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Canada's Balance of International Payments and International Investment Position

Concepts, Sources, Methods and Products

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TABLE OF CONTENTS

TABLE OF CONTENTS (detailed)

PREFACE

Official statistics of Canada's balance of international payments[1] and Canada's international investment position, which began with the reference year 1926, survived the passage of time because of the importance of foreign trade and foreign capital in the Canadian economy, and the relevance of these statistics to a wide range of users. Government relies on these statistics for the formulation, implementation and monitoring of financial and trade policies. They are also used extensively by businesses, the academic community, the media and the public at large for both informational and analytical purposes. Finally, they are needed to meet Canada's statistical obligations to supranational organizations, notably the International Monetary Fund (IMF), the Organisation of Economic Co-operation and Development (OECD) and the World Trade Organization (WTO).

The statistics on Canada's balance of payments and international investment position are the result of an extensive process where statistical concepts constantly need to be made operational in relation to the availability of data sources. Standards and conventions then play a major role in translating the concepts into meaningful statistics. Over the years, the changes in the real and, particularly, the financial economy have been substantial. Where those changes have been significant enough to trigger revisions in concepts and data sources, it followed that statistical organizations and methods needed to adapt accordingly.

Since the inception of these statistics in the reference year 1926, the methods employed in constructing the Canadian balance of international payments and international investment position estimates can be broadly divided into three periods: the interwar period (1926 to 1938), the period from World War II through 1951, and the current period (1952 to the present). The methodology used during the interwar period is described in *The Canadian Balance of International Payments, A Study of Methods and Results*, published in 1939. With the outbreak of World War II in 1939, Canada introduced exchange controls; this entailed a massive reporting system that was incorporated with the methodology employed in the interwar period. This period also saw the emergence of international statistical standards for balance of payments under the aegis of the IMF. The methodology used during this period is described in *The Canadian Balance of International Payments 1926–1948*, published in 1949. The third main period, which began with the lifting of exchange controls near the end of 1951, involved the more extensive use of survey methods that took into account the experience of the two earlier periods. The first few years of the latest period are described in *The Canadian Balance of International Payments in the Postwar Years, 1946–1952*, published in 1953, and *Canada's International Investment Position, 1926–1954*, published in 1956.

A detailed description of the third period up to the late 1970s was published in 1981 in *The Canadian Balance of International Payments and International Investment Position—A Description of Sources and Methods.* (At that time, the statistics were constructed according to standards that largely conformed to the third edition of the IMF's *Balance of Payments Manual*, published in 1961.) The 1981 publication also contains an overview of the first two periods along with the historical evolution in treatment of each account of the balance of payments and international investment position. Its strength is the insight it provides on the history of Canada's external economic statistics.

Three developments should be noted since the last full account in 1981. First, historical data previously dispersed in various publications over the years were collated into a common framework and presented in two volumes, with data going back to 1926: the first complete compendium since the mid-1950s on the balance of payments appeared in 1991; and the first compendium since the late 1960s on the international investment position appeared in 1993. Second, the processing systems were computerized and the data management was strengthened, resulting in a marked improvement in timeliness. Third, the statistics were fully integrated into the broader Canadian System of National Accounts (CSNA) through the major historical revisions of 1986 and 1997. With the

1. Also referred to as 'balance of payments.'

1997 historical revision, standards of the fifth edition of the IMF's *Balance of Payments Manual*, published in 1993, were implemented as far back as 1926 and published in 1997. In parallel, the 1993 norms for the System of National Accounts were implemented in the other parts of the CSNA.

The present publication deals with the statistical concepts, sources, methods and products, covering the period since the late 1970s. Special emphasis is given to concepts—and the associated standards and conventions—because of their central importance as illustrated in the following conversation between the Master Confucius and Tse-Lu:

> ***Tse-Lu:*** "The prince of Wei is ready to hand over the reins of government to you. What is the first task that you will undertake, master?"
>
> ***The Master:*** "Unquestionably, the clarification of concepts."
>
> ***Tse-Lu:*** "How impractical you are. Why care for the clarification of concepts?"
>
> ***The Master:*** "How crude you are, Tse-Lu … If concepts are not clear, words do not fit. If words do not fit, the day's work cannot be accomplished. If the day's work cannot be accomplished, morals and art do not flourish. If morals and art do not flourish, punishments are not just. If punishments are not just, the people do not know where to put hand or foot."[2]

2. Cited in G. Jaszi, "An Economic Accountant's Audit" (lecture on economics in government, American Economic Review, Papers and Proceedings of the 98th Annual Meeting of the American Economic Association, December 28–30, 1985, New York, Vol. 76, No. 2, May 1986), 22.

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Lucie Laliberté
Associate Director General
System of National Accounts

INTRODUCTION

Canada's external economic statistics are measures of economic transactions and investment positions of Canadian residents with residents of other countries (non-residents). These external statistics are presented in two major programs at Statistics Canada[1]: the balance of payments, which covers economic transactions of Canada with non-residents for a specific period of time, on both a quarterly and annual basis; and the international investment position, which covers the economic position of Canada with non-residents at the end of a year.

In the balance of payments, economic transactions are presented in two main groups of accounts: the current account for transactions in goods and services, investment income and current transfers; and the capital and financial account for capital transactions as well as for financial transactions in direct investment, portfolio investment and other investment. The international investment position groups positions into three main financial accounts: direct investment position, portfolio investment position and other investment position. Although they pertain to the country as a whole, these economic accounts are comparable to the financial statements of enterprises: the current account is analogous to the income statement; the capital and financial account, to the changes in financial position; and the international investment position, to the balance sheet.

This document describes the statistical system used to compile Canada's balance of payments and international investment position statements. The compilation of these two statements requires not only the knowledge of the conceptual framework of balance of payments and international investment positions, but also a knowledge of each account and how the accounts relate to one another. This needs to be stressed since individual accounts can be produced in a number of ways, using standards and conventions that may be valid for each account in its own context, but which may not be compatible within an integrated set of accounts. The standards and conventions used to compile the various accounts of the Canadian statistical system reflect concepts which have been agreed upon at the international level.

The Canadian statistical system for external accounts is presented in three Parts in this document. Part I (chapters 1 to 14) describes the balance of payments system. It comprises an opening chapter on the conceptual framework, followed by 13 chapters that describe all the main accounts of the current account, as well as those of the capital and financial account.

- The accounts in the current account comprise goods, services (which cover travel, transportation, commercial services, and government services), investment income and current transfers.
- The capital and financial account includes the capital account (made up of capital transfers and non-produced non-financial assets), and the financial account (which comprises direct investment flows, portfolio investment flows and other investment flows).

Part II (chapters 15 to 18) describes the international investment position system. Prefaced by a chapter describing the conceptual framework of the international investment position, chapters 16 to 18 describe the main accounts of the investment position system: that is, the direct investment position, the portfolio investment position and the other investment position.

Although they are autonomous, the balance of payments and international investment statistical systems described in Part I and Part II are tightly entwined. Part III (chapters 19 to 23) describes the various aspects of this relationship. Chapter 19 deals with concepts, more specifically, the implementation in Canadian statistics of the

1. Compiled by the Balance of Payments Division which also publishes international trade in services (quarterly and annually) and international transactions in securities (monthly). Other programmes at Statistics Canada that cover selected aspects of international transactions are goods trade (International Trade Division), international travel (Culture, Tourism and the Centre for Education Statistics Division) and CALURA (Industrial Organization and Finance Division).

international standards and conventions from the 5th edition of the International Monetary Fund's *Balance of Payments Manual* (1993). Chapter 20 reviews two sources of information: the surveys conducted by Statistics Canada Balance of Payments Division and the Canada–United States current account reconciliation. Chapter 21 describes the processing systems that play a major role in the methods. Chapter 22 describes the products, their timeliness and accessibility to users, with a note on supra-national users. Chapter 23 sets out some of the challenges to be addressed over the next few years in advancing the balance of payments and international investment statistics.

Finally there are four Appendices and a Glossary. Appendix 1 provides a list of the survey questionnaires used by the Balance of Payments Division. Appendix 2 provides a historical summary of statistics of Canada's balance of payments, international investment position and the exchange rates of the Canadian dollar. Appendix 3 contains a chronology of selected domestic and international events that have affected Canada's external accounts since the middle of the 20th century. Appendix 4 describes the various channels available to access data, notably electronic data access.

The three main Parts of this document are presented using a common framework, that is, using the four elements which make up the statistical system: concepts, sources, methods and products.

The Canadian statistical system is significantly strengthened by the legal support provided by the *Statistics Act*. The Act assigns extensive duties to Statistics Canada, including the legal mandate to collect, compile, analyse, abstract and publish statistical information on the economic, social and general conditions of the country and its citizens. To ensure that Statistics Canada carries out this mandate, the Act gives the Agency broad powers to collect information directly from respondents or to access administrative records of other government departments, businesses or organizations, where Statistics Canada requires them for purposes of the Act.

A fundamental quid pro quo to the extensive powers given to the Agency to obtain data, either directly from respondents or from administrative records, is the legal obligation to ensure the confidentiality of those data. By law, Statistics Canada cannot release information in a form that would identify respondents without their authorization.

As mentioned above, Statistics Canada's mandate also requires it to publish the statistical information it collects. Furthermore, it is the policy of the Agency that all official data releases are made available to everyone at the same time.

The quality of accounts generated by the Canadian statistical system on balance of payments and international investment position is of paramount importance in determining the usefulness of statistics. Quality embraces the various aspects of relevancy, accuracy, timeliness, coherence, interpretability and accessibility, aspects which often interact with one another.

Relevancy refers to the extent to which data meet "the purposes for which they are produced and sought by users."[2] The value of the statistics is largely derived from their usefulness to users, that is, from their capacity to convey information or help users in their decision-making process. Statisticians use a number of strategies to ensure that data remain relevant, ranging from extensive data analysis up to specific consultations with users (discussed in Chapter 22 "Products" and Chapter 23 "Looking Ahead"). In ensuring the relevancy of accounts, the statisticians use the guiding principle that the benefits of information to users should exceed the costs of providing the information.

The accuracy of statistics is specific to each account of the balance of payments and the international investment postion, as the available information may reflect to different degrees the actual underlying transactions. For each account described in Part I and Part II, a qualitative indicator with three levels has been adopted: most reliable, reliable and acceptable. By its very nature, this assessment is subjective in that it represents the professional judgement of statisticians as to the degree of error and bias taking into account the available sources of information and the methodology used.

2. Statistics Canada, *Quality Guidelines* (Third edition, October 1998, Catalogue no. 12-539-XIE), 4.

Timely data may lack accuracy if insufficient time was taken to integrate data sources. On the other hand, data that carry the highest degree of accuracy, but which are not timely, may not be relevant since they can no longer influence the decision makers. Timeliness of the data is covered in Chapter 22 “Products.”

Coherence encompasses both consistency with other accounts and consistency in time. Consistency with other accounts is implemented through the use of compatible concepts and common framework as presented in Part I and Part II. Consistency in time is achieved through common formats with the same captions for the same items and the same accounting principles through time (see appendix 2, “Historical statistics”).

Interpretability of the data is ensured through the adoption of concepts that are translated in clear and mutually exclusive definitions of accounts. Concepts and definitions for each account are provided in Part I and Part II with the definitions for each account classified alphabetically in the Glossary. Note that data interpretability may not always be maintained in time series. This may lead to breaks in series since the current framework may not be suitable to represent the reality of historical transactions (see Appendix 3, “Chronology of events affecting the external sector of the Canadian economy since 1944”).

To be used, and hence to be relevant, it is essential that data be accessible. The accounts described in this document can be found in four major statements:

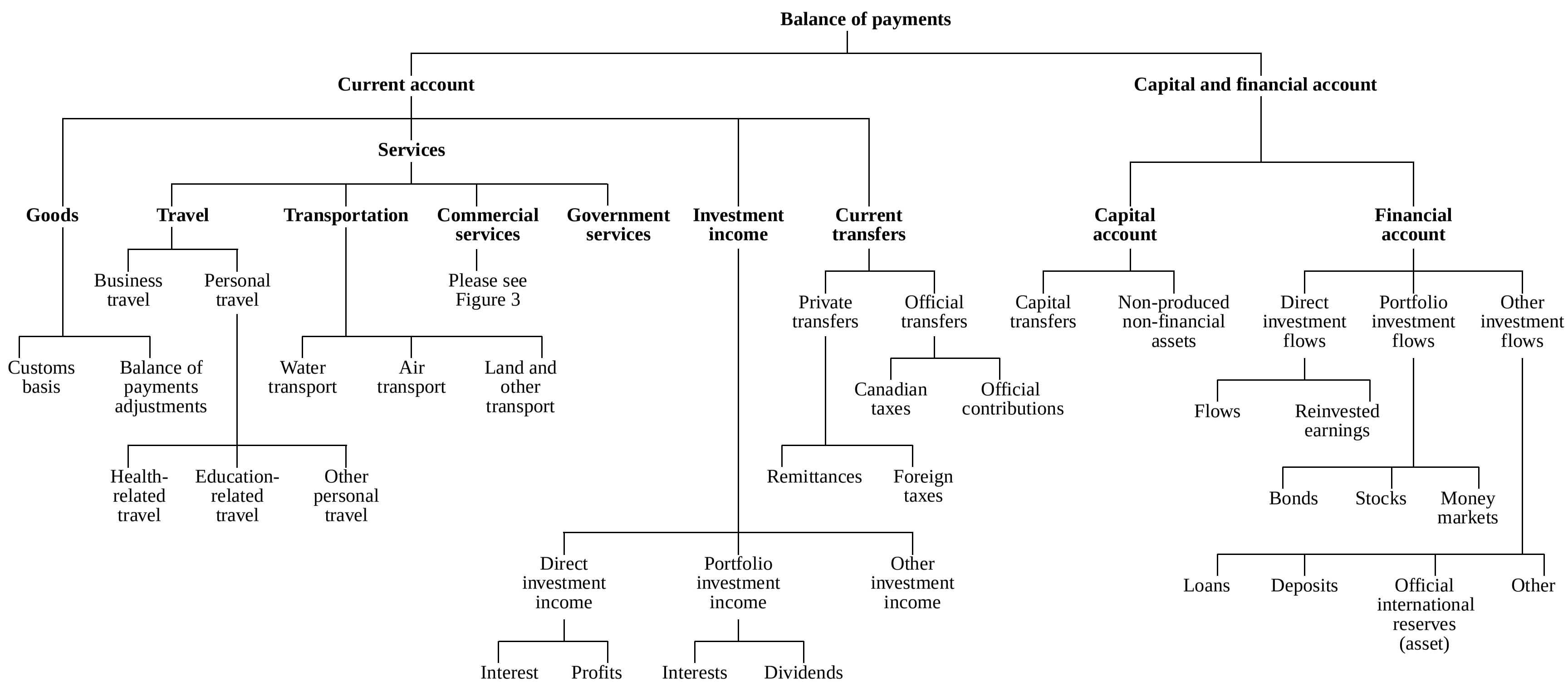
- Canada’s balance of international payments (quarterly);
- Canada’s international investment position (annual);
- Canada’s international transactions in securities (monthly); and
- Canada’s international trade in services (annual and more recently quarterly breakdowns).

These statements and their components are available in print and in electronic format on the Internet and through CANSIM, Statistics Canada’s electronic database. Summary versions are posted on the Statistics Canada web site (www.statcan.ca) in *The Daily* and are also published in *Infomat*, a weekly summary of data releases that is available in both print and electronic formats.

Many other data products are also available. For more details, please refer to Chapter 22, “Products,” and Appendix 4, “Accessibility of Products.”

Part I

Balance of International Payments



Balance of payments
Current account
Capital and financial account
Services
Goods
Travel
Transportation
Commercial services
Government services
Investment income
Current transfers
Capital account
Financial account
Business travel
Personal travel
Please see Figure 3
Private transfers
Official transfers
Capital transfers
Non-produced non-financial assets
Direct investment flows
Portfolio investment flows
Other investment flows
Customs basis
Balance of payments adjustments
Water transport
Air transport
Land and other transport
Canadian taxes
Official contributions
Flows
Reinvested earnings
Health-related travel
Education-related travel
Other personal travel
Remittances
Foreign taxes
Bonds
Stocks
Money markets
Direct investment income
Portfolio investment income
Other investment income
Loans
Deposits
Official international reserves (asset)
Other
Interest
Profits
Interests
Dividends

CHAPTER 1

CONCEPTUAL FRAMEWORK OF THE BALANCE OF PAYMENTS

The balance of payments statement provides information about a country's economic transactions with non-residents for a specific period of time. These transactions are compiled according to the international standards and conventions described in the fifth edition of the *Balance of Payments Manual* (1993) of the International Monetary Fund (IMF). These norms are the result of extensive consultation within a group of balance of payments experts, of which Statistics Canada is an active member. Uniformity of concepts among countries and the use of common standards and conventions enhance the comparability of balance of payments accounts, a major benefit for data users in this age of globalization.[1]

The standards and conventions used to establish the Canadian residency of the transactors and to compile the transactions of Canadian residents with non-residents are identical to those used in the Canadian System of National Accounts (CSNA). This in turn allows for a full integration of the balance of payments accounts into the CSNA. Such consistency greatly facilitates the understanding of relationships among economic variables and enables more in-depth and comprehensive analyses. The CSNA follows the international standards and conventions described in *System of National Accounts, 1993*, published by the United Nations under the auspices of Eurostat, the IMF, the OECD, the United Nations and the World Bank.

This chapter explains the conceptual framework that underpins the balance of payments accounts. It first describes how transactors are classified as residents and non-residents of Canada. The next section describes how the economic transactions between residents and non-residents are measured in the different accounts of the balance of payments statement. The third section looks at how the accounts are grouped into a balance of payment format. The fourth section describes the linkage of this statement with other statistical statements and the concluding section provides some interpretations of the balance of payments accounts.

1. The balance of payments statements of individual countries are published in the International Monetary Fund's *Balance of Payments Statistics Yearbook*, (IMF Publication Services, International Monetary Fund, 700 19th Street NW, Suite 10-540, Washington DC 20431 USA).

1.1 Canadian resident transactors and non-resident transactors

International exchanges or transfers of economic values are performed by institutional units (transactors) that may be persons or legal entities. Legal entities cover a wide range of arrangements, from unincorporated enterprises to legal and social entities such as enterprises, non-profit institutions and all levels of government. However, only those transactions conducted between resident and non-resident entities are recorded in the balance of payments; hence, the importance of residency to the balance of payments accounts and the need to clearly distinguish between resident and non-resident transactors.

Canadian residents are defined as the institutional units whose main centre of economic interest is Canada. The main centre of economic interest means that institutional units live, produce, consume, invest and/or earn revenue in Canada. In the Canadian System of National Accounts (CSNA), resident institutional units are regrouped into three broad sectors: persons and unincorporated business; corporations and government enterprises; and governments. For Canadian balance of payments purposes, individual persons are treated separately from their unincorporated businesses; the latter are regrouped with corporations and government enterprises, because of commonality of economic behaviour among these three sets of units in an international context.

1.1.1 Persons as Canadian residents

Persons are Canadian residents if their centre of economic interest is Canada, as evidenced by having their principal residence in Canada. As a general guide, persons having resided in Canada for more than one year are treated as residents, including the staff of international organizations operating in Canada. However, there are some exceptions.

Immigrants who take up their principal residence in Canada are considered resident upon their arrival in Canada. Also considered resident are persons who move outside of Canada for more than one year but who do so only for educational or medical reasons, or who are diplomatic, military or representative staff of the various levels of Canadian government. Hence, Canadian residents include travellers and workers from Canada going abroad for less than one year; persons who go abroad for education or health purposes; and the Canadian government's employees recruited in Canada to work in its foreign embassies, consulates or military bases.

The residency criterion is based on the centre of economic interest and not the citizenship of persons. As such, foreign citizens whose main centre of economic interest is Canada are considered as Canadian residents for balance of payments purposes. In the same way, Canadian citizens whose main centre of economic interests is outside Canada are not considered to be Canadian residents for balance of payments purposes.

1.1.2 Unincorporated businesses, corporations and government enterprises as Canadian residents[2]

Unincorporated businesses, corporations and government enterprises are Canadian residents if they carry out production in Canada through resident Canadian entities, such as a Canadian corporation or a Canadian branch of a foreign corporation or organization. Businesses are non-residents if they carry out production abroad through foreign concerns, such as foreign corporations or foreign branches.

This means that businesses that carry out production through both Canadian and foreign entities are Canadian residents (for their Canadian production) and non-residents (for their foreign production). For example, a corporation operating in Canada and having a subsidiary in the United States is treated as a Canadian resident for its operations in Canada and as a foreign resident for the operations of its subsidiary. Because of their dual character, special care needs to be taken in measuring the activities of businesses that operate both domestically and abroad, especially in regard to their trade in services and their direct investment activities. The domestically based activities of businesses, including their transactions with non-residents, can be measured from their booked-in-Canada financial statements, whereas their activities as non-residents can be found in their booked-abroad activities and are transactions of their host economies.[3] For financial statements reporting, businesses generally consolidate both their booked-in-Canada activities (resident) with their booked-abroad activities (non-resident), which means that such consolidated statements cannot readily be used as source data for balance of payments purposes.

For businesses, the residency criterion is based on the location of their activities, not their ownership. The Canadian-based operations of foreign businesses are Canadian residents, even if these businesses are owned by non-residents. Conversely, the foreign-based operations of Canadian-owned businesses are non-residents of Canada. This convention applies even if no legal structure exists in Canada; a Canadian branch of a foreign corporation is a Canadian resident although it is not a Canadian legal entity. In the same way, foreign branches of Canadian corporations are not Canadian residents.

1.1.3 Various levels of Canadian government as Canadian residents

Canadian government includes the federal, provincial and local levels of government, as well as non-profit organizations funded by government and for which Canada is the centre of economic interest.[4] These entities are always deemed to be Canadian residents because their centre of economic interest remains Canada whatever the location of their operations. As such, the Canadian residency encompasses the territorial enclaves of Canada in foreign countries for diplomatic, military, scientific or other purposes.

> The economic territory of a country includes (a) the airspace, territorial waters, and continental shelf lying in international waters over which the country enjoys exclusive rights or over which it has, or claims to have jurisdiction in respect of the right to fish or to exploit fuels or minerals

2. Includes Canadian non-profit organizations.

3. The distinction to be made between resident activities and non-resident activities for the same enterprise is illustrated in Colleen Cardillo, *Foreign Sales of Canadian Enterprises*. (Unpublished research paper, Statistics Canada, Ottawa, 1997). An adaptation of this argument is presented here, in Chapter 23, "Looking Ahead."

4. International organizations form part of foreign general government and, as such, are non-residents. However, if they operate in Canada, their staff is considered resident.

below the sea bed; (b) territorial enclaves in the rest of the world (clearly demarcated areas of land which are located in other countries and which are used by the government which owns or rents them for diplomatic, military, scientific or other purposes—embassies, consulates, military bases, scientific stations, information or immigration offices, aid agencies, etc.—with the formal political agreement of the government of the country in which they are physically located).[5]

Conversely, foreign embassies and international organizations located in Canada are considered non-residents. It should be noted that the foreign-recruited staff of foreign embassies in Canada are deemed to be non-resident, whereas the staff of international organizations located in Canada are deemed to be Canadian residents.

1.1.4 Summary on Canadian residents

Canadian residents are those institutional units whose main centre of economic interest is Canada. Conventions which establish that the centre of economic interest is Canada vary among the three broad sectors of institutional units. Persons are deemed to be Canadian residents if their principal residence is Canada (including the staff of international organizations) even if they live abroad for more than one year, as long as it is for medical, educational or government staffing reasons. For business, any unincorporated businesses in Canada or Canadian corporations, including government enterprises, which have production in Canada are deemed to be residents for their Canadian activities; all the various levels of Canadian government (including their Canadian staff working abroad) are always residents of Canada.

1.2 Balance of payments transactions

The economic transactions recorded in the balance of payments represent the exchanges and transfers of economic values between Canadian residents and non-residents. The economic values exchanged or transferred can be goods, services, investment income or financial claims. In an exchange, a Canadian resident gains the ownership of an economic value by giving up the ownership of another economic value; in a transfer, an economic value is provided or received unilaterally, with no economic value exchanged in return. Most of the balance of payments transactions are exchanges of economic values; transfers represent only a small part of the total transactions of Canada's balance of payments.

1.2.1 Timing for recording balance of payments transactions

In principle, transactions are to be recorded in the balance of payments when a change of ownership occurs between Canadian residents and non-residents at the value agreed upon by the two parties to the transactions. A change of ownership is deemed to have occurred when an asset has been received or when a service or income has been provided. It follows that the transactions should be recorded on an accrual basis; that is, revenues and expenses are to be recorded when they are incurred rather than when they are settled, which could be some time afterward. Under the accrual method,[6] for example, an export sold on credit should be recorded in the current account at the time it is recorded as revenue in the books of the exporting unit. At the same time, the exporting unit's account receivable should be recorded as a claim on non-residents in the capital and financial account.

While every effort is made to obtain data on an accrual basis, it may prove difficult to achieve in practice. Often the sources of information determine the time at which the transactions are recorded. A notable case is exports and imports of goods, which are usually recorded in the balance of payments at the time the goods cross the Canadian border, as shown in the customs administrative documents, the main source of information for these accounts. This timing may or may not correspond to that used by the Canadian businesses to record the transactions in their

5. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*. (Prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 14.9, 319.

6. The accrual method is at variance with the cash nomenclature used to describe balance of payments accounts and can create ambiguity. For instance, the very term 'balance of payments' conjures up a notion of payments and of balances when they are settled, as do the terms 'receipts' and 'payments' used in the current account. Nevertheless, the standards still call for accrual reporting, and the cash nomenclature is maintained because its usage has become so entrenched.

books, but it is deemed as an acceptable proxy for a change of ownership.

1.2.2 Valuation of balance of payments transactions

The international standards call for transactions to be valued at market prices, which are defined as:

> amounts of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between independent parties on the basis of commercial considerations only.[7]

In the Canadian statistics, the valuation generally used is that agreed upon between the two transactors (that is, transaction value) and it may not always be at market price, especially as a substantial portion of Canada’s transactions are carried out with related foreign parties (versus independent parties). International standards make provision for such difficulties, given that a significant portion of world-wide trade is carried out among related parties that are located in different countries:

> In view of practical difficulties involved in substituting an imputed or notional market value for an actual transfer value, substitution should be the exception rather than the rule.[8]

1.2.3 Double-entry system of accounting

1.2.3.1 Recording of transactions

Transactions are recorded in the balance of payments according to a double-entry system of accounting. Under that system, each transaction gives rise to two simultaneous entries of equal value. These entries are recorded in the balance of payments from the Canadian resident viewpoint. For example, an export of goods on credit by Canada would be recorded as an export of goods and as a trade receivable; a gift of goods by Canada to a foreign country would be recorded as an export of goods and as a current transfer payment.

7. International Monetary Fund, *Balance of Payments Manual.* (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 92, 26.

8. International Monetary Fund, *Balance of Payments Manual.* (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 102, 28.

Table 1.1
Recording conventions of the balance of payments

	Debit	Credit	Signs
Current account			
Receipts		X	+
Payments	X		-
Captial and financial accounts			
Assets			
Increase	X		-
Decrease		X	+
Liabilities			
Increase		X	+
Decrease	X		-

The two entries are recorded using the corporate accounting practice of debits and credits. In the current account, a debit refers to a Canadian expense incurred and a credit to a Canadian revenue earned from non-residents. In the capital and financial account, a debit refers to an increase in Canadian assets or a decrease in Canadian liabilities to non-residents, and the reverse for a credit.

The convention in the balance of payments presentation is to convert the debits and credits into signs: a debit shows as a minus sign (–) and a credit as a plus sign (+). This greatly simplifies the presentation since all transactions can be presented in a single column with + 's and –'s, instead of two columns of debits and credits (see Table 1.1).

This convention is modified in statistical releases of Canada's current account, where no signs are attached since the revenue accounts are regrouped independently from the expense accounts. Implicitly all the revenues carry a plus sign and the expenses a minus sign, except when otherwise indicated. For example, a negative sign on direct investment profit would refer to a loss.

1.2.3.2 Statistical discrepancy

By virtue of the double-entry system of recording, the sum of all entries throughout the balance of payments statement should be equal to zero. This does not occur in practice, since the statistical inputs used as sources in the Canadian balance of payments are not available in the form of pairs of entries. Instead, two or more sources are used to obtain the two entries of a transaction. The recording of these two sides of the transaction may differ due to a number of factors: different periods of recording, different valuations, different coverage or simply undercoverage leading to one or both sides of the transaction being missed.

After all entries are recorded in the balance of payments, that is, in the current and capital and financial accounts, the two accounts are totalled, resulting in a net credit or a net debit. To offset this net credit or debit, a balancing item called the 'statistical discrepancy' is entered as a single account.[9] This account effectively ensures that the sum of all accounts equals zero or, in other words, that the balance of payments effectively balances out. It should be stressed that the account for the discrepancy is net of all the errors recorded as well as of all missing entries. As such, the size of the residual item provides only a general and imprecise measure of the overall accuracy of the statement.

In fact, the sources of the statistical discrepancy cannot easily be determined. It is difficult to establish to what extent the errors originated from the current or the capital and financial accounts. Data development measures which help toward reducing the statistical discrepancy are presented in Chapter 23, "Looking Ahead."

1.3 Format of the balance of payments statement

The format of Canada's balance of payments has evolved over the years.[10] The present document focuses on the presentation and norms that were adopted in 1997 and are based on the 5th edition of the International Monetary Fund's *Balance of Payments Manual*. Canada's balance of payments is composed of the current account, the capital and financial account, as well as the statistical discrepancy (see Table 1.2).

These accounts, which largely conform to international standards, were chosen for the Canadian balance of payments on the basis that they exhibit distinctive behaviour, they respond differently to economic influences, they are important for a number of countries (and enhance comparability) and they can be measured.

1.4 Relationship with other statistical systems

1.4.1 Linkages to the Canadian System of National Accounts

Canada's balance of payments statement constitutes a component of the set of major economic statistics known as the Canadian System of National Accounts (CSNA). The CSNA covers the economic transactions of Canadian residents both with other Canadian residents and with non-residents. Ultimately, the CSNA sheds light on the rather

9. For more details on the statistical discrepancy, please refer to Fred Barzyk and Lucie Laliberté, *The Statistical Discrepancy in Canada's Balance of Payments—1962 to 1991*. (Research Paper No. 4, Balance of Payments Division (67F0001MIB97004), www.statcan.ca/english/services, Statistics Canada, Ottawa, 1992).

10. For a historical perspective, please refer to Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods*, (published under the authority of the Minister of Supply and Services, Catalogue no. 67-506E, March 1981).

complex question of "Who does what by what means for what purposes with whom in exchange for what with what changes of stocks."[11] The various answers to this question have been developed and organized through the years into autonomous but consistently interrelated parts, referred to as components of the CSNA. The balance of payments and international investment position provide answers to the CSNA question when the "with whom" are non-residents.

11. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993,* (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Brussels/ Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 2.12, 18.

These are the various components of the CSNA:

- **The national economic and financial accounts** are made up of the income and outlay account as well as the capital and financial account. These accounts focus on the broad sectors of the Canadian economy; that is, persons and unincorporated businesses, corporate and government business enterprises, governments, and non-residents. In these accounts, transactions of the non-resident sector correspond to those in the balance of

Table 1.2
Canada's balance of payments format

Current account	**Receipts**	**Payments**	**Balance**
Goods and services			
Goods			
Services			
Travel			
Transportation			
Commercial services			
Government services			
Investment income			
Direct investment			
Profits			
Interest			
Portfolio investment			
Dividends			
Interest			
Other investment			
Interest			
Current transfers			
Private			
Official			
Capital and financial account	**Assets: net flows**	**Liabilities: net flows**	**Net flows**
Capital account			
Capital transfers			
Non-produced, non-financial assets			
Financial account			
Direct investment			
Retained earnings			
Other			
Portfolio investment			
Bonds			
Stocks			
Money market instruments			
Other investment			
Loans			
Deposits			
Reserves			
Other assets/other liabilities			
Statistical discrepancy			**Net discrepancy**

payments. They are viewed, however, from the viewpoint of the rest of the world, as opposed to the Canadian resident viewpoint of the balance of payments. As a result, the entries are reversed in the two statements; for instance, a non-resident financial asset in the financial flows statement would show as a Canadian financial liability in the balance of payments statement.

- **The balance of international payments and the international investment position**, described in this document, focus on economic transactions and positions between Canadian residents and non-residents of Canada. The transactions and positions are viewed from a Canadian resident standpoint in these two statements.
- **The input–output tables** measure the origin and destination of Canadian production according to the industrial and commodity structure and provide a special focus on inter-industry transactions and technological relationships underlying intermediate production. The focus of this component is on the industries of the Canadian economy.
- **The real domestic product by industry** shows changes in the industrial composition of real or 'constant price' output, with the real output measured on a gross domestic product at factor cost basis. The focus of this component is also on the industries of the Canadian economy.

The accounts in the balance of payments and the international investment position have a one-to-one relationship with the corresponding accounts of the Canadian System of National Accounts, except in two cases. The two exceptions are the recording of financial intermediary services indirectly measured (FISIM) and the profits from direct investment. Although FISIM are identified as services in the other components of the CSNA, the balance of payments leaves them embedded in investment income. The balance of payments recognizes the profits from direct investment when earned, whereas they are recorded in the other components of CSNA only when they are declared as dividends.

1.4.2 Link with balance of payments systems of other countries

Balance of payments statistics are also part of an international system. Transactions which affect one country's balance of payments will also affect the balance of payments of the counterpart countries. Because of the intrinsic unifying influence of balance of payments transactions between countries, concerted efforts have been made at the international level to develop the same concepts and to adopt standards and conventions which are consistent among countries. This facilitates having internationally comparable statistics—an obvious benefit in the development and application of policies on international trade and investment.

1.5 Interpretation of balance of payments accounts

1.5.1 Accounting interpretation

In a financial accounting context, the current account could be referred to as Canada's statement of revenue and expenses, and the capital and financial account as Canada's statement of changes in financial position with non-residents. The current account shows the revenues earned and expenditures incurred with non-residents on goods, services, investment income and current transfers. The capital and financial account shows the investing and financing activities of Canada with non-residents. The capital account shows the capital transfers in and out of Canada as well as the receipts and payments for non-produced non-financial assets; the financial account shows how Canadian residents channel funds from Canada to foreign countries (adding to their external financial assets or reducing their external financial liabilities) or into Canada from foreign countries (reducing their external financial assets or adding to their external financial liabilities).

By virtue of the double-entry system of accounting, the balance of payments statement is a self-contained statement: the sum of the accounts is zero. As such, any summation of selected accounts is equal to the sum of the remaining accounts, with the sign reversed. For example, the current account balance is the mirror image of the net flow in the capital and financial account. This means that a country can incur a current account deficit only if it imports capital. This is tantamount to saying that a country can import capital on balance only through a current account deficit. It should be noted that this accounting identity exists for the summation of all current account transactions and the summation of all capital and financial transactions, as there is not necessarily a one-to-one relationship between a current account transaction and a financial account transaction. In fact, there are many more international transactions in the financial market (financial account) than there are current account transactions. For example, a Canadian government can float a new Canadian bond issue abroad and leave the proceeds as deposits in a foreign bank. This will give rise to two entries in the financial account: one under portfolio bond liability and the other one under deposit asset, with no impact on the current account, nor on the financial account balance.

1.5.2 Analytical interpretation[12]

From an analytical viewpoint, various accounts are regrouped in aggregates and analysed in terms of surpluses and deficits, or net inflows and net outflows. The two more widely known aggregates are the current account balance and the capital and financial account balance. In the Canadian balance of payments, balances are also generated for goods, services, goods and services, investment income, current transfers and net flows of capital and financial transactions, with a breakdown into asset and liability flows. Historically, Canada has on the whole generated a surplus in goods; deficits in services and in investment income, as well as for the current account as a whole; and, a net inflow in the capital and financial account.

Since historically Canada has experienced more current account deficits than surpluses, the case of a current account deficit is used here to illustrate the accounting identity of the balance of payments. A deficit in the current account shows that Canada spent more than it earned on goods, services, investment income and current transfers. It also means that Canada obtained financial resources from abroad and, as such, relied on foreign saving. In other words, non-residents invested more in Canadian assets than Canadian residents invested in foreign assets. As more foreign investors acquired Canadian assets compared with residents acquiring foreign assets, the current account deficit became larger. This stems from the accounting identity whereby the size of the net foreign investment in Canada is equal to the deficit in the current account.

Numerous reinforcing and offsetting forces are at play and may act with different intensities at different times in shaping a country's current account deficit. For example, is it the net foreign lending that produces the current account deficit, or is it the current account deficit that leads to a net borrowing from abroad? These questions can be answered only by setting the statistics into an analytical context that describes the economic behaviour of the transactors involved. It is through analysis that the causal factors are established. Depending upon the conditions and timing, the current account deficit may be accomodating the foreign demand for Canadian financial assets; or instead it may show that Canadian residents are spending more than they earn from abroad on goods, services, investment income and current transfers (a current account deficit) and need to borrow abroad to do so—in short, net foreign lending is the accommodating reaction. The forces at play change over time and no format can succeed in tracking them all:

> No single measure of surplus or deficit can characterize adequately the kaleidoscopic interplay of domestic and international economics.[13]

The analysis of the balance of payments accounts can be set against a broader framework than the balance of payments transactions, such as the global level of economic activity of Canada and the stage of the business cycle in which the country finds itself. The Canadian economy is considerably open to international influences in terms of goods and services, and financial transactions. A significant portion of Canada's production is dependent on levels of effective demand in other countries and Canada also makes extensive use of imports in its production and consumption. The use of foreign goods, services and capital makes it possible for Canada to expand and develop beyond the limits of its internally generated resources. The Canadian external sector is thus affected by domestic developments and, vice versa, external influences affect the domestic economy. International influences also play a dominating role in the Canadian financial market. This exposure of the economy to the trials and tribulations of the rest of the world underscores not only the crucial importance of balance of payments surpluses and deficits, but also highlights their effect on the domestic economy. The Canadian System of

12. Please see chapter 23, "Looking Ahead," which explains how analysis is an integral part of the statistical process.

13. Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods,(* published under the authority of the Minister of Supply and Services, Catalogue no. 67-506E, March 1981), 17.

National Accounts (CSNA) provides a broader framework for assessing the external sector of the Canadian economy.

An additional measure consists in assessing Canada's balance of payments in a worldwide context. For example, Canada exports goods whose prices are established at the world level and any change in these prices may significantly affect the Canadian trade in goods. The international financial markets also have a major influence on the price of Canadian financial instruments and on the external value of the Canadian dollar.

CHAPTER 2

THE CURRENT ACCOUNT

2.1 Concepts

The current account measures Canada's revenues and expenditures arising from transactions in goods and services, investment income, and current transfers with non-residents. In the balance of payments, the current account can also be defined residually as covering all transactions with non-residents except those transactions in capital and in financial items (as measured in the capital and financial account). The transactions in the current account are final, in the sense that they are not linked to previous or future transactions with non-residents, as financial transactions often are—for example, in the settlement of financial claims or in the generation of investment income.

Transactions in the current account are recorded on a gross basis; that is, both revenues and expenditures arising from economic activities with non-residents are recorded. The broad categories of the current account are goods, services, investment income and current transfers. Services are further categorized as travel, transportation, commercial services and government services.

2.2 Data sources

The information on goods is largely taken from customs administrative data, which record the cross-border movement of goods.

Services can take numerous forms and thus entail a wide range of data sources. Significant portions of the data on services, particularly travel and commercial services, are derived from surveys. Over 40% of all receipts and about 30% of payments are based directly or indirectly on administrative records. For travel estimates, survey data supplied expenditure factors are synthesized with administrative data on the number of travellers; from time to time, administrative data are also used in the verification of travel data. For commercial services and transportation services, survey data are the main source, with annual administrative data used to assess and improve survey results. Administrative data are largely used for government services. Benchmark indicators are used to derive certain service estimates for which current direct measures are not available.

The investment income account is largely compiled from survey sources. The data on current transfers are obtained from administrative data, such as records of official assistance and income security payments (such as pensions).

2.3 Methods

The goods account is compiled by the International Trade Division of Statistics Canada with some supplementary information provided by the Agency's Balance of Payments Division. Travel series are compiled by the Culture, Tourism and Centre for Education Statistics Division of Statistics Canada. All the other accounts of the current account are compiled by the Balance of Payments Division.

The next seven chapters review each of the current account's components—goods, travel, transportation, commercial services, government services, investment income and current transfers. Each account is reviewed in terms of concepts, sources, methods, and products, including data quality and data accessibility.

2.4 Products

2.4.1 Data accuracy

The overall quality of data on current account receipts and payments is reliable.

2.4.2 Data accessibility

The quarterly and annual series on the current account are published in the quarterly *Canada's Balance of International Payments* (available both as an electronic publication on the Internet and in print) and in CANSIM. The series are shown as receipts, payments and balances in total and for the United States. The series are also published annually for the six standard geographical groupings used throughout the balance of payments statement: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries.

CHAPTER 3
GOODS

3.1 Concepts

Goods refer to commodities that are bought and sold between Canadian residents and non-residents.

> Goods are physical objects for which a demand exists, over which ownership rights can be established and whose ownership can be transferred from one institutional unit to another by engaging in transactions on markets.[1]

Conceptually, goods should be recorded in the balance of payments when their ownership changes between residents and non-residents, and should be valued at market price at the border of the exporting country. Since customs data are widely used by countries to compile trade in goods, the administrative customs practices have a large influence on the international standards which embody these concepts. Notably, international standards consider the cross-border movement of goods—the basis for customs documentation—as a proxy for change of ownership. However, the actual point of valuation in customs data is not always at the border of the exporting country, as required for balance of payments purposes. In these, and in other specific cases, customs data are corrected by balance of payments adjustments.

In conformity with international standards, the Canadian statistics record three broad types of transactions as goods. First, most of the goods crossing the border per customs records are incorporated in the balance of payments, as they are generally deemed to have changed ownership. These customs-based data are adjusted in the Canadian statistics for coverage, timing and valuation, where by far the largest valuation adjustment is the adjustment for freight to the border (note that in Canadian statistics, this adjustment for inland freight is limited to goods transported inland by truck, rail and pipeline).[2]

Second, there are cases of goods recorded in the customs data that are clearly not subject to change of ownership. These include goods for processing, repair and financial leases of capital equipment. These, however, are still treated as goods by international standards. Canada adheres to these standards, but it does not separately identify goods processed and the value of most repairs.[3]

Third, there are goods that change ownership but that are not recorded in customs because of specific circumstances (such as satellites and ships not crossing to or from the country’s economic territory), and non-monetary gold traded with non-resident accounts inside the country (see sections 3.3.1.4 and 3.3.2.4). These goods are incorporated through residency adjustments in the Canadian balance of payments. Canada does not, however, treat as goods fuel and other provisions to non-resident carriers in Canadian ports and to resident carriers in foreign ports, as is called for by international standards. These goods are included in transportation services in Canadian statistics as they cannot be differentiated from other expenditures in foreign ports by air and marine carriers.

Again, in conformity with international standards, Canada excludes three broad types of goods transactions from its statistics. First, there are certain goods that cross the border and undergo a change of ownership, but which are not recorded in the customs data. By convention, such goods are recorded in balance of payments accounts other than goods:

- personal-use goods acquired by international travellers and by cross-border workers are recorded in travel;

1. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*, (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 6.7, 123.

2. Freight by water and air are treated as international freight. Note also that the valuation of goods at the border under international measurement conventions embeds some elements of transportation which are also found in the transportation account, more specifically freight in Canada carried out by non-resident carriers, and freight in foreign countries carried out by Canadian resident carriers. Please refer to Chapter 5, “Transportation,” for further details.

3. Certain repairs are allocated to construction, computer and transportation services as called for by international standards. Please refer to Chapter 5, “Transportation,” and Chapter 6, “Commercial Services.”

- financial items such as paper money, securities and coins in current circulation are recorded in the financial account; and
- gold exchanged between monetary authorities of different economies, which is referred to as monetary gold, is recorded in reserves.

Newspapers and periodicals that are sent by direct subscription, rather than in bulk, should be recorded with information services by international standards. However, because newspapers and periodicals are not distinguishable from other parcels in Canadian statistics, they are recorded in goods through a coverage adjustment for postal imports.

Second, there are other goods that cross the border and are not recorded by customs as trade items. In balance of payments terms, they are clearly not subject to change of ownership. These items cover

- transit trade, including that carried out through distributive trade centres;
- goods (other than consigned goods) that are returned in the case of exports, as well as returned exports and imports of a temporary nature;
- goods under operational lease;
- mobile equipment, such as drilling rigs, where there is no change of ownership;
- shipments to and from military and diplomatic establishments abroad;
- goods not for sale such as displays or exhibitions and samples of no commercial value; and
- migrants' effects.

Note that, according to international standards, migrants' effects should be recorded as goods with a counterpart entry in capital transfers; however, they are not recorded in Canada's balance of payments, because of practical problems in valuing such effects.[4] No provision for illegal goods has been made other than for undeclared imports of tobacco products; (see section 3.3.2.1) the issue in this case does not concern change of ownership, but rather the ability to arrive at plausible estimates.

Third, there are two types of goods that do not cross the border and that undergo a change of ownership, but that are not recorded as goods. Non-financial assets (including land, structures, equipment

4. However, funds in possession and net worth of migrants are recorded in Canada's balance of payments. Please refer to Chapter 11, "Capital Account."

Table 3.1
Summary of Canadian practices for recording goods

	Recorded as goods		Not recorded as goods	
	Do cross the border	**Do not cross the border**	**Do cross the border**	**Do not cross the border**
Change of ownership	Most goods (adjusted for coverage, timing and valuation)	Non-monetary gold with non-resident accounts in Canada Satellites Ships (adjusted for residency)	Travellers' goods (in travel), Financial items (in deposits), Monetary gold (in reserves)	Non-financial assets (in financial account) Merchanting*
No change of ownership	Goods under financial lease Processing Most repair	Not applicable	Transit trade* Returned goods* Goods under operational lease* Mobile equipment* Shipments for military, diplomatic or display purposes* Migrants' effects*	Not applicable

* not recorded in balance of payments accounts

and inventories) are included in the capital and financial account. Merchanting—where the owner is from a country different from the location of the asset—should be recorded in the services account but are not identified as such in the Canadian statistics owing to data limitations (see section 6.2.2.7 in Chapter 6, “Commercial Services”).

3.2 Data sources

As noted, the trade in goods account is largely based on customs documents.

> When goods are imported into or exported from Canada, declarations must be filed with Customs, giving such information as description and value of the goods, origin and port clearance of commodities and the mode of transport. Most of this information is required for the purposes of Customs administration. Statistics developed from administrative records of Customs are commonly referred to as Customs-based trade statistics.[5]

In Canada, the customs records are processed and published for statistical purposes by the International Trade Division of Statistics Canada. That division compiles Canadian imports from all foreign countries and Canadian exports to countries other than the United States from the Canadian customs documents filed with Canada Customs and Revenue Agency (formerly Revenue Canada, Customs and Excise). Since January 1, 1990, Canadian exports to the United States have been based on U.S. customs documents on imports from Canada; the data are compiled by the U.S. Census Bureau of the U.S. Department of Commerce and provided to the International Trade Division of Statistics Canada. Before 1990, the information was obtained directly from Canadian customs export documents. The Balance of Payments Division of Statistics Canada uses additional sources to adjust customs data to meet balance of payments requirements.

As customs data are by far the major source of data on goods for most countries, concerted efforts have been made at the international level in recent years to narrow the differences in compilation standards between customs and balance of payments. In recording its customs data, Canada generally follows the international standards set out in the United Nations document *International Trade Statistics, Concepts and Definitions*.[6] These standards, as adopted in Canada, are reviewed next, with notes on the adjustments needed for balance of payments purposes.

3.2.1 General commodity trade system

To record its customs data, Canada uses a system which is referred to as the general trade system by the United Nations Statistical Office. The main feature of the general trade system is that it records all goods, whether they are for domestic or re-export purposes. (In customs terminology, ‘re-exports’ refers to goods of foreign origin that have not been noticeably transformed in Canada.)

3.2.2 Commodity presentation

Canada uses the Harmonized Commodity Description and Coding System (HS) in coding its customs goods.

> The Harmonized System is an international product nomenclature, which has been developed under the auspices of the Customs Co-operation Council (now called the World Customs Organization or WCO) based in Brussels. The HS, which came into effect on 1 January 1988, was meant to be used not only for customs purposes but also for the collection of trade statistics and for all kinds of transactions in international trade (transport, insurance, etc.).
>
> For the purpose of tariff classification, the HS provides a legal and logical structure. It consists of a total of 1,241 headings grouped into 96 chapters that are themselves sub-divided into 21 sections. Thus, the HS consists of more than 5,000 sub-headings identified by a 6-digit code and provided with

5. Statistics Canada, *Exports, Merchandise Trade 1998* (Catalogue no. 65-202), v.

6. United Nations, Statistical papers, *Series ST/ESA/SER</52/Rev. 2.* New York, 1998.

> definitions and rules to ensure uniform application.[7]

> The Harmonized System is based on a fundamental principle that goods are classified by what they are and not according to their state of fabrication, use, made in Canada status, or any other such criteria.[8]

Most countries use the HS coding, which both expedites traders' paperwork and customs administration as well as facilitates analysis for policy and commercial purposes.

> Practically all … World Trade Organization members apply the HS nomenclature, which means that more than 95 per cent of world trade is now covered by the HS. Article 16 of the HS Convention foresees periodic revision of the System. To keep the HS up-to-date and to take into account changes in technology, new products and developments in international trade, two sets of amendments to the HS were made on 1 January 1992 and 1 January 1996 respectively. A third set of amendments is expected to be introduced in the year 2002 or 2003.[9]

3.2.3 Valuation

For customs purposes, goods are valued at 'transaction value' at the point of exit for Canadian exports and from the point of last direct shipment for Canadian imports. For balance of payments purposes, international standards call for goods to be "recorded at market values at points of uniform valuation, that is, the customs frontiers of the exporting economies."[10]

3.2.3.1 Transaction value

In the Canadian customs documentation, goods are valued at "transaction value" as defined by the present World Trade Organization.

> To determine the transaction value of imported goods, all transportation and associated costs arising in respect of the goods being appraised prior to and at the place of direct shipment to Canada, are to be added to the price of goods. Therefore, Canadian imports are valued F.O.B. (Free on Board), at the place of direct shipment to Canada. It excludes freight and insurance costs in bringing goods to Canada from the point of direct shipment.

> … Canadian exports to overseas countries are valued at F.O.B. port of exit, including domestic freight charges to that point but net of discounts and allowances. As of January 1990, Canadian exports to the United States are valued F.O.B. point of exit from Canada. Prior to 1990, they were valued F.O.B. place of lading net of freight charges, discounts and allowances.[11]

For balance of payments purposes, the transaction value used for customs is generally accepted. There are a few cases where supplementary information indicates that the transaction occurred at a value different from that recorded in customs. For such cases, the data are corrected with balance of payments valuation adjustments.

3.2.3.2 Valuation at the border

For balance of payments purposes, the point of valuation of goods is at the border of the exporting economy. Valuing goods at the border entails adjusting customs data, both on exports and imports. The valuation from the point of exit (customs exports) and from the foreign point of shipment (customs imports) to the border entails valuation adjustments for inland freight, especially where the place of direct shipment to Canada is well within the interior of a country such as the United States. The inland freight valuation adjustments on exports arise because the

7. World Trade Organization , *FOCUS*, (newsletter, No. 20, Information and Media Relations Division, Worl Trade Organization, Geneva, June-July 1997). Coding up to the 8-digit level for exports and at the 9th- and 10th-digit levels for imports is provided for under the HS and is variously used by Canada. The additional coding levels are not necessarily intended to be comparable at the international level.

8. Statistics Canada, *Exports, Merchandise Trade 1998* (Catalogue no. 65-202), viii.

9. World Trade Organization, *FOCUS*, (newsletter, No. 20, Information and Media Relations Division, World Trade Organization, Geneva, June–July 1997).

10. International Monetary Fund, *Balance of Payments Manual*, (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 195, 54.

11. Statistics Canada, *Exports, Merchandise Trade 1998* (Catalogue no. 65-20) viii.

balance of payments and the customs data use somewhat different definitions of freight to border.

The adjustments on U.S. imports arise because freight to border is not included in the customs records, which value imports at the point of last direct shipment in the United States. In contrast, overseas imports are valued by both customs and balance of payments at the foreign export border.

The acceptance of the customs frontier (rather than the political border) means that once goods have cleared customs at an inland airport or water port, freight thereafter is regarded as international freight and recorded in transportation services (see Chapter 5, "Transportation"). No attribution is made to inland freight for the portion of the post-clearance journey occurring inside the political border (for example, for the vessel movement across the Great Lakes or between the port of Thunder Bay and 200 miles (approximately 322 kilometres) off the Newfoundland coast en route to Europe).

3.2.4 Country attribution

Exports on a customs basis should be attributed to the country of last destination, but the country of last *known* destination is in fact requested. In practice, the customs documents may show neither destination. Therefore, for practical reasons, exports are attributed to a country of *best-known destination* for the balance of payments.

The international standard is clear about the change of ownership principle at the global level. It basically refers to a change from the books of the exporter to the books of the importer.[12] However, whether this 'change of books' occurs at the next, middle or last of several actual parties after export is not always recorded in documentation.

In effect, it is impracticable to determine who the first owner really is. More importantly, the bulk of customs records—the only comprehensive source—show the intended destination without third country involvement along the way other than the provision of transit. In cases where residents of more than one country following export are involved, but change of books is unknown, the choice of a 'late' rather than 'early' destination is in fact quite acceptable.

A particular concern arises with exports to the United States: because of administrative filing procedures, US Customs file significant trade as imports for consumption rather than as imports transiting to destinations overseas. Since the vast majority of Canadian exports is intended for U.S. consumption, that majority is correctly allocated, along with whatever portion of intended-for-transit exports that first go onto the books of a U.S. recipient. The latter, of course, move on to their overseas clients as U.S. exports or re-exports. For the remaining intended-for-transit exports, which are attributed by default to the United States, there is an implicit 'early' rather than 'late' country of attribution in balance of payments procedures and, accordingly, significant misallocation on a customs basis covering all the intended-for-transit trade that is not so documented. No attempt to apply a corrective geographical adjustment has been made for lack of data, though an adjustment for undercoverage of exports outside the United States (that is, over and above the misallocation), was applied from 1986 at the time of the historical revisions in 1997 (see section 3.3.1.1 of this chapter). Research continues in this area.

Imports on a customs basis are allocated to the country of origin. This treatment was adopted beginning in 1988, and coinciding with the introduction of the HS. It states

> [The country of origin is where] the goods were grown, extracted or manufactured in accordance to the rules of origin administered by Revenue Canada, Customs and Excise.… Prior to 1988, most imports were attributed to the country of export/consignment with the exception of imports from Central and South America.[13]

For balance of payments purposes, however, imports of goods are allocated to the last country of shipment, as it is believed to better reflect the ownership change. The last-country notion thus parallels that used for exports. Hence, balance of

12. "Goods for export are generally considered to change ownership at the time the exporter ceases to carry them on his books as a real asset (i.e. when he records a sale) and makes a corresponding entry in his financial items. Goods for import are considered to change ownership when the importer enters them on his books as a real asset (i.e. when he records a purchase) and makes a corresponding entry in his financial items. This convention is designed to promote consistency between the **goods** items and the **financial account** in the balance of payments of the compiling country, as well as consistency between the **goods** item as compiled by the exporting and importing countries." International Monetary Fund, *Balance of Payments Manual*, (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 204, 55.

13. Statistics Canada, *Exports, Merchandise Trade 1998* (Catalogue no. 65-202),

payments residency adjustments are used to re-allocate imports from the country of origin to that of shipment; these adjustments apply at the country level and obviously cancel out on a global basis. The information for this adjustment comes from customs data, where imports are recorded on a dual basis, by country of origin and country of last shipment.

3.3 Methods

Statistics on goods trade are compiled monthly by the International Trade Division. The balance of payments adjustments to trade in goods are compiled on a monthly basis by the Balance of Payments Division. The two divisions work in close co-operation to integrate the balance of payments adjustments with the customs data. The International Trade Division publishes the data on trade in goods on a monthly basis and the Balance of Payments Division publishes the same data, but quarterly, as part of the balance of payments.

The following summarizes the compilation of Canadian exports and imports, from a customs basis through to their compilation on a balance of payments basis.

3.3.1 Exports

Canadian exports to the United States on a customs basis are compiled from U.S. Customs imports from Canada[14]

1) to which are added Canadian re-exports (goods of foreign origin shipped through Canada);
2) from which are subtracted
   a) U.S. goods returned through Canada and designated as Canadian origin by the United States; and
   b) U.S. imports originating from Canada but shipped from third countries; and
3) to which are added freight and related charges from point of lading to Canadian point of exit.

This procedure is used for all Canadian exports to the United States except exports of natural gas and electricity. These two commodities are recorded directly from Canadian sources in both Canadian and U.S. customs data, as the Canadian sources are viewed as more accurate than U.S. import data for these series. Exports to other countries are compiled from Canadian customs documents by Statistics Canada's International Trade Division.

The resulting customs exports to the United States and to other countries are then adjusted through four categories of balance of payments adjustments: coverage adjustments, timing adjustments, valuation adjustments for inland freight, and other valuation and residency adjustments.

3.3.1.1 Coverage adjustments

Three major coverage adjustments are made to customs exports: an adjustment on crude petroleum exports to the United States, an adjustment on natural gas exports to the United States, and a general provision to account for undercoverage of exports to countries other than the United States not covered in customs data.

The crude petroleum adjustment is made to replace customs data with volume and price data (obtained from the Manufacturing, Construction and Energy Division of Statistics Canada and the National Energy Board, respectively). This adjustment is effectively both a coverage and a valuation adjustment, although it is portrayed as simply a coverage adjustment until 1995, when a split was re-instituted.

Although the adjustment to natural gas is a freight adjustment to bring the value of gas to the border (since gas is valued as being delivered at the border), it is classified as a coverage adjustment for historical reasons.

The undercoverage adjustment, which begins with the reference year 1986, was introduced to account for exports to countries other than the United States that were not recorded in customs data. The amount increased noticeably with the introduction of the data exchange agreement with U.S. authorities in 1990; the increase stemmed from Canadian exporters not always being aware that they had to continue to report exports which transited through the United States but which were ultimately destined to countries other than the United States. On the U.S. side, it is legal and faster to file goods as imports for consumption in the United States and avoid the obligations of in-transit procedures, which penalize failure to ship the goods outside the United States within a given period.

14. Country of origin and f.o.b. point of lading.

3.3.1.2 Timing adjustments

Two main types of timing adjustments are made: one to current customs exports of grains and the other for late documents.

The adjustments for wheat and durum products entail replacing customs data with volume data on clearances obtained from the Canadian Grain Commission (CGC) coupled with prices from the Agriculture Division of Statistics Canada from 1988 to 1992, as well as with a global transaction price from 1993 onward, which is used for customs data by the International Trade Division. The CGC's data are believed to reflect more accurately the movement and ultimate destination of Canadian grains and have been progressively introduced into the customs data by the International Trade Division. From 1999, the CGC volumes were applied monthly rather than annually.

From 1999, the CGC volumes and the International Trade Division unit prices have been applied monthly at the customs level for two other grains: canola and barley.

For other grains (oats, rye, flaxseed, and corn), balance of payments adjustments substitute monthly CGC volumes for customs volumes and use the latest available unit price from the International Trade Division. None of the grain adjustments are applied to the United States because its import data are generally taken as sufficient.

A temporary adjustment based on recurrent patterns is made for late arrivals of customs documents, which are subsequently integrated into the customs database and removed from the balance of payments adjustments. Omissions from customs records documented from other sources are temporarily recorded from time to time through a balance of payments adjustment as well, until appropriate entries are made in the customs data.

3.3.1.3 Valuation adjustments for inland freight

The inland freight on goods is such a large valuation adjustment that it is shown separately in publications. To ensure consistency with Canada's input–output statistical treatment, goods require valuation at the plant. This is done first by removing inland freight to the border as recorded in the customs data (see section 3.3.1.4.1), and second, by applying specific balance of payments adjustments as explained in the current section. This process is followed because, based on past research and ongoing commodity balancing within the input–output framework, it was found that freight measured in the customs data was incomplete. Once further deductions of freight (and discounts) are made to bring the value of exports to the plant, the estimation of a somewhat different amount of inland freight back to the border is again carried out by the Balance of Payment Division.

For exports to the United States, the following inland freight adjustments are applied *en bloc*, that is, they are not necessarily distinguished by commodity:

- Freight by truck, as reported in U.S. customs data, is added (U.S. brokers estimate the mileage-based share of the journey occurring in Canada).
- Rail freight, as reported in U.S. customs data, is adjusted to factor in certain receipts on forest products shipped on a cost, insurance and freight (c.i.f.) basis to the United States and, historically, seen as missing from direct surveys of carriers.
- For charges on petroleum moved by pipeline, the U.S. customs data are recalculated using National Energy Board transport-to-border rates and volumes provided by the Statistics Canada Manufacturing, Construction and Energy Division. A small amount identified by the Input–Output Division for liquid petroleum gas transport is also added. No inland freight is added to natural gas exports as this commodity has been already valued at the border through a coverage adjustment (see section 3.3.1.1). Note that this is an exception to at-plant valuation, as significant sales are made inclusive of transport charges.[15]
- A small miscellaneous freight amount from U.S. customs data, unclassified as to mode of transport other than air or water, is added.
- A small percentage reduction is made for duplication of rail charges on exports transiting the United States and already estimated in inland freight to overseas destinations.

For exports outside the United States, historical rates for freight are applied to overseas exports and serve as the inland freight estimate for non-U.S. exports. A separate freight component is not distinguished in the customs data for these exports.

15. Another exception is wheat exports, marketed centrally with transport costs to the border already covered in customs valuation.

3.3.1.4 Other valuation and residency adjustments

The other valuation and residency adjustments are made up of the following:

- a valuation adjustment to remove the freight and handling charges and to account for the discounts on a number of commodities not fully removed in the customs data;
- a valuation adjustment on pre-packaged software; and
- two residency adjustments made to gold, mainly to add gold bullion transacted with non-resident accounts in Canada and to add gold sold by Canadian monetary authorities to non-residents other than foreign monetary authorities.

3.3.1.4.1 Removal of customs-based and additional freight

The initial stage of the valuation adjustment consists in deducting freight already included in customs data. This provides data which are essential to the input–output framework for the at-plant valuation.

For Canadian exports to the United States, inland freight is removed on every commodity by means of a special 'freight-out' run provided by the International Trade Division, which obtains the data—including mode of transportation—from the U.S. Census Bureau on the range of U.S. imports from Canada.[16]

For exports to overseas countries, a small general factor is applied, without distinction by commodity, to subtract freight in order to reach plant valuation.

A few more deductions are made to certain resource commodities, where not all freight and discounts are considered to have been removed. Large freight deductions are made on the following commodities for exports to countries other than the United States: coal, newsprint, wood pulp and aluminium. Smaller adjustments are made on sulphur, asbestos, iron ore and potash, and a general freight adjustment is made for the remaining commodities.

Freight adjustments are also made for exports to the United States of newsprint and wood pulp. The large adjustments for freight as well as the discounts are calculated from the gap between customs values and the customs volume revalued at unit prices from production censuses by the Manufacturing, Construction and Energy Division. For post-census periods, information on unit values is projected from more current price index series of Statistics Canada. The smaller adjustments for freight are carried out by applying known percentages on monthly exports.

Discount adjustments, part of the above valuation gap, are made for the following commodities: newsprint, wood pulp, sulphur and, to a lesser extent, aluminium and asbestos.

3.3.1.4.2 Valuation adjustments to pre-packaged software

From 1996, a small adjustment compiled by the U.S. Bureau of Economic Analysis is applied to increase the value of prepackaged software exports. The data source, U.S. import data, continue to value some of these transactions at the value of the medium (for example, diskette or CD) rather than at the value of the content.[17]

3.3.1.4.3 Residency adjustments on gold

The first residency adjustment to gold is limited to transactions between residents and non-residents on commodity gold located within Canada, since the cross-border movement of gold is already recorded in customs data. The adjustment consists of adding to the customs data gold sold to non-residents but which is left in Canada with non-resident accounts. Data for these adjustments are obtained from surveys of Canadian banks and refiners.

A second residency adjustment covers gold sold by Canadian monetary authorities to foreign residents other than foreign monetary authorities. Gold transacted between Canadian monetary authorities and foreign monetary authorities should not be recorded as trade in goods—since it is treated as monetary gold and is part of financial assets[18]—and any customs documents which involve the Canadian monetary authorities are removed before customs data are compiled (or, if not removed in time, cancelled by

16. As discussed in section 2.3.2, air and water freight are not treated as inland freight, and are not included in the value of goods as they are incurred beyond the customs point of exit; rather they are classified in transportation services from the point of departure by the carriers from their ports of exit.

17. For a further discussion see Chapter 6, "Commercial Services."

18. Financial assets also include gold held abroad by Canadian residents other than the Canadian monetary authorities. Transactions in gold held abroad by Canadian residents other than the monetary autorities are recorded as a financial asset in the financial account and not as commodity gold in the current account. This treatment is inconsistent with the treatment of gold assets held in Canada by non-residents and which is not treated as their financial assets (that is, their gold is not shown as Canada's financial liability).

an offsetting balance of payments adjustment). Where monetary gold is sold to foreign residents other than foreign monetary authorities, it is viewed as normal exports of commodity gold. From time to time the monetary status of certain individual transactions may be difficult to determine readily in source data. When a monetary exclusion is inadvertently made in the customs data, a balance of payments adjustment is applied to include the transaction if it is non-monetary in nature. When such gold is sold by Canadian monetary authorities from holdings abroad to a non-monetary foreign resident, there is no customs record generated and the change of ownership is also reflected through a balance of payments adjustment.

Up to 1968, goods also include the Canadian production of gold that was available for export. The value corresponds to that of current domestic gold production, minus gold consumed by Canadian industry or the arts, and minus that held by producers for refining, or in the mines. Although this metal was not actually exported, it was sold to the Exchange Fund after having been refined in Canada. Its value was recorded as a credit entry in the current account and as a debit in the official exchange holdings account. This was consistent with the convention used at that time to shift the gold from the real sector (gold as a good) to an international asset (monetary gold). Given the special role of gold up until 1968, when its commercial price was no longer fixed, it was decided to break the series at that point, and no attempt was made to apply the current treatment to the data prior to 1968.

3.3.2 Imports of goods

Canadian imports on a customs basis are also adjusted with four broad balance of payments adjustments: coverage adjustments, a timing adjustment, a valuation adjustment for inland freight, and other valuation and residency adjustments.

3.3.2.1 Coverage adjustments

Four adjustments for coverage are applied to customs imports. The first pertains to crude petroleum, where quantity data, seen to be more accurate, are used from the Manufacturing, Construction and Energy Division to replace the customs volume data. Prices used to arrive at values are based on unit values provided by the International Trade Division, with the except of the current month where information supplied by Natural Resources Canada is used. The second adjustment relates to imports via mail which are not fully recorded in customs data; this adjustment was developed from internal investigation and administrative sources linked to existing customs coverage and external variables such as exchange rate change. The third adjustment pertains to the import of undeclared tobacco products, which has been roughly estimated from internal studies on production and trade.

Beginning in 1996, a fourth adjustment based on customs records was compiled by the International Trade Division to subtract custom software already covered in service imports.

3.3.2.2 Timing adjustment

A temporary adjustment is made for late arrival of documents for automotive parts. Based on past patterns, the amount is reduced each month as customs records are received.

3.3.2.3 Valuation adjustment for inland freight

Because customs imports are valued only at the place of last direct shipment to Canada, an estimate of freight to the export frontier must be added. This inland freight adjustment is made by mode of transport and commodity (trucks, rail, coal) for imports from the United States; a smaller general adjustment is applied to imports from countries other than the United States.

The methodology for calculating inland freight on imports with the United States has evolved over time, in particular since of the end of the 1980s as different institutional arrangements for data sourcing and imputation procedures have themselves changed. Under the Canada-United States exchange of imports data in 1990, basic information began to be compiled using Canadian import documentation, a complete reversal of practice up to that date. Ideally, much of the freight from import documentation would be drawn upon in the same way as became possible for export freight after the data exchange. However, compilation from Canadian import documents did not begin until 1991, and from then, the Canadian customs measure has represented freight for the whole journey rather than to the border only. Thus the source for inland freight was substantially overstated until 1998, when the International Trade Division changed imputation methodology; this almost halved the freight-to-goods ratio, bringing it much closer to the ratios that prevailed before 1990.

Because of the issues in Canadian import documentation outlined above, the Balance of Payments Division continued with a modal approach between 1990 and 1998. The largest component, truck freight, was initially estimated in consultation with the Transportation Division using a range of volume, price and transborder share information. With the imputation procedures recently adopted by the International Trade Division, a more direct and current measure was taken for truck freight. Freight by rail continues to be compiled from balance of payments survey sources of Canadian and U.S. rail carriers, avoiding a substantial drop shown in the current customs-based information. A third component of inland freight with the United States consists of a rate-based estimate in addition to current volume information on coal.

The adjustment for inland freight on imports from countries other than the United States is derived from specific freight rates applied to the values of all goods imported excepting some specific products, such as crude petroleum, aircraft, autos and trucks. As with exports, separate freight accounts are not distinguished in the customs data, except for those transactions with the United States.

3.3.2.4 Other valuation adjustment and residency adjustments

One valuation adjustment and two residency adjustments are applied to customs imports.

The valuation adjustment consists in a small rate-based adjustment to represent inland freight included in imports from countries other than the United States. This amount, once deducted from imports valued at the exporter’s customs frontier, brings overseas imports to the same plant basis as imports from the United States. At this point inland freight (see section 3.3.2.3) is added to reach border valuation on a balance of payments basis.

The first residency adjustment pertains to gold bought in Canada by non-residents, but which does not cross the border. Data from a survey of banks and refiners are used in producing this adjustment.

The other residency adjustment is made in order to show imports on a last country of shipment. These adjustments are made at the level of countries and cancel out on a global basis. A residency adjustment would also be called for if the Canadian monetary authorities were to purchase gold in certain circumstances from non-residents other than foreign monetary authorities. If a purchase is from a non-resident within Canada, or if the purchase is made abroad for delivery abroad, no import document is generated to reflect the transaction.

Table 3.2
Summary of balance of payments adjustments

	Exports	Imports
Coverage	Petroleum Natural gas Exports overseas addition	Crude petroleum Mail addition Undeclared tobacco addition Custom software deduction
Timing	Grains Late documents, general	Late documents, automotive parts
Inland freight valuation	Inland freight addition	Inland freight addition
Other valuation and residency	Freight and discount deductions (valuation) Petroleum (valuation) Prepackaged software U.S. addition (valuation) Non-monetary gold addition (residency)	Freight deduction (valuation) Non-monetary gold addition (residency) Country of shipment (residency)

3.3.3 Summary

Overall, the adjustments on exports are more numerous and sizeable than on imports (see Table 3.2) and the largest adjustment for both exports and imports arises from ensuring appropriate inclusion of inland freight to the border. It should be noted that the adjustments are not always strictly balance of payments adjustments as they are often used to rectify what would ideally have been originally recorded as customs data. Timing adjustments are such examples and they are subsequently replaced with more complete customs records.

3.4. Products

3.4.1 Data accuracy

The overall quality of data on exports and imports of goods is reliable. It is underpinned by the quality of customs documentation—the main source of information to compile these statistics—and by the quality of the balance of payments adjustments. These two sources are considered to be reliable.

Customs documentation on imports is generally of higher quality than that on exports since more emphasis is given to imports by customs authorities. This was the rationale for the Canada–United States agreement to use each other's customs imports as their major source of export data.

Because they are such a large and detailed set of data, customs data are bound to encounter problems of coverage, timing, valuation, classification and country allocation. Coverage will be affected by failures to file the required documentation, as occurred most notably following the gradual removal of tariffs under trade liberalization. Undercoverage has been corrected somewhat through the exchange of import data with the United States, but has remained prevalent with exports to other countries. Late receipt of documents, both by the International Trade Division of Statistics Canada and by the U.S. Census Bureau, are corrected through balance of payments adjustments based on best available knowledge. Inappropriate valuation may also arise from erroneous information reported in customs data. This is corrected to the extent that additional information is available. Since not all trade can be adequately allocated to the several thousand classifications of the Harmonized System, misclassification will arise, and this is not generally corrected. Country allocation can appear as the first port of destination (instead of ultimate destination) for exports, but no attempt is made to correct this due to the lack of data. For example, exports destined overseas via the United States may be captured as U.S. imports (as noted, such registration is both legal and simpler than filing in-transit documents).

Many of the balance of payments adjustments are derived from other administrative or corporate information and the results can be considered reliable, although some individual adjustments may be lacking in accuracy, timeliness or geographic details. It should be noted that most of the balance of payments adjustments to goods are not intended to be independent measures of activity in their own right—they frequently represent corrections to phenomena already measured directly elsewhere. Because these adjustments rely on available approaches and secondary sources for their calculation, less precision should be attributed to them than for directly measurable transactions.

Efforts are continuously made to enhance the data quality. In addition to co-operating with Canada Customs and Revenue Agency and the U.S. Census Bureau—the U.S. statistical agency in charge of trade in goods data—the International Trade Division of Statistics Canada also conducts periodic reconciliations with other major trading partners. An evaluation of the goods trade statistics is also routinely made in compiling the input–output series in the Canadian System of National Accounts, where the need for different valuation than those shown in customs adjustments have been uncovered for particular products.

3.4.2 Data accessibility

The quarterly and annual series on goods are published in the quarterly *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM. Total exports, imports and balances of goods on a balance of payments basis are broken out by six standard geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. Goods exports, imports and balances on a balance of payments basis are also published for nine broad groupings: agricultural and fishing products, energy products, forestry products, industrial goods, machinery and equipment, automotive products, consumer goods, special transactions, and inland freight and other Balance of payments adjustments. Exports and imports on a customs basis are published along with the four balance of payments adjustments.

Exports and imports of goods on both a balance of payments and a customs basis are also published each month by the International Trade Division in both print and electronic versions and in CANSIM.

CHAPTER 4
TRAVEL

4.1 Concepts

In conformity with international standards, travel covers purchases of goods and services by the following:

- persons travelling in another country for less than one year;
- persons travelling in another country for one year or more for medical or educational purposes;
- seasonal and border workers working in another country (cross-border workers); and
- crews of airplanes, ships, trucks or trains stopping off or laying over in another country.

Purchases of goods and services consist of expenditures for food, lodging, recreation, gifts and other incidentals, as well as local transportation purchased in the country of travel.

Travel excludes passenger fares for international travel, which are included in transportation. It also excludes spending of diplomats and military personnel on posting in host countries. Such personnel remain residents of their home countries, and their spending in the host countries is included in government services. However, visits in the interim, whether on leave or on official business, are considered part of travel.

In Canadian statistics, the only exceptions to international standards are cruise fares, which are excluded from travel and, instead, are classified in transportation (see Chapter 5, “Transportation”). Furthermore, though Canadian travel statistics include the personal expenditures of cross-border workers in business travel, such expenses are not separately identified, as called for by international standards.

Travel is subdivided into travel for business reasons and travel for personal reasons, an important distinction for the System of National Accounts.

> Expenditures by business travellers are part of the intermediate consumption of producers, whereas expenditures by other travellers on personal trips are part of household final consumption expenditures. In order to calculate final consumption expenditures of resident households from the expenditure made by all households, both resident and non-resident, within the domestic market, it is necessary to add direct purchases abroad by residents and to subtract direct purchases in the domestic market by non-residents.[1]

4.1.1 Business travel

Business travel covers the expenditures of travellers visiting another economy for business reasons—such as sales, marketing or commercial negotiations—and extends to expenditures by carrier crews stopping off or laying over, and employees of government and international organizations on official business. Business travel also covers expenditures by cross-border workers, but as mentioned above, insufficient data bar their identification as such in the Canadian statistics.[2] Business travel includes spending on goods for personal use as well as for accommodation, food, recreation and local transport.

4.1.2 Personal travel

Personal travel covers travel for health, education and other personal reasons. This includes travel expenses of employees of international organizations when they travel outside their country of residence for personal reasons.

4.1.2.1 Health-related travel

In theory, health-related travel refers to all expenditures in another country by medical patients.

1. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*, (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Commission of the European Communities, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 14.111, 334.

2. A limited provision for the income as opposed to spending of cross-border workers is included in miscellaneous commercial services, where they are treated as units of own-account labour, instead of labour income, as called for by international standards. See Chapter 6, “Commercial Services.”

Persons accompanying or visiting such patients may also indicate the purpose of their travel as health-related. Two types of health-related services are covered in Canadian data: those by hospitals and those provided by physicians' offices. The out-of-pocket expenditures on goods and services by persons travelling for health-related purposes should also be included here, but Canadian statistics record these expenditures in other personal travel, due to data limitations.

4.1.2.2 Education-related travel

In theory, education-related travel should include all expenditures in another country by students. But for practical reasons, Canadian statistics include only outlays of post-secondary students; that is, only outlays on full-time university and college programs, which generally extend over more than one year, are included. Recorded outlays include all expenditures by post-secondary students studying abroad—that is, expenditures for tuition fees and course materials, together with accommodation and general living expenses. Except as incidentally covered in other personal travel, spending for primary and secondary schooling remains to be estimated in Canadian statistics. Certain further expenditures on institutional education (such as for personal interest courses) also remain in other personal travel because of data limitations.

The fact that travel outlays are collected from the consumer rather than the supplier (see section 4.4.1) sets up a potential duplication between, for example, the foreign visitors' spending on a commercial training course, and the same course reportable as earnings from abroad by the Canadian supplier. Historical response rates for the travel series, however, make it difficult to establish that non-institutional education services as such would be extensively represented. All receipts and payments reported as commercial education in miscellaneous business services are accordingly included in the commercial services account (see Chapter 6, "Commercial Services"). Self-employed earnings by instructors are outside the scope of travel, and are not surveyed in any case.

4.1.2.3 Other personal travel

Other personal travel includes outlays for leisure travel, including participation in sports, artistic, cultural or recreational events. Spending on visits with relatives and friends and for religious purposes is also included here. As previously discussed, other personal travel also includes some expenditures on health and education that cannot be identified separately, for example, expenditures on full-time programs of less than a year as well as some spending by international students at elementary and secondary school levels.

4.2 Data sources

The Culture, Tourism and Centre for Education Statistics Division of Statistics Canada compiles the basic Canadian travel statistics. These statistics are derived from a combination of census data and sample counts of travellers crossing the border, coupled with sample surveys used to collect specific information from travellers, including their expenditures and main purpose of visit (business or personal).[3]

The Canada Customs and Revenue Agency collects information on the number of crossings at frontier ports and distributes the travel survey questionnaires. The frontier count is made by categories, based on mode of transportation (including, in the case of highway and ferry points, cars, trucks, motorcycles and bicycles). Complete counts are taken at all but seven points of entry where automobile, motorcycle and bicycle flows are estimated from samples. The questionnaires that collect the travel expenditure data are distributed according to pre-arranged schedules to non-resident[4] travellers upon entry to Canada, or to residents of Canada upon their return from travel abroad. Completion of the questionnaires is voluntary and travellers are asked to mail their completed questionnaires directly to Statistics Canada.

In business travel, estimates of spending by crews (of airplanes, ships, boats, trains and trucks) are calculated by the Culture, Tourism and Centre for Education Statistics Division.

Historical series and recent extensions to coverage of health-related travel were developed by the Culture, Tourism and Centre for Education Statistics Division and the Balance of Payments Division. The

3. Publications by Culture, Tourism and Centre for Education Statistics Division provide additional descriptions of the sources, methods and quality of the travel series. For example, see Statistics Canada, *Touriscope, International Travel, Travel Between Canada and Other Countries, 1997* (Catalogue no. 66-201-XIB, May 1999).

4. Prior to 1990, questionnaires for United States travellers visiting Canada were distributed to American residents on returning to their country by U.S. Customs officials. The questionnaires were processed by the U.S. Department of Commerce and the results were sent to Statistics Canada.

receipts data for health consist of foreign spending for hospital services in Canada, as recorded from the annual hospital survey of the Canadian Institute for Health Information, with projections for recent years where survey results are not yet available. Recent estimates for physician services linked to U.S. data on the payments side were introduced with the 1995 reference year.

Until recently, the series on health-related payments was largely limited to hospital and physician charges as paid under provincial health plans for Canadian residents travelling abroad. Starting in 1995, access to U.S. sources has enabled a fuller estimate covering payments beyond provincial health plans at major medical centres and university hospitals.

On the receipt side of the education series, the Culture, Tourism and Centre for Education Statistics Division produce the estimates by combining the time series on the number of students with average tuition and adding estimates of other expenditure. For expenditures of Canadian students in the United States, the data have been supplied by the U.S. Bureau of Economic Analysis from 1981 onward and were linked with balance of payments data for prior years. Data on student expenditures overseas are updated by the Culture, Tourism and Centre for Education Statistics Division to incorporate volume and expenditure estimates.

4.3 Methods

The Culture, Tourism and Centre for Education Statistics Division processes the monthly data on counts of travellers and the quarterly expenditure factors, and provides the spending results to the Balance of Payments Division. The latter division seasonally adjusts the quarterly travel expenditures.

4.3.1 General methodology

Specific methodology is described in the Culture, Tourism and Centre for Education Statistics Division publication, *Touriscope*, which is released annually.

4.3.2 Extended geographical breakouts

Six geographical areas have long been the basis for balance of payments presentations—the United States, the United Kingdom, Other European Union, Japan, Other OECD and Other Countries. This presentation is still used for sub-annual and detailed presentations on services and continues to serve well, as the three countries identified separately often comprise a significant share of total services trade. In 1999, the annual trade in services release[5] expanded the geographical breakout of total travel receipts and payments to 44 countries and residual areas.

For basic travel spending (covering some 80% of all travel outlays), estimates by country are available directly from the international travel survey. The other 20% of travel expenditures are not available for all individual countries and have to be allocated to countries within the three standard country areas. Health-related transactions are allocated by basic travel spending in proportion to the travel undertaken. Travel specifically for obtaining medical treatment is taken as occurring largely with the United States, for which there is an existing estimate.

Education-related receipts are proportioned by the number of foreign students; this information is collected from administrative sources. Note, however, that fees and living costs in Canada are not specific to a student's country of residency. Payments are estimated according to UNESCO data on the number of Canadian students who study abroad. The relative cost of living overseas is also taken into account, based on indexes developed by the Prices Division of Statistics Canada. Spending by foreign crews is dominated by airplane crew spending. The expenditures of foreign air crews is distributed by the supporting service outlays made by foreign airlines serving Canada (captured by a balance of payments survey) and, in the case of payments, by the number of outward flights to first-stop destinations by Canadian carriers. The latter information is supplied to the Culture, Tourism and Centre for Education Statistics Division by the Transportation Division.

4.4 Products

4.4.1 Data accuracy

The data accuracy on travel is acceptable. The counts of travellers are most reliable, while the response rates for the questionnaire on expenditure factors and other

5. Statistics Canada, *Canada's International Transactions in Services*, (Catalogue no. 67-203-XPB and 67-203-XIB). Starting with the 1998 edition, Table 20 of that publication presents for the first time a time series for trade in services broken out by 44 individual countries. In each case, receipts and payments are shown for travel, commercial and combined transportation and government services, beginning with the reference year 1990.

characteristics remain low. Survey methodology is continually reviewed and special characteristics are studied periodically.[6]

> The basic purpose of the questionnaire surveys (the estimation of total spending at the Canada level) continues to be met with reasonable levels of reliability.[7]

> The procedures used by the Culture, Tourism and Centre for Education Statistics Division to compile international travel are monitored and reviewed on an annual basis in an attempt to improve the accuracy of the existing system.[8]

Some breaks in the data in the mid-1990s result from additional coverage of receipts and payments for health-related travel.

Unlike most goods and services, travel is collected on the basis of spending by the consumer, as opposed to being represented by sales of the provider. This approach to travel, set out in international standards, best ensures maximum coverage for balance of payments reporting. Whereas most trade data are presented on a commodity basis, travel includes both goods and services. Therefore some commodity expenditures are not identified separately in the balance of payments statements.

6. One prominent component of expenditures by Canadian travellers abroad—namely spending in goods—was validated for 1990 and 1991 through analysis of related administrative data. See Statistics Canada, *Cross-Border Shopping-Trends and Measurement Issues*, (National Accounts and Environment Division, Statistics Canada, Technical Series, no. 21, January 1991).

7. Statistics Canada, *Touriscope, International Travel, Travel Between Canada and Other Countries, 1997* (Catalogue no. 66-201, May 1999), 68.

8. Statistics Canada, *Touriscope, International Travel, Travel Between Canada and Other Countries*, *1997* (Catalogue no. 66-201-XIB, May 1999), 68.

4.4.2 Data accessibility

The quarterly and annual series on travel are published as total receipts, payments and balances in *Canada's Balance of International Payments*, quarterly (available in print and in electronic format on the Internet) and in CANSIM.

The series on travel are published in the annual *Canada's International Transactions in Services,* (also available in both print and electronic versions) and in CANSIM for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. Additional quarterly and annual details are published for business and personal travel. Business travel is further identified between crew spending and other business travel. Personal travel is further broken down between health, education and other travel.

A detailed geographic breakout for trading partners other than the United States, United Kingdom and Japan shows an annual time series of travel on a total basis from 1990—that is, inclusive of health, education and crew spending for some 44 countries. As indicated, these series began with the 1998 edition of *Canada's International Transactions in Services,* and are also published in CANSIM.

The Statistics Canada Culture, Tourism and Centre for Education Statistics Division publishes separate monthly, quarterly and annual releases on the outlays and other characteristics of travellers, for example through its annual release, *Touriscope*.

CHAPTER 5
TRANSPORTATION

5.1 Concepts

Transportation covers international revenues (receipts) and expenses (payments) arising from the transportation of goods and of cross-border travellers, as well as from supporting services related to transportation.

The convention of valuing goods trade at the customs frontier of the exporting country affects the measurement of transportation, especially for overland forms of transportation. (For air and ocean carriers, the point of departure and the customs frontier are generally coincident.) For overland forms of transportation, the transportation services from the plant to the border will give rise to an entry in the transportation account of the balance of payments if the carrier is a non-resident of that country. Likewise, if a non-resident carrier provides the overland transportation service from the customs frontier to the destination, there will be an entry in the transportation account.

Canadian practice generally conforms to international standards, except for the following transactions, which are under transportation in Canadian statistics but which international standards identify in other classes:

- cruise fares (international standards include these in travel);
- ship stores, which are not separately identified from port expenditures (international standards include these in goods);
- rentals without crews, which are not separately identified from charters with crews (international standards include these with equipment rentals in commercial services); and
- freight insurance, which is not separately identified from freight charges (international standards include this with insurance services in commercial services).

The international standards that call for a breakout by mode of transportation are not fully followed in Canada in the case of ocean transportation. For reasons of both confidentiality and quality, Canadian statistics combine ocean freight with freight by inland waterway. International standards call for freight by inland waterway to be recorded as other transportation.

5.1.1 Receipts

Canadian transportation receipts cover passenger revenues of Canadian carriers (the majority of which are airlines) from cross-border fares purchased by foreign travellers, and freight revenues earned from non-residents by Canadian carriers for transporting the following:

- Canadian exports beyond the borders of Canada;
- Canadian imports to the Canadian border; and
- foreign-owned goods both in transit through Canada and between foreign ports.

Revenues earned by Canadian residents chartering vessels to non-residents are also included, as well as those earned by Canadian residents providing port services in Canada to foreign air and shipping carriers.

5.1.2 Payments

Conversely, Canadian transportation payments cover cross-border passenger fares purchased by Canadian travellers from non-resident carriers (again, mainly airlines), and freight expenses incurred with non-resident carriers for transporting the following:

- Canadian imports from the Canadian border;
- Canadian exports to the Canadian border; and
- Canadian-owned goods between foreign ports.

Expenditures of Canadian residents chartering vessels from non-residents are also included, as well as those of Canadian carriers acquiring port services abroad, largely for air- and water-borne transport, are also included.

5.1.3 Exclusion from transportation

Transportation, as defined in the international standards, excludes the following transactions:

- revenues earned for transporting non-resident travelers once in the domestic economy;
- major repairs and refits of ships and aircraft, which are included in goods;
- repairs to infrastructure (for example, to harbours and runways), which are included with construction services; and
- time charters; and
- financial leases, which are treated as both financial transactions and goods.

5.1.4 Cross-border trucking

As discussed in section 5.1, the treatment of goods and inland transportation services is interdependent because goods transactions are valued at the customs border of the exporting country. Since trucking is by far the largest component of inland freight and an important part of both the goods account and the transportation account, the Canadian treatment of

Figure 5.1
Conventions for cross-border trucking of Canadian exports and imports of goods

Goods Exports

Service provided by:		**Value at the plant**	**Cost to transport to border**	**Valuation at customs border**	**Cost to transport beyond the border**	**Value at destination**
Canadian trucker	Goods Account		Included in the value of exports		not applicable	
	Transportation Account		not applicable		Receipts in transportation services	
U.S. trucker	Goods Account		Included in the value of exports		not applicable	
	Transportation Account		Payments in transportation services		not applicable	

Goods Imports

Service provided by:		**Value at destination**	**Cost to transport beyond the border**	**Valuation at customs border**	**Cost to transport to border**	**Cost at the plant**
Canadian trucker	Goods Account		not applicable		Included in the value of imports	
	Transportation Account		not applicable		Receipts in transportation services	
U.S. trucker	Goods Account		not applicable		Included in the value of imports	
	Transportation Account		Payments in transportation services		not applicable	

cross-border trucking is reviewed in some detail (see Figure 5.1). The residency of the truck carriers and the location where transport is provided determine the entries for cross-border trucking services in the transportation account. Services provided by Canadian domiciled truckers beyond the Canadian border are recorded as transportation receipts whereas services provided by U.S. domiciled trucks within the Canadian border are treated as transportation payments.

5.2 Data sources

5.2.1 Passenger fares

The Culture, Tourism and Centre for Education Statistics Division estimates passenger fare receipts and expenditures. The monthly data on air travellers, provided by Canada Customs and Revenue Agency, are combined with estimates of average passenger fares, obtained from the quarterly sample survey of travellers (for more information on this survey, see Chapter 4, “Travel”).

5.2.2 Transportation of goods

Transportation of goods by truck beyond the exporting country—which constitutes by far the largest component of the transportation account—is derived from customs documentation compiled by the International Trade Division for payments and by the U.S. Census Bureau for receipts. The components for earnings of Canadian truckers for the carriage of goods in the United States, as well as for expenses paid to U.S. truckers for transporting goods in Canada, are obtained from the U.S. Bureau of Economic Analysis (BEA). The BEA incorporates freight data from the customs data compiled by the International Trade Division of Statistics Canada.

The other transportation components are derived from five annual surveys conducted by Statistics Canada’s Balance of Payments Division:

- Great Lakes–St. Lawrence Seaway Shipping Transactions—BP-20;
- Report of Cargo, Earnings and Expenses of Ocean Vessels Operated by Non-resident Companies—BP-24;
- Report of Cargo, Earnings and Expenses of Ocean Vessels Operated by Canadian Companies—BP-25;
- Report on Imports of Crude Petroleum and Petroleum Products and Other Shipping Operations—BP-26; and
- Transactions of Foreign Airlines with Residents of Canada—BP-58.

The mailing lists for these surveys are updated based on the *Canadian Transportation Guide, Canadian Logistics,* published annually by the Canadian Maritime Industries Association. This guide lists all companies engaged in the Canadian transport industry by sector, that is, by sea, air, land and rail. The mailing list is supplemented by information gathered from media coverage. For the surveys of shipping companies, the mailing list is further compared with information on shipping companies kept by the Transportation Division of Statistics Canada.

5.3 Methods

5.3.1 General methodology

The Culture, Tourism and Centre for Education Statistics Division compiles the data on passenger fares.

The Balance of Payments Division compiles the remaining information on transportation as follows.

For estimates of trucking freight beyond the Canadian/American border, most components of the calculation are taken from the U.S. Bureau of Economic Analysis, whose basic methodology is followed for this series.[1] Beginning with the reference year 1987, the earnings by Canadian-domiciled truckers comprise the freight for carrying exports within the United States to the U.S. destination and the freight for carrying goods from U.S. suppliers within the United States up to the U.S.–Canadian frontier. (Freight on the latter Canadian imports for the remaining journey within Canada is classified as a resident-to-resident transaction, outside the scope of balance of payments.)

In the opposite direction, since 1981, the payments made to U.S.-domiciled truckers have included the payments made for carrying imports within Canada from the Canadian border to their destination in Canada, as well as the payments to carry Canadian exports in Canada up to the Canadian border.

1. A description of the U.S. treatment appears on page 70 of the June 1, 1995 issue of the U.S. Department of Commerce publication, *Survey of Current Business.*

For the surveys, where regular follow-ups do not produce sufficient data, amounts are imputed based on prior responses and available external information. The survey results are often combined with other sources. For example, in the 1997 historical series, the methodology was adapted to increase the coverage of global payments abroad for the transport by sea of imports. Unit freight charges, obtained from a mixture of survey and secondary sources, were multiplied by annual volume data on international cargo unloadings from the Transportation Division. The basic survey of non-oil imports was closely re-edited to calculate unit values. The unit values were then multiplied by international shipping tonnage unloaded at Canadian ports as compiled by the Transportation Division of Statistics Canada. The tonnage activity is largely handled by non-resident carriers.

5.3.2 Extended geographical breakouts

Some larger series in the transportation sector are regularly reported for a range of individual countries at source, such as international passenger fares from the travel survey and the port expenditures in Canada reported by individual foreign airlines. In other instances, such as cross-border trucking earnings or smaller series on earnings from in-transit movements, no special allocation is required as they occur only with the United States.

Otherwise, statistics for the United States, Japan, United Kingdom, Other European Union, Other OECD and Other Countries are collected at source, or through other established estimates. Earnings of Canadian-operated shipping on outward cargo are allocated to individual countries in the last three partner trading blocks according to volumes loaded for specific countries based on data from Transportation Division. Other large series, such as freight payments to vessels operated by non-resident interests or charters, cannot suitably be estimated only according to cargo volumes unloaded or by waterborne import values. What is relevant in these cases is the shipping interests that paid for the service rather than the origin of the cargo. In such a case, a typical allocator used is the shipping tonnage by country of domicile, including the portion of open-registry shipping managed by each country (tabulations from United Nations Conference on Trade and Development [UNCTAD]).

5.4 Products

5.4.1 Data accuracy

Data accuracy is acceptable.

The structure of Canada’s transportation services account has undergone substantial change over the years. The pattern of trade in goods plays a preponderant role in the transportation account. A large portion of Canada’s trade in goods is now with the United States, which in turn leads to more transportation inland, and the attendant difficulties of measuring inland freight (see Chapter 3, “Goods”). There are major difficulties in delineating transportation services on the basis of the residency of the carriers, especially for trucking. For example, in the estimation of cross-border trucking, the northbound freight on goods used by the U.S. Bureau of Economic Analysis is supplied by the International Trade Division from Canadian customs records, which show the whole journey rather than only inland freight to the border. This whole journey measure is useful for the series in question, but within this, the shares by domiciled carriers are difficult to discern.

In the past, a higher percentage of trade was with overseas countries. The carriage of Canada’s trade by ships under Canadian registry has declined considerably in the postwar period. The fact that Canada’s foreign trade is now carried to a larger extent by foreign-operated carriers has led to methods such as the unit valuation (see section 5.3.1) to raise coverage when less than complete information is available at source.

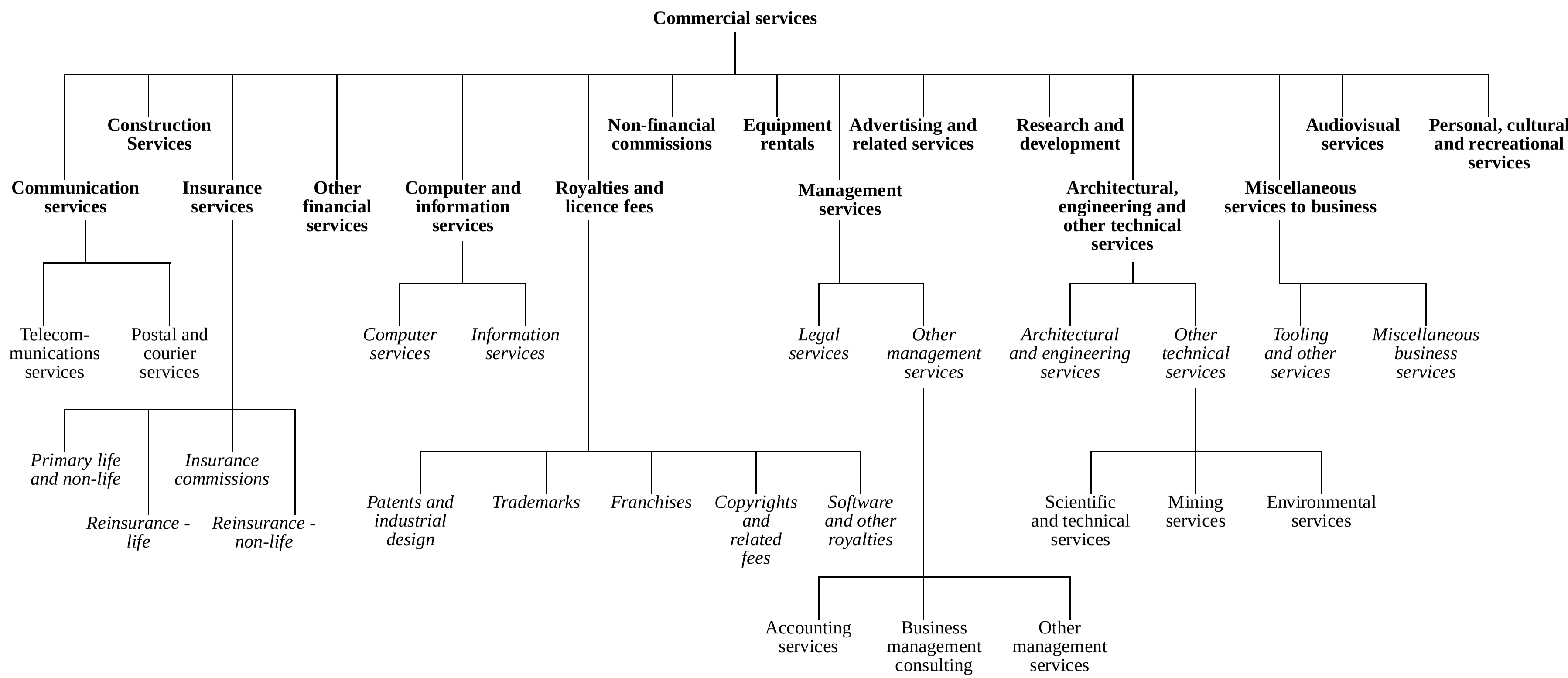
In addition, since deregulation of air services in the late 1980s, reporting has been less than complete for air freight receipts and on payments for supporting landside services, especially geographic breakouts. The extensive detailed annual reconciliation on current account transactions, which is conducted with the U.S. Bureau of Economic Analysis, assists in the data estimation process as well as in validation.[2] Certain payments on bilateral air freight and landside services benefit from U.S. estimates, reflecting incomplete information obtained from the Canadian source.

2. “Reconciliation of the Canada–United States Current Account,” in Statistics Canada, *Canada’s Balance of International Payments*, Third Quarter, 1999 (Catalogue nos. 67-001-XPB and 67-001-XIB).

5.4.2 Data accessibility

The quarterly and annual series on transportation covering total receipts, payments and balances are published in the quarterly *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM.

The annual transportation series are also published in the annual publication *Canada's International Transactions in Services* (available in print and in electronic format on the Internet) and in CANSIM with breakdowns for the six geographic groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. This publication also has transport series by major mode: water, air, land and other transport. Air transport, land transport and other transport are in turn divided on an annual basis between passenger services and freight and auxiliary services. Water transport, which combines ocean freight and inland waterway transportation, is broken down annually by freight and auxiliary services. Beginning with the 1998 issue, annual totals for transportation are also available (with a year's lag) for over 40 more countries from 1990 onward. These series are published in combination with government services, which are very small by comparison. Estimates showing transportation separately can be made available on enquiry.


Commercial services
Communication services
Construction Services
Insurance services
Other financial services
Computer and information services
Royalties and licence fees
Non-financial commissions
Equipment rentals
Management services
Advertising and related services
Research and development
Architectural, engineering and other technical services
Miscellaneous services to business
Audiovisual services
Personal, cultural and recreational services
Telecom-munications services
Postal and courier services
Primary life and non-life
Reinsurance - life
Insurance commissions
Reinsurance - non-life
Computer services
Information services
Patents and industrial design
Trademarks
Franchises
Copyrights and related fees
Software and other royalties
Legal services
Other management services
Accounting services
Business management consulting
Other management services
Architectural and engineering services
Other technical services
Scientific and technical services
Mining services
Environmental services
Tooling and other services
Miscellaneous business services

CHAPTER 6
COMMERCIAL SERVICES

6.1 Concepts

6.1.1 Transactions

Services covers a wide and complex variety of transactions on products that are generally intangible in nature.

> [Unlike goods,] services are not separate entities over which ownership rights can be established. They cannot be traded separately from their production. Services are heterogeneous outputs produced to order and typically consist of changes in the conditions of the consuming units realized by the activities of producers at the demand of the consumers. By the time their production is completed they must have been provided to the consumers.[1]

Since, by nature, most services are not traded separately from their production, these transactions usually require the simultaneous presence of the producer and the consumer of the services. This simultaneity is not easily realized between countries where distance and political boundaries separate the supplier and client. This largely explains the lower volume of trade in services when compared with goods, where both the seller and buyer of goods remain in their respective domestic economies, while the goods they trade move across the border.

International trade negotiations—which extended in recent years to cover services—increased the demand to provide detailed breakdowns of service categories as well as data for individual countries. Prominent among cross-border services[2] are those described in Canadian statistics as commercial services.[3]

Canadian statistics on cross-border commercial services are produced for over 25 categories based on the international standards initially set out by the International Monetary Fund and subsequently extended by the OECD and Eurostat (the statistical arm of the European Union). This breakdown is based to a significant extent on the Central Product Classification (CPC),[4] whose main objective "is to provide a framework for international comparison of various kinds of statistics dealing with goods, services and assets."[5] Since the CPC is also used by trade negotiators to classify services, a formal development of the link between the balance of payments classification and the CPC has various implications for data specification and development, which will be driven, in part, by the requirements of the World Trade Organization (WTO).[6]

The various types of commercial services are described in more detail in section 6.2. The trade with their partners abroad is divided into two categories: trade occurring between related parties and trade occurring with other parties.

6.1.2 Transactors

Commercial services are largely traded by Canadian business corporations. However, a small portion is also traded by Canadian governments and their enterprises. Moreover, because Canada's balance of payments does not include a distinct account for labour income as called for by international standards, income from compensation of employees is treated as

1. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*, (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Commission of the European Communities, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 6.8, 123.
2. The details of these data are published in Statistics Canada, *Canada's International Transactions in Services* (Catalogue nos. 67-203-XPB and 67-203-XIB).
3. As noted earlier, 'commercial services' is a term of convenience used in Canadian statistical presentations to summarize services other than travel, transportation and government. The term is also used quite correctly by the World Trade Organization to refer to services other than government. Technically it would be more accurate for the Canadian term to read 'other services.' It seemed, however, that a description containing 'other' would indicate that this major block of trade was a residual class that is not correct for most of its 25 sub-categories.
4. Please refer to United Nations, *Central Product Classification (CPC) Version 1.0*, Statistical Papers, (Series M, No. 77, 1998).
5. International Monetary Fund, *Balance of Payments Manual*, (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraphs 521, 146.
6. Hugh Henderson, *A Canadian Perspective of Linking Services Categories of the World Trade Organisation and the Balance of Payments Compilers*, (lecture presented at the Tenth Meeting of the International Monetary Fund Committee on Balance of Payment Statistics, Washington, D.C., Statistics Canada, Ottawa, October 1997).

commercial services as if the employees were self-employed service providers. Data limitations bar their identification among commercial services.

Special care needs to be taken in establishing the residency of the Canadian transactors involved in commercial services, since it is not always clear if the services are provided by a resident or by a non-resident entity. For example, if a Canadian company has a subsidiary located in the United States, sales of services by the U.S. subsidiary to clients outside Canada are not to be recorded in Canada's balance of payments statistics, since such sales are considered as non-resident to non-resident transactions and, hence, beyond the balance of payments framework. Although this treatment also applies to goods and other accounts, corporations are often motivated to set up foreign concerns for the sole purpose of trading services. Sales outside the domestic economy are referred to as 'establishment trade' (that is, trade arising from a business established abroad) or 'foreign affiliate trade in services' (FATS).[7] 'Commercial presence' trade (named after the third of four main channels for supplying services in the multilateral WTO General Agreement on Trade in Services [GATS]) is more narrowly defined, referring only to sales within the host market. The net profits of such foreign subsidiaries accruing to Canada are, however, recorded as direct investment income in the current account. This treatment is in keeping with the balance of payments and other national accounting principles that focus on cross-border activities of Canadian residents.

6.2 Data sources

6.2.1 General description

The Balance of Payments Division collects much of the data on commercial services through its comprehensive survey International Transactions in Commercial Services—BP-21S (annual). Other Balance of Payments Division surveys used include the following:

- International Transactions in Commercial Services—BP-21SQ (quarterly);
- Transactions Between Canada and Other Countries—BP-21 (annual);
- Transactions Between Canada and Other Countries—BP-21A (quarterly);
- International Transactions Between Insurance Brokers in Canada and their Foreign Affiliates, Agents, and Other Companies or Persons Outside Canada—BP-17 (annual);
- Transactions Between Canadian Incorporated Insurance Companies and their Foreign Affiliates, Agencies and Bank Accounts and Other Companies or Persons Outside Canada—BP-27 (annual);
- Transactions Between Canadian Branches of Foreign Insurance Companies in Canada and Head or Other Offices, Companies or Persons Outside Canada—BP-28 (annual);
- Report by Trust and Mortgage Loan Companies in Canada on Transactions with Non-residents—BP-29 (annual); and
- Canada's International Transactions in Securities—BP-30 (monthly).

The Division also relies on other Statistics Canada surveys and administrative data for source data. The following annual surveys of the Services Division are used:

- Survey of Consulting Engineers;
- Survey of Scientific and Technical Services;
- Survey of Architects;
- Annual Survey of Software Development and Computer Services; and
- Annual Survey of Employment Agencies and Personal Suppliers.

The following surveys of the Science, Innovation and Electronic Information Division are used:

- Survey of Telecommunications Service Providers;
- Annual Return of "Broadcasting Distribution" Licensees;
- Annual Return For Radio and Television Programming Undertaking(s) (including Networks); and
- Research and Development in Canadian Industry.

The following four surveys are used from the Culture, Tourism and Centre for Education Statistics Division (CTCES):

7. For an illustration see Colleen Cardillo, *Foreign Sales of Canadian Enterprises*, (unpublished research paper, Statistics Canada, Ottawa, 1997); for more details on FATS, please refer to Chapter 23, "Looking Ahead."

- Film, Video and Audiovisual Production Survey;
- Film, Video and Audiovisual Distribution and Video Cassette Wholesaling Survey;
- Motion Picture Laboratory Operations and Production and Post Production Services; and
- Sound Recording Survey.

In addition to the surveys listed, data on environmental services are provided by the Environment Accounts and Statistics Division from the Environment Industry Survey, and data on courier services are provided by the Transportation Division from the Survey of the Couriers and Local Messengers Industry.

Government administrative sources from the federal government include

- tax forms T-106, GST, and NR-4 (withholding taxes);
- Citizenship and Immigration Canada;
- Bank of Canada; and
- Office of the Superintendent of Financial Institutions (federal).

Data sources from other Canadian governments and crown corporations include

- Public Accounts of Crown Corporations (federal and provincial), with supplementary data obtained directly from selected corporations;
- film and tourism authorities (provincial); and
- power utilities (provincial).

Other data sources used include

- regular correspondence with corporations engaged in international communications, air and rail transportation, consulting, and so on;
- U.S. Department of Commerce data (with annual reconciliations of U.S. current account data);
- foreign embassies;
- World Bank;
- patent agents;
- international organizations operating in Canada;
- Canadian banks;
- benchmark studies on sports and other entertainment;
- annual reports of individual companies engaged in international transactions; and
- public media.

Data on services are collected net of withholding taxes but published inclusive of withholding taxes. The allocation of withholding taxes to the relevant royalty categories entails significant estimation.

6.2.2 Description and sources by service categories

Specific details as to provenance and accuracy are noted as part of this section, with a general overview taken up in the section that follows. The following main categories are all published. In addition, sub-categories that are published separately are in italics.[8]

6.2.2.1 Communication services

Communication services covers

- postal and courier services: the pick-up, transport and delivery of letters, other printed matter, parcels and packages, together with postal outlet services; and
- telecommunications services: ‘basic’ services such as telephone, telex, data and facsimile transmission; and ‘enhanced’ or ‘value-added’ services such as e-mail, electronic data interchange (EDI) or teleconferencing.

Included are charges to and from abroad by public carriers and interconnected suppliers for the use of facilities that teletransport client information, together, as a matter of practicality, with fees for related consulting and facilities management reported at source. Charges for the use and management of private facilities (non-public carriers) for teletransporting client information to and from abroad are included. The value of the subject matter teletransported is, however, excluded where possible. Confidentiality policy bars separation of postal, courier and telecommunications data.

8. In 1996 and in 1997, the services data, notably commercial services, were restated according to the 1993 international standards. For more detail, please refer to Hugh Henderson, *Implementation in Canada of the International Standards for Services Trade—On with the Fifth*, (Research Paper No. 13, Balance of Payments Division, (67F0001MIB97013), http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

Data are derived from the annual survey of international transactions in services and from specific information supplied by industry participants.

6.2.2.2 Construction services

Construction services covers the erection of structures, structural repairs, installation, refurbishing, special trades, demolition and site work. Service suppliers are asked to estimate the construction portion in the case of a turnkey project, or to judge where to assign its entire value between, for example, construction and the architectural and engineering services category. Rentals of construction equipment are excluded, appearing instead with equipment rentals (see section 6.2.2.8). According to international standards, goods supplied directly to or from Canada should be recorded with construction services. However, such goods are left with the trade in goods in Canadian statistics and, to the extent that they may be also reported in surveys of construction services, there will be duplication in the goods and services accounts. Furthermore, the Canadian expenditures related to revenues of construction services, such as expenditures for local supplies, are classified as construction payments in Canadian statistics—a departure from international standards, which call for such services to be included with other services.

Projects extending beyond a year are still classified as cross-border services, unless the service suppliers themselves have established foreign enterprises. In other words, in Canadian statistics, regardless of the length of the contract, construction is classified as cross-border construction services if the suppliers record them as such in their books, or as direct investment if the suppliers set up foreign enterprises to manage their construction activities. This approach does not conform to international standards, which typically treat site offices as direct investment:

> Construction involving major specific projects … that often take several years to complete … are carried out and managed by non-resident enterprises through unincorporated site offices. In most instances, site offices will meet the criteria that require site office production to be treated as the production of a resident unit and as part of the production of the last economy rather than as an export of services to that economy.[9]

Construction was surveyed as a separate category for the first time in 1995. From 1990 to 1994, a proportion of results from selected survey returns in a previous broad grouping on consulting and other professional services was used. Construction activity prior to 1990 is included with the category architectural, engineering and other technical services (see section 6.2.2.12).

6.2.2.3 Insurance services

Insurance services covers the provision of various types of insurance to non-residents by resident insurance companies and vice versa. Broker and agency commissions related to insurance are included.

Data cover life insurance, pension and annuity services, as well as other direct insurance. Compulsory social security services are excluded. Other direct insurance covers private sector accident and health, property, casualty and other liability risks, such as financial or vehicular. Reinsurance, or the subcontracting of risk, is also included. No separate category is attempted for freight insurance. Some elements may be indistinguishably included with other direct insurance and/or be embedded in the valuation of freight charges shown as goods or with transportation services. No explicit provisions are made for some auxiliary services, such as claims adjustment and salvage administration.

The Canadian statistics are shown on the basis of gross premiums and claims, a departure from international standards.[10] Receipts are the sum of premiums received by Canadian residents from abroad and claims paid to clients in Canada by non-resident insurers. Payments for their part are the sum of claims paid abroad by insurers resident in Canada, and premiums paid to outside insurers by policyholders in Canada. From 1990, the annual

9. International Monetary Fund, *Balance of Payments Manual*, (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 78, 23.

10. The international standards call for a rearrangement of gross premiums and claims data into two separate components. The first is a service charge (premiums earned less claims expensed) that would be entered as the insurance service. The other component, which is the difference between gross premiums and the service charge plus claims payable, would be entered in the case of life insurance under other investment of the financial account, and for non-life insurance under transfers in the current account.

insurance series are subdivided into four sub-categories:

Primary life and non-life represents the premiums and claims of insurance carriers. The largest majority of international transactions are by far non-life in nature. Health and term life insurance are not excluded, although this is called for by international standards. However, compulsory social insurance transactions are excluded. Finally, no distinguishable component of freight has been identified in non-life insurance, although this is called for by international standards.

Reinsurance—life covers subcontracted risk on life insurance in return for a proportional share of the premium income.

Reinsurance—non-life, as a further significant set of international insurance transactions, covers other subcontracted risk, often to specialized operators.

Insurance commissions covers commissions by brokers and agencies and commissions identified by carriers.

Data for insurance companies are obtained annually from Balance of Payments Division surveys of Canadian and foreign insurers in Canada, supplemented by the annual survey of international transactions in services, and a small annual survey of Canadian insurance brokers. In addition, data from the U.S. Bureau of Economic Analysis on cross-border insurance are also used—especially for insurance of Canadian resident individuals with U.S. insurance companies—as it is difficult from a Canadian viewpoint to measure activities of resident individuals.

6.2.2.4 Other financial services

Other financial services covers financial intermediary and auxiliary services (except those of insurance enterprises and pension funds) conducted between residents and non-residents. These include the following:

- commissions and other fees related to transactions in securities—the majority of service in this category—including brokerage, placement of issues, underwriting, redemption and arrangement of swaps, options and other hedging instruments;
- commissions of commodity futures traders, as well as service fees related to asset management, financial market operational and regulatory services, security custody services, and so on;
- intermediary service fees, such as those associated with letters of credit, bankers' acceptance, lines of credit and financial leasing; and
- commitment fees associated with undrawn balances under standby or extended credit arrangements.

Fees associated with foreign exchange transactions, as well as financial services rendered by means of foreign-correspondent banking, are not currently measured. Financial intermediary services indirectly measured (FISIM) are also excluded; these are classified indistinguishably with investment income both here and under International Monetary Fund standards. However, estimates of FISIM are included in the non-resident sector in the other components of the Canadian System of National Accounts.

Prior to 1986, the data mainly cover commissions paid on new Canadian securities issued abroad. Beginning in 1986, the data also include the following:

- fees and commissions paid or received on trade in outstanding securities with non-residents;
- banking services (embedded in investment income transactions prior to 1986);
- provisions for services related to guarantees and letters of credit, funds transfers, collection fees, credit card transactions, interoffice and interbank charges (some from U.S. sources); and
- trust company fees that were shown under management and administrative services prior to 1986.

Commissions on new issues are largely derived by applying a percentage against the proceeds from new issues. The percentages used are checked from time to time against prospectuses. Fees on trade in outstanding securities are derived from gross trading data coupled with certain rate factors based on discussions with the industry, and some extensions made to cover certain management and listing fees payable abroad. Rates were recomputed in 1998 and significantly lowered both receipts and payments shown from 1994. Estimates include commissions on trading in commodity futures.

The remaining fees and commissions are derived from both corporate[11] and regulatory sources, supplemented by the annual survey of international transactions in services and by some U.S. survey sources that are believed to be more comprehensive. Estimates of service fees with the International Monetary Fund are based on administrative records.

6.2.2.5 Computer and information services

Computer services covers the design, engineering and management of computer systems (exclusive of the value of hardware). Also covered is the development and production of original software (including operating software). Beginning with the reference year 1996, the physical exports of prepackaged software units for general commercial or personal use are excluded. These exports are part of goods, but were included in services for the years prior to 1996 to ensure sufficient valuation in the goods and services account. Computer processing services as well as equipment maintenance and repair are covered here. The category also includes consulting and training related to the provision of computer services. Computer services may be sold or licensed, specifically including fees for the right to replicate, distribute or otherwise use software, whether custom or prepackaged; these transactions are shown for the most part with software and other royalties (see section 6.2.2.6).

Information services covers online information retrieval services, including database services (the development of subject matter through to storage and dissemination) and computer-assisted document searches and retrievals; news agency services (such as syndicated reporting services to the media). If database charges are separable from related telecommunications charges, they are reported here for convenience. Because of data limitations, direct subscriptions to newspapers and periodicals are covered as part of mail imports in goods rather than with information services, as called for by international standards (see Chapter 3, "Goods").

Data on computer services are based on the annual survey of international transactions in services, which covers receipts from a range of companies not primarily providing computer services, together with payments by a wide spectrum of companies acquiring these services. To this are added receipts by major computer industry firms surveyed by the Services Division of Statistics Canada. A further amount, which is based on U.S. survey sources, serves to extend coverage on payments.

Measurement of the computer services category, as it has attempted to reflect conditions of rapid technological change, has inevitably brought a number of challenges. Indeed, rapid technological change has resulted in some series breaks. Computer services were not captured separately, until 1981—and not annually, until 1983—and were intermingled with other categories, including goods. Since 1990, software royalties are assigned to Royalties and licence fees. Beginning with 1996, customs values for customs software already recorded in imports of goods is removed from goods through a balance of payments adjustment to avoid its duplication with services (see Chapter 3, "Goods", section 3.3.2.1).

The treatment of software continues to present difficulty. A particularly difficult issue has remained the estimation of prepackaged software. In recent years, it has been widely agreed that retail software is appropriately classified as goods, in much the same way as retail copies of books, magazines or music CDs. Recent research, comparing detailed records for prepackaged software from both goods and services survey sources, has enabled an approximation of the goods portion residing in the service data. While some undervaluation in goods on a customs basis seems to remain, the higher results from recent service surveys appear mainly due to revenues for multiple usage by foreign clients of copies passing through customs, often at an appropriate unit value. In short, an estimate for the physical copies valued at content and exported on a customs basis is now deducted from services while a relatively small amount, to increase the valuation in goods, is included as a BOP adjustment to Canadian goods exports (the amount is compiled by the U.S. Balance of Payments). These changes were applied starting with the reference year 1996.[12] From the same reference year, prepackaged software less the goods portion is reclassified to royalties and licence fees in that this portion represents licences (see section 6.2.2.6).

11. For example, to cover transactions arising from demutualization of life insurance carriers.

12. The source of statistics on goods exported to the United States is the U.S. customs data. Records of the U.S. customs value many software transactions at the cost of the medium rather than inclusive of the content. Goods imports in the Canadian data are valued for content, in part to ensure applicable GST is not foregone.

Information services were requested for the first time in the 1995 survey of commercial services and, for prior years, consist of reallocations to this category of recent respondent results from several categories of data collection including consulting, computer services, and communications. As with computer services, a further amount based on U.S. survey sources is used to extend coverage on payments.

6.2.2.6 Royalties and licence fees

Royalties and licence fees covers the use of intellectual property rights (the sales of rights themselves are recorded in the capital account). The breakout of royalties and licence fees into the five following sub-categories was implemented from 1990 and goes beyond the provisions of international norms.

Patents and industrial designs covers royalty or licence fees for the use of patents, industrial designs, industrial know-how or manufacturing rights, as well as payments for non-patented industrial processes.

Trademarks covers royalties or fees for the use of trademarks, that is, words, symbols, designs or combinations thereof that distinguish the holder's products or services from those of another provider.

Franchises covers contractual privileges granted by an individual or corporation to another, permitting the sale of a product or service in a specified area or manner.

The value of franchise transactions in total has appeared small compared to other service payments. This is partly attributable to the fact that many foreign franchise firms have subsidiaries established in Canada, and franchise fees payable to such subsidiaries within Canada do not give rise directly to international payments. In spite of additional coverage from U.S. sources, there may also be an element of undercoverage, for which a general provision is included under miscellaneous services to business.

Copyrights and related rights covers royalty or licence fees for the use of original artistic, literary, dramatic or musical works—for example, to stage productions or performances, or to make recordings or films. These originals or prototypes may take the form of text, data compilations or audio and visual products (such as films or sound recordings) and may or may not be in machine-readable format. Distribution rights for performances of completed audio-visual productions are reported with audio-visual services (see section 6.2.2.14). Fees for the replay of recordings or videos are recorded here. Royalties, licences or other fees for the right to use computer programs are reported below in software and other royalties.

Software and other royalties covers software and other computer-related royalties including fees for the right to replicate, distribute or otherwise use software, whether custom or prepackaged. These also cover royalties for exclusive use of natural resources (private sector transactions). From the reference year 1996, licence fees included in the survey value of prepackaged software exports are reclassified here from computer services (see section 6.2.2.5).

6.2.2.7 Non-financial commissions

Non-financial commissions covers commissions on goods and service transactions between non-residents and resident merchants, commodity brokers, dealers, manufacturers' sales branches and commission agents. Excluded are financial service commissions, which are included in other financial services (whether involving insurance, credit, stock or bond issues), as well as commissions already recorded in the price of goods imported and exported.

A small provision is made for fees paid by the importer of goods after the point of export. However, Canada Customs and Revenue Agency (formerly Revenue Canada) view such buying commissions as less common than selling commissions, which are valued with goods.

Merchanting is the buying and selling of goods that do not enter or leave the economy from which the trader is conducting business. An apt measure of such transactions has not been found for the Canadian series.

Data are based on both the annual survey of international transactions in services and on estimates derived by applying fixed factors to merchandise exports and imports. The factors used for trade with the United States are lower than for other countries, as a larger proportion of transactions are presumed to take place between related companies without incurring agents' fees.

6.2.2.8 Equipment rentals

Equipment rentals covers rentals (without operator) of light or heavy machinery and tools, drilling rigs and supply vessels, rail or road/off-road vehicles and aircraft (short-term leases). It also includes rentals of containers, office machinery and equipment, including computers, as well as rentals of household and personal goods.

Excluded are financial leases, leases of telecommunication lines, leasing of real estate, car rentals on foreign travel and certain shipping charters.

Moreover, for practical reasons, no distinction has been made in the Canadian series between rentals with operators (to be reported in various other specific services according to international standards) and rentals without operators (reportable here). Identifiable amounts for chartering boats without crews based on Transportation Division data are incorporated here. Otherwise, charters without crews which cannot be separately identify from charters with crews are included in transportation, which does not conform to international standards.

The annual survey of international transactions in services and other smaller surveys are the basis for estimates on equipment rentals.

6.2.2.9 Management services

Management services covers legal, accounting and business management services (which include management and administrative overheads between related enterprises and business management consulting).

Legal services[13] covers legal advisory and representational services in any law, judicial and statutory procedures, and the drawing up of legal instruments or documentation.

Included here are patent and trademark registration fees and patent maintenance fees. At present, there is no provision for the inclusion of auction, escrow or bankruptcy services (see section 6.2.2.7). Additional coverage is obtained from more complete counterpart sources of the U.S. Bureau of Economic Analysis.

Other management services covers accounting, business management consulting and other management services.

- Accounting services covers the recording of business and other accounts, including reviews and audits, bookkeeping and preparation of related statements and returns. These services include business tax planning and consulting, and preparation of tax documents.
- Business management consulting,[14] including public relations services, is typically transacted with unrelated parties. In addition, there is management consulting between related companies, which cannot be identified as such and which appears in other management services below.

  Certain specialized business management consulting, however, is reported with the service concerned: telecommunications, computer and information services, legal, accounting, architectural, engineering and construction, environmental, artistic or recreational, education and training. Property management is included with miscellaneous business services (see section 6.2.2.13).
- Other management services comprise charges for managerial and administrative services, rendered by an individual or corporation, that cannot be allocated to another services category. Such overhead charges typically arise between related parties and may include amounts that are not always identified as services.

Figures are based largely on the annual survey of international transactions in services. The main component is management and administrative charges between related companies. Data on patent agent fees that are included here are estimated from administrative data. The data also include specific survey results for legal firms beginning in 1995, registration and maintenance fees of intellectual property, and added coverage of international management consulting services typically provided to third parties, also from 1995.

Reporting is incomplete for most major firms that provide clients with both accounting and management consulting services. At the same time, international

13. Please refer to Colleen Cardillo, *Canada's International Legal Services, 1995–1996, (*Research Paper No. 15, Balance of Payments Division (67F0001MIB97015) http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

14. Please refer to Willa Rea, *Canada International Trade in Management Consulting, 1990-1996*, (Research Paper No. 16, Balance of Payments Division (67F0001MIB97016) http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

transactions in such services in past years are not believed to have involved substantial flows. This is a reflection of the industry's international structure whereby separate partnerships operate in each domestic market in a largely self-sufficient manner.

6.2.2.10 Advertising and related services

Advertising and related services covers :

- design, creation and marketing of advertisements by advertising agencies;
- placement of advertisements in newspapers, journals, radio, TV and other media, including the purchase and sale of advertising space; and
- participation in trade fairs and other promotional outlays, including exhibition services, telemarketing and delivery services of promotional material.

Costs of maintaining representative offices of banks in another country are included in the Canadian series. Also, some advertising outlays are reported with the data on airline transactions within transportation services (see Chapter 5, "Transportation"). Classified here are services to advertise and promote travel that are purchased from non-residents by governments in Canada. Also covered are market research and public opinion polling services.

Data are obtained from the annual survey of international transactions in services. Included also are benchmark projections of expenses in Canada of representative offices of foreign banks as well as representative offices of Canadian banks located in other countries. Tourism promotion outlays are obtained from provincial authorities on an annual basis.

6.2.2.11 Research and development

Research and development covers charges related to systematic investigation through experiment or analysis to achieve a scientific or commercial advance for, or through, the creation of new or significantly improved products or processes. Research and development extends to the social sciences and humanities but excludes market research (see section 6.2.2.10, above) and technical studies (see other technical services in section 6.2.2.12, below).

The statistics are derived from the annual survey of international transactions in services and from surveys conducted by the Science, Innovation and Electronic Information Division.

6.2.2.12 Architectural, engineering and other technical services

Architectural, engineering and other technical services covers a range of architectural and engineering activities together with a diverse group of scientific and technical services and specific services related to mineral extraction, processing and the environment.

Architectural and engineering services comprises consulting, design and predesign, as well as contract supervision services. Urban planning and landscape architectural services are covered as are the export or import of services for the management of projects after completion. Please also refer to construction services for the treatment of turnkey projects and projects of long duration (section 6.2.2.2).

Other technical services covers, to date indistinguishably, the following services:

- Scientific and technical services comprise geological and geophysical services; mineral exploration and prospecting work; surveying and mapping services of or from land, sea and above-surface, including weather services; and services of testing, analysis, inspection or certification of materials or products. Medical and dental laboratory services are excluded (see section 6.2.2.13).
- Mining services comprise drilling and field services including maintenance, inspection and repair, but not equipment rentals or sales. Services related to discovery—that is, mineral prospecting and exploration, as well as geological surveying—are classed as scientific and technical services (above in section 6.2.2.12).
- Environmental services comprise sanitation services; waste storage, treatment, destruction; decontamination, clean-up or containment and pollution control; environmental consulting, covering biological and ecological consulting, environmental audits, and impact and site assessments. Basic architectural and engineering or research and development services for projects that happen to be environmental in purpose, however, remain with architectural and engineering services

(above in section 6.2.2.12) or with research and development (see section 6.2.2.11).

Services incidental to agriculture, fishing and certain mining and forestry activities are not systematically identified in the data collection to date: international transactions, apart from those related to mining, are not viewed as substantial.

Results from the annual survey of international transactions in services were augmented from 1991 by additional data for certain engineering, architectural and technical services surveyed by the Services Division. Data for mining and environment require further development. Coverage was extended from 1996 for companies engaged in providing a range of surveying, mapping, remote sensing and related information systems sometimes referred to as 'geomatics.'

6.2.2.13 Miscellaneous services to business

Tooling and other services predominantly covers amounts paid or received by automotive companies for charges such as retooling, warranties and like charges linked to the production of new models. A provision for undercoverage of services not included elsewhere is also grouped here.

Miscellaneous business services covers a range of transactions not allocated elsewhere. These include real estate services (sales, commission fees and contracts for the management of properties including hotels and resorts), suits and settlements as they are deemed a cost of doing business; medical and dental laboratories; and education, training and staff development services. Commercial or non-institutional education services cover charges for employee training and development. These services also cover services to the educational market such as testing, consulting and the development, delivery and adaptation of course materials and systems. Equipment sales and replications for general sale, however, are excluded. (Fees incurred for attending full-time university and college programs are covered under personal travel; see Chapter 4, "Travel.")

Compensation of cross-border employees (commuter and seasonal workers' remuneration) is entered here since these employees are treated as self-employed service providers: insufficient data prevents their identification as labour income, as called for by international standards. Expenditures for local labour and supplies for construction projects are not identified separately and are included in construction rather than in miscellaneous services to business, as called for by international standards.

For working purposes, an internal category under miscellaneous services to business has been established to cover what so far are infrequent cases of reported contract production abroad. Instances where a resident hires and pays a producer abroad to transform basic materials into a new product that is then sold abroad appear not to be fully articulated, either in the data or in underlying concepts and classifications at the present time. Where residents export their own materials, this can be expected to appear in customs coverage of goods. The value added abroad is less frequently known or reported, and the international norms call for assigning it as a service to the category of merchanting and other trade-related services. Cases where the inputs are all sourced abroad and sold from abroad are not covered by international standards. Recipients of the commercial services survey are currently asked to report their contract production abroad separately.[15]

Other components in the Canadian data include real estate, design, personnel, translation and security services together with certain conservation expenditures and legal settlements deemed a cost of doing business.

Data for tooling and other automotive charges are based on the annual survey of international transactions in services and on customs information from the International Trade Division of Statistics Canada. The provision to cover underreporting in the main services surveys reflects coverage of administrative sources and survey experience.

Remaining data are in part based on unspecified services reported by individual companies in the annual survey of international services under other transactions. Estimates of commuter and migrant labour earnings are based on benchmarks. Coverage of commercial education services from 1996 was added based on a listing compiled at Industry Canada.

15. The BP-21S questionnaire at category #30 reads as follows: Contract production abroad. If you pay a producer abroad to produce a good which you then sell abroad (that is, no export back to Canada), please report the revenue you receive, and the production expenses which the foreign producer bills you. (The producer may buy materials outside Canada on your behalf and bill for the whole cost, or you may export your own materials or master copy and pay only the transformation or reproduction charge). In the reverse situation, that is, if you are the contract producer, please report revenue from foreign parties who engage your services, and at #31 specify the value of the product shipped within Canada.

A general provision is made from 1990 for Canadian government sales and purchases of services to and from the foreign private sector. Amounts for international organizations are obtained either directly or from public accounting records. A provision is made to include from 1995 a block of lower-value export contracts financed by CIDA. Some small items covered by annual reports or benchmark estimates are included here as well.

6.2.2.14 Audiovisual services

Audiovisual services covers film and video production and distribution, broadcasting, performing arts and organized sports. More specifically, these may be services and associated fees related to the production of motion pictures (on film or videotape), radio and television programs (live or on tape) and musical recordings. Included are receipts or payment for rentals; fees received by resident actors, directors, producers, and other crew members for productions abroad (or by non-residents in the compiling economy); and fees for distribution rights sold to the media for a limited number of showings in specified areas.

Fees to actors or participants in theatrical or musical productions, organized sports and other activities intended for broadcast, as well as related distribution rights are also included. Certain distribution rights for sporting events are classified here.

Physical copies of films, programs, musical compositions, books and retail software should be excluded, being treated as goods. Also excluded here are copies of software for retail sale.

Most of the data are obtained from results of annual surveys of the Science, Innovation and Electronic Information Division and the Culture, Tourism and Centre for Education Statistics Division of Statistics Canada, including film producer and distributor data from 1988. Statistics are supplemented from various provincial sources and studies and the annual survey of international transactions in services. Data for broadcasting are based on annual survey information of the Science, Innovation and Electronic Information Division. Estimates of organized sports and performing arts are based on benchmark investigations of receipts and payments of major participants and on continuing surveys.

Joint development work to edit and improve international data on cultural transactions has proceeded with the Culture, Tourism and Centre for Education Statistics Division. Certain additional coverage has lately been implemented for film labs and sound recording services as a result.

6.2.2.15 Personal, cultural and recreational services

At present, coverage is limited to data on international activity of trade unions. Figures, until recently estimated from annual returns filed with Statistics Canada under the former *Corporations and Labour Unions Returns Act*, are now projected since the *Act* no longer covers labour unions (see Chapter 16, “Direct investment position”).

6.3 Methods

6.3.1 General methodology

The Balance of Payments Division compiles the data on commercial services. For the current year, data are estimated from the quarterly sample surveys, which are based on the previous annual census survey data. The data are processed through a system known as the Services Integrated System (SIS) which is a relational database that consolidates the extensive but diverse sources of information on commercial services. One format file, for example, contains company names. An algorithm file (with factors changeable as needed by staff) is used to calculate certain series or to prorate global totals geographically when country level information is unavailable (that is, over and above normal imputations to deal with incomplete survey responses). It also serves as a useful registry for the firms identified as transacting international commercial services. The system also identifies the particular source and status of the data. At present the system identifies some 20 sources, from surveys through benchmark calculations, along with four status indicators as to whether the data is reported or estimated.

The coverage of the main survey is updated from listings from trade associations and from the monitoring of events by a regular scanning of the business media for international transactions. Tracked events are both company-specific and of a general background nature (for example, industry trends and developments). The information assists with the editing and updating of survey coverage for balance of payments surveys and other series. Finally, the data benefit from internal comparisons and review, both within the System of National Accounts (for example, commodity balancing through the input–output system), and with other areas of Statistics Canada, such as the Culture, Tourism and Centre for Education Statistics Division and the Services Division. Each year, results are compared and corrected, when applicable, in relation to counterpart U.S. results through the Canada–United States current account reconciliation. This exercise, which has been carried out since 1970, has now led to some 13% of all services data used by Canada being supplied by the United States.

6.3.2 Extended geographical breakouts

As all detail is initially compiled with an extensive geographical basis, more geographical data has been published for commercial services over the years than for other service accounts. The publication from 1990 of services by 44 countries largely entailed a review for confidentiality for countries not previously released.

6.4 Products

6.4.1 Data accuracy

The overall quality of the data on commercial services is reliable. The non-responses to the surveys, the main source of information, tend largely to be comprised of low or nil value transactions for the period. A provision based on analysis of taxation records is applied to allow for underreporting in the survey and operations too small to survey. If follow-ups do not result in sufficient data, amounts are imputed from past results, external information and broader projections of annual information as a control indicator. For the most part, the geographical detail on commercial services is reported directly by survey respondents according to the geographic coding instructions that are sent to them. When respondents do not or are unable to report full details, approximations are accepted or estimates made.

As noted in section 6.3.1, the extensive detailed annual reconciliation on current account transactions, which is conducted with the U.S. Bureau of Economic Analysis, assists in the data estimation process as well as in validation.[16]

16. "Reconciliation of the Canada–United States Current Account," in Statistics Canada, *Canada's Balance of International Payments*, Third Quarter issue, (Catalogue no. 67-001-XPB or XIB).

6.4.2 Data accessibility

The quarterly and annual series on commercial services are published as total receipts, payments and balances in the quarterly publication *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM.

In the annual publication *Canada's International Transactions in Services* (available in print and in electronic format on the Internet) and in CANSIM**,** the annual series for commercial services are published for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. The annual services series are broken down among four major categories of services: travel, transportation, commercial and government, with a maximum detail of 40 categories. The commercial services category is broken down to provide for over 25 product types. Not only is each major category presented by the six standard geographical areas delineated above, but each category of services is also presented according to three basic foreign regions with which the transactions are conducted—United States, European Union and Other Countries. The transactions are further identified by the party with whom they were carried out—that is, either a foreign affiliate or a foreign non-related party. The categories are presented according to the country of control of the Canadian transactor and the transactor's industry classification. The total of commercial services is also presented according to some 40 countries and world areas.

The world areas used largely parallel those in the presentation of trade data on goods on a customs basis, with which many users are already familiar. The following world areas are published:

- Western and Eastern Europe;
- Middle East;
- Other Africa;
- Other Asia;
- Oceania;
- South America; and
- Central America and the Antilles.

The European Union, the OECD and Other Countries are added as memorandum items. Country groupings are according to membership in the years shown. Beginning with the reference year 1990, the list was expanded to show receipts and payments for 44 individual countries (starting with the 1998 edition of the services publication).

Starting with the 1997 edition of the services publication, a quarterly breakout of some 14 commercial services was introduced from 1995 onward, both on a raw and seasonally adjusted basis.

CHAPTER 7
GOVERNMENT SERVICES

7.1 Concepts

Government services covers international transactions arising largely from official representation and military activities, as well as commercial activities of governments not covered in other accounts. They include expenses of staff at embassies and missions and of individuals stationed on military bases. Receipts chiefly comprise expenditures in Canada by foreign governments and their staff recruited abroad. Receipts also include overheads to administer official assistance. Payments cover expenditures abroad of both the Canadian federal and provincial governments and their staff recruited in Canada. Beginning with the reference year 1996, separate information is available on construction, existing building and land transactions for both embassy and other use by the Government of Canada abroad. Construction is now included in construction services while purchases of existing buildings will continue to be treated as government services. In conformity with international standards, land transactions are classified as non-produced non-financial assets in the capital account.

In conformity with international standards, outlays by the federal government for contributions to the operations of international organizations and programs are excluded and shown in current transfers (see Chapter 9, “Current Transfers”). For provincial governments, the data exclude receipts and payments by provinces for the promotion of tourism, which are included in commercial services (see Chapter 6, “Commercial Services”).

To the extent that official government records used as the source data are on a cash basis, they are incorporated as such in the balance of payments accounts and not on an accrual basis, as called for by international standards.

7.2 Data sources

Almost all the data are collected from administrative sources, except for ad hoc surveys conducted to obtain estimates of spending by foreign embassies in Canada (the last such survey was conducted to collect 1995 data). Federal government administrative sources include the following:

- Public Accounts of Canada;
- National Defence;
- Canadian International Development Agency;
- Department of Foreign Affairs and International Trade; and
- International Development Research Centre.

Data for provincial and territorial governments come from the provincial Public Accounts while data for crown corporations are taken from federal and provincial Public Accounts and supplementary data obtained directly from selected corporations.

Most of the data on spending in Canada by U.S. government authorities are provided by the U.S. Bureau of Economic Analysis. Data on spending by countries other than the U.S. are obtained from Canadian administrative records.

7.3 Methods

7.3.1 General methodology

The Balance of Payments Division compiles the data. For Canadian expenditures by personnel posted abroad, two-thirds of their salary is assumed to be available for personal spending in the local economy. Payments for Canadian military personnel are calculated and provided by the Income and Expenditure Accounts Division.

A number of changes were made following a review of government transactions with the Input–Output Division. Beginning with 1993 data, military expenditures abroad were scaled back to be more in line with declining outlays on personnel. From the same year, improved data sources were used for receipts for the use of Canadian facilities by visiting non-U.S. military forces. Additions and changes were also made to more accurately reflect outlays for trade development by provincial governments. A number of in-Canada outlays of a commercial nature—deemed paid to Canada by recipients of official aid flows—

were reduced and were recognized instead under services to business. Spending by foreign embassies, High Commissions and consulates was re-estimated through a voluntary survey for 1995. This survey produced a small but helpful cross-section of responses. Results were generally higher than previous estimates.

7.3.2 Extended geographical breakouts

In terms of geographical detail for government services, some larger segments of data are initially recorded by individual country, such as Canadian representation abroad or certain expenditures on defence. In Canada, overheads to administer official assistance are recorded as receipts. These are distributed geographically according to the administrative records of assistance provided. These records are country-specific. More difficult is an allocation for foreign government expenditures in Canada. Here, the 1995 benchmark survey forms the basis for a benchmark indicator composed of wages and salaries paid annually to local employees of embassies and consulates in Canada and aggregated from taxation records.

7.4 Products

7.4.1 Data accuracy

Overall, the data are reliable. For each series, the accuracy varies. This reflects the variable accuracy of the data sources, which range from sound administrative records to estimates—particularly of foreign activity in Canada—that are based overall on very limited information. The data, however, benefit from the extensive detailed reconciliation conducted annually with the U.S. Bureau of Economic Analysis on current account transactions.[1]

7.4.2 Data accessibility

The quarterly and annual series on government services are published as total receipts, payments and balances for total and for the United States in the quarterly publication *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM.

The annual series on government services are published in the annual *Canada's International Transactions in Services*, in total and for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries.

Annual breakouts of 44 countries are also released aggregated with transportation services from 1990 onward in the annual *Canada's International Transactions in Services.*

Specific unpublished breakouts are available on request.

1. "Reconciliation of the Canada–United States Current Account," in Statistics Canada, *Canada's Balance of International Payments*, Third Quarter (Catalogue nos. 67-001-XPB and 67-001-XIB).

CHAPTER 8
INVESTMENT INCOME

8.1 Concepts

Investment income refers to the income earned by Canadian residents on their financial claims on non-residents and the income expense incurred by Canadian residents on their financial liabilities to non-residents. It excludes gains and losses arising from the revaluation of the underlying claims and liabilities, as required in the System of National Accounts. For the time being, the income is limited to property income. Because of data limitations, it excludes income from compensation of employees, a departure from international standards. In the Canadian data, labour income is included in commercial services (see Chapter 6, “Commercial Services”).

The evaluation of the investment income is determined by the relationship of the income to the investments from which such income is derived. This is why the investment income and underlying claims of the international investment position are both grouped under direct investment, portfolio investment and other investment.

8.1.1 Direct investment income

Direct investment income covers income on Canadian direct investment abroad and on foreign direct investment in Canada. Direct investment involves an investment by a business having a significant influence in the management of a business in another country (for more details, please refer to Chapter 12, “Direct Investment Flows”). Direct investment can be in the form of equity or debt. Hence, direct investment income consists of income on equity (profits and losses) and income on debt (interest).

Profits and losses on direct investment cover net operating profits and losses, that is, profits and losses after income taxes but before realized and unrealized capital gains and losses.[1] Businesses may distribute the profits to the owners in the form of dividends or retain part of the profits (retained earnings) for their own operations. The portion of the profits that is retained shows as a direct investment flow in the financial account. The articulation of the accounts is as follows: the total operating profits are recorded in the current account as accruing to the direct investor, with the portion that is retained recorded in the financial account as reinvested earnings from the direct investor.

Direct investment income on debt consists of interest earned on direct investment loans and bonds—both long-term and short-term—with the exception of short-term intercompany accounts of banks. The latter interest is classified as other investment income, to correspond with the classification of the underlying claim in the international investment position.

8.1.2 Portfolio investment income

Portfolio investment represents investment in marketable securities, that is, stocks, bonds and Canadian money market instruments (see Chapter 13, “Portfolio Investment Flows”). Hence, portfolio investment income covers income received from and paid to non-residents on holdings of portfolio stocks and bonds (both Canadian and foreign) as well as that paid on money market instruments (Canadian), and is divided into income on equity (dividend income) and on debt (interest income).

8.1.3 Other investment income

Other investment income covers the revenues and expenses of Canadian banks from interest on their claims on and liabilities to arms-length parties abroad and on short-term claims on and liabilities to non-resident related parties, as well as interest earned and paid by other Canadian residents. The latter includes interest earned from the following:

- government bilateral and multilateral loans and advances;
- business loans;
- lending under repurchase transactions;

1. It is important to distinguish operating profits from capital gains, which are not included in the current account. Capital gains may give rise to liquidating dividends. The latter are recorded directly in the financial account as withdrawals of capital (and not profits in the current account). This treatment is in conformity with international standards.

- bank deposits abroad (including foreign money market instruments);
- official foreign reserves; and
- other miscellaneous claims.

Interest expenses incurred by Canadian residents other than banks are from business loans, from borrowing under repurchase agreements, from deposit liabilities of trust companies and the Bank of Canada and from other liabilities.

Data on investment income are collected net of withholding taxes but published inclusive of withholding taxes. The articulation of investment income and associated withholding taxes is as follows: investment income is recorded inclusive of withholding taxes and then the withholding taxes flow back to the country where the income was generated under current transfers (for more details, see Chapter 9, “Current Transfers”).

8.2 Data sources

Profits and interest on Canadian direct investment abroad, other than by banks and insurance companies, are derived from five surveys conducted by the Balance of Payments Division, as well as from the quarterly survey of the Industrial Organization and Finance Division and the annual T-106 return of Canada Customs and Revenue Agency (formerly Revenue Canada). The Balance of Payments surveys are

- Transactions Between Canada and Other Countries—BP-21A (quarterly sample survey);
- Transactions Between Canada and Other Countries—BP-21 (annual transactions survey);
- Investment in Canada by Non-Canadian Corporations—BP-22 (annual transactions survey);
- Capital Invested Abroad by Canadian Enterprises—BP-59 (annual asset position survey); and
- Geographical Distribution of Capital—BP-52 (annual liability position survey).

Profits abroad of Canadian banks are obtained from a quarterly survey of Canadian banks, while profits of insurance companies are obtained from two annual surveys:

- Transactions Between Canadian Incorporated Insurance Companies and their Foreign Affiliates, Agencies and Bank Accounts and Other Companies or Persons Outside Canada—BP-27; and
- Transactions Between Canadian Branches of Foreign Insurance Companies in Canada and Head or Other Offices, Companies or Persons Outside Canada—BP-28.

Portfolio income other than interest expenses on Canadian bonds is largely calculated by applying current rates to benchmark positions. Interest expenses on Canadian bonds are derived from a detailed inventory of bond instruments maintained by the Balance of Payments Division (described in Chapter 13, “Portfolio Investment Flows”). Interest on other investment is derived from a combination of surveys and administrative data.

8.3 Methods

The Balance of Payments Division estimates the investment income from both survey results and derivation procedures.

For both receipts and payments, the quarterly data on direct investment profits are initially estimated from preliminary data and are then superseded by more complete annual sources. Foreign profits[2] on Canadian direct investment by enterprises other than banks and insurance companies are compiled on a quarterly basis by adding dividend receipts and reinvested earnings. Dividends are obtained from the survey Transactions Between Canada and Other Countries—BP-21A (quarterly), and reinvested earnings are obtained from the quarterly survey of the Industrial Organization and Finance Division. On an annual basis, these estimates are superseded with data on profits and dividends from the Transactions Between Canada and Other Countries—BP-21 (annual), the Capital Invested Abroad by Canadian Enterprises—BP-59 (annual), and Canada Customs and Revenue Agency T-106, which provide profits from abroad and dividends from abroad. Profits abroad of insurance companies and of banks are constructed directly from income statement data and are not broken down between dividends and reinvested earnings.

2. For more information, please refer to Diane Thibault and Emmanuel Manolikakis, *Direct Investment Profits—in Canada and Abroad, 1983 to 1993*, (Research Paper No. 9, Balance of Payments Division (67F0001MIB97009), http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

Profits of foreign direct investment in Canada are taken directly from the quarterly survey of the Industrial Organization and Finance Division of Statistics Canada (IOFD), with foreign ownership percentages (derived from the annual survey Geographical Distribution of Capital—BP-52) applied to these series to prorate the foreign ownership portion of profits. The data on reinvested earnings are obtained residually by subtracting dividends from profits as obtained from the IOFD survey results. The dividend series are compiled from the Transactions Between Canada and Other Countries—BP-21A and benchmark estimates of the Balance of Payments Division. These quarterly foreign-derived profits are then edited against annual survey data from the Geographical Distribution of Capital—BP-52.

Data on portfolio interest and dividend receipts from the United States are derived from five-year benchmark information on U.S. portfolio liabilities to Canada, compiled by the U.S. Treasury. Non-U.S. figures for receipts on portfolio investment are calculated from benchmark positions updated with flows. In the near future, the income from Canadian portfolio investment abroad could be calculated on a security-by-security basis as collected from a newly introduced Canadian portfolio investment survey (described in Chapter 17, “Portfolio Investment Position”). Data on payments of dividends are derived from the annual survey Geographical Distribution of Capital—BP-52. It is difficult to survey all companies with established foreign portfolio ownership, which in turn affects the coverage of the associated dividend payments.

Data on portfolio interest payments on Canadian bonds are calculated from a detailed inventory of Canadian bonds (including deep discount bonds), resulting in reliable calculations based on security-by-security detail. Underlying amounts, rates, term and currency are obtained (monthly and quarterly) from issuers and brokers. These amounts are further adjusted through an annual census survey of borrowers (the system that calculates income on foreign portfolio investment in Canadian bonds is described in section 13.3 of Chapter 13, “Portfolio Investment Flows”).[3] Interest on money market instruments (such as treasury bills, commercial paper, and so on) is currently derived from average yields applied to the stocks outstanding for the various instrument categories. The stocks are compiled by cumulating flows in original currencies and converting them at period-end exchange rates. This procedure is being replaced with a detailed calculation on a security-by-security basis, similar to the system used to process Canadian bonds.

Among other investment, interest from banking operations booked in Canada is derived from data supplied by Canadian banks on a quarterly questionnaire. Interest received and paid by the Canadian non-bank sector is derived using positions and relevant market yields. Foreign bank claims on and liabilities to Canadian residents other than banks are obtained from the U.S. Treasury, the Bank of England and the Bank of International Settlements. Canadian borrowing from foreign banks is also obtained from the annual surveys: BP-52 for corporations and BP-55 for governments and their enterprises. Earnings on international reserves are obtained from official records. Similarly, interest receipts on government-financed export credits are based on administrative records. Some further relatively minor components are based on administrative records and best estimates.

8.4 Products

8.4.1 Data accuracy

Overall, the data on investment income are reliable. However, the preliminary estimates of direct investment income are less reliable and are subject to large revisions, especially in relation to Canadian direct investment abroad. The administrative data filed by Canadian companies on an annual basis (form T-106) with Canada Customs and Revenue Agency on their non-arm’s length transactions with non-resident companies is periodically used to validate survey results and to update the list of potential reporting entities. This file includes direct dividends and interest payments and receipts (along with other variables on services).

The accuracy of portfolio investment income receipts is acceptable but, as noted above, should be substantially improved from the results of the survey of portfolio investment introduced for the reference year 1997 (for more details, see section 17.3 of Chapter 17, “Portfolio Investment Position”). Payments of portfolio interest are most reliable as

3. For more information, please refer to Lucie Laliberté and Réjean Tremblay, *Measurement of Foreign Portfolio Investment in Canadian Bonds*, (Research Paper No.12, Balance of Payments Division (67F0001MIB 97012) http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

they are compiled from very detailed information. Payments of portfolio dividends are of acceptable quality as no systematic study has been carried out on the registry of Canadian companies to assess their foreign portfolio shareholders (see Chapter 23, “Looking Ahead”).

Other investment income estimates range from very reliable (administrative data of banks) to acceptable quality. The allocation of withholding taxes to the relevant investment income (and services) categories entails significant estimation since no breakdown is provided on the underlying transactions on which the withholding taxes were collected.

The data also undergo close review in the extensive detailed reconciliation, which is conducted annually by Statistics Canada and the U.S. Bureau of Economic Analysis on current account transactions.[4] That source is extensively used, especially to enhance Canada’s estimates on dividends receipts from Canadian holdings of U.S. portfolio equities.

4. “Reconciliation of the Canada–United States Current Account,” in Statistics Canada, *Canada’s Balance of International Payments*, Third Quarter issue, (Catalogue nos. 67-001-XPB and 67-001-XIB)

8.4.2 Data accessibility

The quarterly and annual data on investment income receipts, payments and balances are published in *Canada’s Balance of International Payments,* quarterly (available in print and in electronic format on the Internet) and in CANSIM. Direct investment income receipts, payments and balances are published for interest and profits, with the latter broken down between dividends and reinvested earnings. Portfolio investment is broken down between dividends and interest, with the latter further broken down between bonds and money market. Total interest payments (direct, portfolio and other) are again subdivided among governments, government enterprises (federal, provincial and municipal) and corporations. The direct investment and portfolio incomes are also available according to an industrial classification of the paying entities. In addition, investment income receipts, payments and balances are published in total and for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries.

CHAPTER 9
CURRENT TRANSFERS

9.1 Concepts

Transfers refer to goods, services and financial assets received or provided between Canadian residents and non-residents without an economic value provided or received in return:

> Taxes and social assistance benefits are examples of two-party transactions in which one party provides a good, service or asset to the other but does not receive a counterpart in return. This kind of transaction, sometimes called a 'something for nothing' transaction or transaction without a quid pro quo, is called a transfer in the system.[1]

Current transfers are distinct from capital transfers (described in Chapter 11, "Capital Account") and are defined as follows:

> Current transfers, which may be either in cash or in kind, redistribute income.[2]
>
> Capital transfers which may be either in cash or in kind, redistribute savings or wealth.[3]

Current transfers are presented as receipts and payments broken down between private and official transfers.

9.1.1 Receipts

Private transfer receipts consist of

- pensions paid by foreign governments to Canadian residents;
- institutional remittances for relief, research, and other purposes such as wartime indemnification payments; and
- other transfers by non-residents to Canadian residents, such as personal gifts.

Official receipts represent Canadian taxes withheld by the Government of Canada on selected income and service payments to non-residents. Although the withholding taxes are collected at the Canadian source, that is, before income and service payments are made to non-residents, income and service payments are recorded as if the gross amounts inclusive of withholding taxes were remitted to non-residents, with non-residents remitting the withholding taxes to the Canadian government (receipts of transfers). Estimates of provincial land transfer taxes received from non-residents are classified as current transfer receipts.

9.1.2 Payments

Payments of private transfers cover personal remittances abroad by Canadian residents, as well as remittances by religious, charitable and academic institutions. Official payments cover social security pension payments made by the Canadian government to non-residents (notably Canada Pension, Child Tax Benefits, Old Age Security and Veterans' Pensions) together with official contributions for aid and foreign taxes withheld by foreign governments on selected income and service receipts from abroad. The pensions paid abroad to former federal government employees appear in the financial account (see Chapter 14, "Other Investment Flows"). Official contribution payments refer to technical and economic assistance and food aid to developing countries provided by the Canadian International Development Agency. Comparatively minor amounts for several other governmental and non-governmental organizations in Canada as well as administrative overheads for official assistance are also included in official contributions. To the extent that Canadian official contributions are used to purchase Canadian goods and services, such purchases are also recorded under receipts of goods and services in the balance of payments. The treatment of foreign withholding taxes is the reverse of that noted for Canadian taxes withheld.

1. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*, (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Commission of the European Communities, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 3.19, 73.
2. *Ibid.*, paragraph 3.22, 73.
3. *Ibid.*

9.2 Data sources

Administrative sources from the federal government include the Public Accounts, Citizenship and Immigration Canada, National Defence, the Bank of Canada, the Canadian International Development Agency, Canada Customs and Revenue Agency and the Department of Foreign Affairs and International Trade. Other Canadian government and Crown corporation data sources are the Public Accounts of Crown Corporations (federal), with supplementary data obtained directly from selected corporations, and the International Development Research Centre (federal).

Information on remittances is taken from a variety of sources. Canadian government payments abroad to non-residents are obtained from administrative data. Personal remittances to non-residents are estimated from Statistics Canada's Survey of Household Spending.

Canadian withholding tax data are obtained from Canada Customs and Revenue Agency. United States withholding taxes are based on information from the U.S. Internal Revenue Service; all other foreign withholding taxes are estimated.

Data on official contributions are obtained from the Canadian International Development Agency and from the Public Accounts.

Beginning in 1991, estimates from U.S. sources have been added for certain personal gifts and for study and health benefits that are received, but not paid for, by Canadian residents.

9.3 Methods

The data are compiled by the Balance of Payments Division. Data are updated annually or quarterly, depending upon the specific sources. Updating ranges from special monthly compilations primarily in the case of official assistance to annual data running at least two years behind the reference year, such as U.S. withholding taxes from the Internal Revenue Service. Adjustments to a calendar year basis are made from government sources that operate on fiscal years ending March 31.

9.4 Products

9.4.1 Data accuracy

The overall data accuracy on current transfers is acceptable. Data on personal remittances are difficult to assess in terms of reliability, reflecting the paucity of data sources. The accuracy of data on remittances by charitable and academic institutions as well as on inward pension payments is acceptable. The data accuracy of official contributions, notably for payments, is most reliable as they are derived from administrative sources. The data on current transfers are also subject to the detailed annual reconciliation conducted with the U.S. Bureau of Economic Analysis on current account transactions.[4]

9.4.2 Data accessibility

Quarterly and annual breakdowns for current transfers by private and official sectors and by type are published in the quarterly *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM.

4. "Reconciliation of the Canada–United States Current Account," in Statistics Canada, *Canada's Balance of International Payments*, Third Quarter issue, (Catalogue nos. 67-001-XPB or 67-001-XIB).

CHAPTER 10
THE CAPITAL AND FINANCIAL ACCOUNT

10.1 Concepts

This account measures capital and financial transactions with non-residents. In conformity with international standards, transactions in the capital and financial account are published on a net basis whereas, as noted earlier, transactions in the current account are published on a gross basis. However, transactions in the capital and financial account are generally compiled on a gross basis. For example, both the sales and purchases of financial instruments across the border are measured in order to obtain the net investment. There are cases where financial transactions are available only on a net basis, notably when the transactions are derived from positions outstanding. Examples are the transactions of banks and Canada's official reserves.

The capital and financial account comprises the capital account (capital transfers and non-produced, non-financial assets) and the financial account (transactions in financial instruments).

Capital transfers represent the change of ownership of savings and wealth across the border with no *quid pro quo*. Transactions in non-produced, non-financial assets give rise to rights and obligations that create an opportunity to generate cash or other assets. This is distinguished from transactions in financial instruments, which give the right to receive or the obligation to provide cash or other financial instruments. A financial instrument is defined as "any contract that gives rise to both a financial asset of one party and a financial liability or equity instrument of another party."[1]

There are two types of financial instruments: primary instruments and derivative instruments. The value of primary instruments—such as bonds, receivables and equity securities—is largely derived from the credit of the entity that issued them. The value of derivative instruments—such as financial options, futures and forwards—is determined largely by the underlying assets on which they are based.

The financial account provides information about the financing and investing activities of Canadian residents with non-residents. It measures the sources and uses of financial funds with non-residents and it consists of transactions in financial instruments. Transactions in financial instruments have a direct impact on the international investment position by creating, extinguishing or modifying financial assets and liabilities (see Chapter 15, "Conceptual Framework of International Investment Position"). In turn, financial assets and liabilities generate investment income, which is recorded in the current account (see Chapter 8, "Investment Income").

Transactions in financial instruments are presented under three major accounts: direct investment, portfolio investment and other investment. The classification of direct investment as asset and as liability does not strictly portray gross assets and gross liabilities as it does for portfolio and other investment. Instead, direct investment under the asset category represents a net transaction in both financial assets and financial liabilities of Canadian companies with their foreign-related parties. In the same way, the direct investment under liability represents the netting of transactions of Canadian direct investees with their foreign direct investors. (For a further explanation of direct investment, please refer to Chapter 17, "Direct Investment Position.") Such netting of assets and liabilities is referred to as directional flows of direct investment.

10.2 Data sources

Most of the information for the capital account is derived from administrative sources, while the data on financial transactions are obtained from surveys conducted by the Balance of Payments Division.

10.3 Methods

The next four chapters cover each of the four accounts making up the capital and financial account (capital account, direct investment flows, portfolio investment

1. The Canadian Institute of Chartered Accounts, *CICA Handbook*, (277 Wellingston Street West, Toronto ON M5V 3H2, December 1997), 3860.03.

flows and other investment flows) in terms of concepts, sources, methods and products (data quality and data accessibility).

10.4 Products

10.4.1 Data accuracy

Overall, the data on the capital and financial account are reliable.

10.4.2 Data accessibility

The quarterly and annual capital and financial account series are published in the quarterly *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM. They are presented as annual net flows of Canadian assets and Canadian liabilities for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. The U.S. series are also presented on a quarterly basis.

CHAPTER 11
CAPITAL ACCOUNT

11.1 Concepts

The capital account includes capital transfers and transactions in non-produced, non-financial assets. Transfers, as explained in Chapter 9, “Current Transfers,” are unilateral transactions for which there is no *quid pro quo*. Unlike current transfers—which redistribute current income—capital transfers redistribute savings or wealth.

Capital transfers consist in transferring the ownership of tangible and intangible assets or the cancellation of a financial claim by mutual agreement between a creditor and a debtor from another country (debt forgiveness). Conforming to international standards, capital transfers in Canadian statistics include migrants’ assets and debt forgiveness by the Government of Canada and its enterprises, as well as inheritances. Private forgiveness of loans has not been observed and, as such, are not in Canadian data.

The acquisition or disposal of non-produced, non-financial assets covers intangible assets and selected transactions of government in tangible assets (land and subsoil assets). Intangible assets include such items as rights, good will, grants, patents, trademarks, franchises, leases or other transferable contracts. Except for selected government transactions, all international transactions in land and subsoil assets are excluded from the capital account. Land is treated as being owned by a resident of the country where the land is located. When a non-resident purchases land or structures, the balance of payments treats this as the purchase of a financial asset from a notional landlord resident in the same country as the land. This is based on the notion that “land and buildings can only be used for purposes of production in the country where they are located.”[1] These transactions are therefore recorded in the financial account. The exception is land transacted by embassies, which should be treated as a capital account entry. This treatment has been applied in the Canadian statistics since 1996 when administrative data from the Government of Canada have included detail on land and building transactions abroad, enabling their proper classification among non-produced, non-financial assets and government services, respectively. For the years prior to 1996, such transactions were not identifiable in the source administrative data and were thus classified as government services in the Canadian balance of payments statistics. Data on land purchased by embassies in Canada is not available.

11.2 Data sources

Monthly data on immigrants’ funds are taken from official immigration records. Emigrants’ funds, relatively small in size, are lacking information at source. The Demography Division of Statistics Canada supplies estimates of the number of emigrants, to which an average value of funds transferred is applied. The data on debt forgiveness come from administrative data of the federal government. Small estimates of inheritances represent carry-forwards from earlier studies. Data on intangible assets are derived from surveys and media information.

11.3 Methods

The data on the capital account are largely compiled from administrative sources by the Balance of Payments Division.

The information on the wealth of immigrants[2] arriving in Canada is derived by combining two sources: information on wealth obtained from declarations of net worth by prospective immigrants to Canada at the time of visa application, and information on landed immigrants (not all visa applicants become landed immigrants).

The net worth left abroad at the time of immigration constitutes an increase in Canada’s external wealth. This is recognized by recording this net worth as an asset in other investment in Canada’s balance of payments (transactions) and international investment position (position). The assets abroad are

1. International Monetary Fund, *Balance of Payments Manual, (*Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 64, 21.

2. Extracted and modified from Statistics Canada, “New treatment for recording migrants funds,” in *Canada’s Balance of International Payments, First Quarter, 1991* (Catalogue no. 67-001-XPB).

measured by using net worth less funds in possession. It is assumed that some of that wealth is initially left abroad and is subsequently patriated to Canada over a period of 40 quarters or 10 years. This is articulated in the financial account by creating an outflow at the time of immigration to represent the assets abroad, and the patriation of these assets is subsequently recorded over a 10-year period as inflows. This is an operating assumption as it is not possible to ascertain when and how much of these funds immigrants will patriate into Canada.

In some cases, potential investor immigrants must invest funds in Canada in advance of receiving a visa (investor class under the business immigration program). These funds are shown as inflow foreign investment in other investment (Chapter 14, “Other Investment Flows”) and are shown as outflow once the potential immigrant becomes a Canadian resident (assumed to occur on acquiring landed status).

An estimate is made for returning Canadians who are re-entering Canada after spending more than a year abroad, using as a basis the funds in possession for two immigrant classes: family and independent persons.

Similarly, emigrants’ funds have been estimated on a funds-in-possession basis. Estimates are based on the relationship of funds in possession to total net worth for the family and independent immigration classes.

11.4 Products

11.4.1 Data accuracy

The accuracy of data on capital transfers and non-produced, non-financial assets is acceptable. This rating reflects both the lack of data sources on these accounts and their relatively small size.

11.4.2 Data accessibility

The quarterly and annual series on the capital account on a gross and net basis are published in the quarterly *Canada’s Balance of International Payments* (available in paper and in electronic format on the Internet) and in CANSIM. They are shown annually on a net basis for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries.

CHAPTER 12
DIRECT INVESTMENT FLOWS

12.1 Concepts

The International Monetary Fund describes the direct investment concept as follows:

> Direct investment is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy in an enterprise resident in another economy. (The resident entity is the direct investor and the enterprise is the direct investment enterprise.) The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprises and a significant degree of influence by the investor on the management of the enterprise.[1]

The concept of direct investment is a behavioural concept in that it purports to measure the investment by a resident enterprise[2] that has been made with the intent of having a significant influence in the affairs of a non-resident enterprise or vice versa. This concept is difficult to apply in practice. Canada generally retains a rule of 10% ownership of voting equity when identifying a direct investment relationship.

Under Canadian direct investment abroad, the foreign entities in which a Canadian enterprise holds at least a 10% voting equity ownership are referred to as related parties of a Canadian direct investor; they include foreign subsidiaries (enterprise more than 50% owned), foreign associates (enterprise between 10% and 50% owned) and foreign branches (wholly- or jointly-owned unincorporated enterprises). In the same way, the Canadian entities that receive foreign direct investment capital are referred to as Canadian direct investees and cover the Canadian subsidiaries, Canadian associates and Canadian branches of foreign enterprises.

As noted in Chapter 10, "The Capital and Financial Account," direct investment flows are not broken down strictly between transactions in assets and transactions in liabilities. Rather, the net flow in direct investment is 'directional' in that it represents the netting of all transactions in both assets and liabilities. The net transactions of Canadian enterprises with their foreign subsidiaries, associates and branches are recorded as assets under Canadian direct investment abroad. The net transactions of Canadian enterprises with their foreign direct investors are recorded as liabilities under foreign direct investment in Canada. This practice conforms to international standards and is explained in more detail in Chapter 16, "Direct Investment Position."

Direct investment covers all transactions in equity and debt between the Canadian enterprise and the foreign enterprise linked by a direct investment relationship. Equity comprises equity capital and reinvested earnings; debt comprises both long-term and short-term debt, except for banks where short-term intercompany transactions are excluded and presented in other investment (see Chapter 14, "Other Investment Flows").

12.2 Data sources[3]

The data sources consist of nine surveys conducted by the Balance of Payments Division and other sources, ranging from administrative data to information collected from public sources, especially the financial press.

12.2.1 Survey sources

The following are the transaction-based surveys:

- Transactions Between Canada and Other Countries—BP-21A (quarterly sample survey);

1. International Monetary Fund, *Balance of Payments Manual* (Fifth edition, Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 359, 86.

2. 'Enterprise' is a generic term used to indicate that, although data are reported by a corporation or a branch, they usually represent a consolidation of the operations of all resident corporations/branches of the same business family. See Chapter 15, "Direct Investment Position."

3. Sections 12.2 and 13.3 are derived from Christian Lajule, *Collecting and Reporting FDI in the Canadian Balance of Payments*, (unpublished document, presented at the OECD Conference on direct investment, Istambul, Turkey, December 1997, Statistics Canada).

- Investment in Canada by Non-Canadian Corporations—BP-22A (quarterly sample survey);
- Transactions Between Canada and Other Countries—BP-21 (annual survey);
- Investment in Canada by Non-Canadian Corporations—BP-22 (annual survey);
- Transactions Between Canadian Incorporated Insurance Companies and Their Foreign Affiliates, Agencies and Bank Accounts and Other Companies or Persons Outside Canada—BP-27 (annual survey); and
- Transactions Between Canadian Branches of Foreign Insurance Companies in Canada and Head or Other Offices, Companies or Persons Outside Canada—BP-28 (annual survey).

Verification and comparison are also carried out with the quarterly survey of domestic financial statements of Canadian enterprises from the Industrial Organization and Finance Division. The transaction-based surveys are confirmed and supplemented with the following position surveys:

- Geographical Distribution of Capital—BP-52;
- Capital Invested Abroad by Canadian Enterprises—BP-59; and
- Canadian Investment in Non-Canadian Corporations—BP-60.

12.2.2 Administrative sources

A number of administrative sources are used to supplement the quarterly and annual surveys. The monthly list of Canadian companies with investments from non-residents, compiled by Investment Canada, a branch of Industry Canada, is used to update the survey mailing list.

Supplementary administrative sources provided by financial institutions to the Bank of Canada and the Office of the Superintendent of Financial Institutions are also used, especially to derive Canadian direct investment abroad by Canadian banks and foreign direct investment in Canadian banks.

The Canada Customs and Revenue Agency’s administrative form T-106, which is filed by Canadian companies on their non-arm’s length transactions with non-resident entities, includes dividends, interest and intercompany claims, and liabilities. This form is used from time to time to update the list of potential reporting entities.

Occasionally, the records of the Balance of Payments Division are reviewed against administrative data collected under the *Corporations and Labour Unions Returns Act*, which was passed in April 1962, with several amendments in subsequent years. The *Act* was amended in January 1999 to exclude labour unions and its name changed to the *Corporations Returns Act.* Information on foreign ownership of Canadian companies provided under the *Act* is presented in more detail in Chapter 16, “Direct Investment Position.”

12.2.3 Other sources

Financial information published in the financial press (for example, *Globe and Mail*, *National Post* and *Les Affaires*) is systematically analysed and processed against quarterly survey results through a computerized system (dubbed SERIE) developed in the Balance of Payments Division. SERIE is used both to supplement quarterly data on direct investment reported on the quarterly sample questionnaire Transactions Between Canada and Other Countries—BP-21A, and to detect longer-term developments that could have an impact on direct investment data. The importance of the financial press is evidenced by the fact that this source often accounts for more than half of the preliminary estimate of net inflow of foreign direct investment in Canada; for Canadian direct investment abroad, the proportion has reached up to half the preliminary estimate.

12.3 Methods

The enterprises that typically exhibit significant direct investment flows are surveyed quarterly on the questionnaires Transactions Between Canada and Other Countries—BP-21A and Investment in Canada by Non-Canadian Corporations—BP-22A. As previously noted, these data are supplemented by data on transactions associated with specific projects, takeovers and so on, which are reported in the financial press and by other news services and are documented in the system SERIE.

First, research is done through the financial press to identify transactions that could have international implications. When a news item is identified, it is entered into SERIE with the following information: a unique identifier; the names of Canadian and foreign enterprises involved; the country with which the transaction occurred; the date and source of the news item; the size of the transaction (small, medium or large); the account affected (direct investment abroad or direct investment in Canada); and a brief description of the news item. If a transaction is material, a search is done to see if the enterprise (transactor) involved is already surveyed. If the enterprise is surveyed by a quarterly questionnaire, the information is validated against the response to that questionnaire and, if necessary, the enterprise is called to discuss the transaction. Enterprises not surveyed are contacted for details of the transaction (closing date of the transaction, amounts involved, and so on), and they are then added to the list of surveyed enterprises. When the flow is small or if time does not permit, an estimate is made without making contact with the enterprise.

Furthermore, the databases of the Balance of Payments Division and the database of the Industrial Organization and Finance Division are linked at the enterprise level for selected cells on investment in foreign corporations or borrowing from foreign parents or subsidiaries to validate direct investment flows of the current quarter. Major discrepancies between the two databases are investigated and reconciled.

Given that the current quarterly flows on direct investment are based on a sample survey of the largest enterprises, which is supplemented by other sources described above, two additional procedures are executed to improve the quality of quarterly flows. A system (International Investment Statistical Information System) estimates flows for the non-surveyed portion from the previous annual surveys and imputes for non-response until the results of annual (quasi census) questionnaires become available.The program also distributes the estimates by geographical area and by broad industrial grouping according to their respective importance. These estimates are based on past information as collected from annual questionnaires.

Sources and methods applicable to Canadian direct investment abroad closely parallel those for foreign direct investment in Canada.

12.4 Products

12.4.1 Data accuracy

The data are believed to be most reliable, but preliminary estimates of direct investment capital flows are less reliable as they undergo several updates. The data are validated against other administrative sources and the undercoverage estimates are gradually reduced and eliminated when the annual data become available. Estimates in recent years, however, have been less reliable and have resulted in large revisions. The results of the annual surveys are also used to project the flows of investment for enterprises that are not surveyed quarterly.

12.4.2 Data accessibility

The quarterly and annual series on direct investment are published for Canadian direct investment abroad and foreign direct investment in Canada in the quarterly *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM, with a split between re-invested earnings and other flows, and on an annual basis with a split among acquisitions, sales of direct investment interests, other long-term flows, short-term flows and re-invested earnings. The net flows are published quarterly in total, according to six broad industrial categories: wood and paper; energy and metallic minerals; machinery and transportation equipment; finance and insurance; services and retailing; and other industries. They are also published annually, according to six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries.

CHAPTER 13
PORTFOLIO INVESTMENT FLOWS

13.1 Concepts

13.1.1 Description

Portfolio investment embodies the notion of marketability, that is, of financial instruments that can be traded (bought or sold) on organized and other financial markets after they have been issued.

In the Canadian statistics, portfolio investment covers transactions in stocks and bonds (both Canadian and foreign) and in Canadian money market instruments between Canadian residents and foreign residents. However, it excludes the following:

- security transactions, which are part of direct investment capital, as described in Chapter 12, "Direct Investment Flows;"
- foreign security transactions, which are part of Canada's official international reserves, as described in Chapter 14, "Other Investment Flows;"
- repurchase and reverse repurchase agreements on securities, which are classified as short-term borrowing and lending in other investment, as described in Chapter 14, "Other Investment Flows;" and
- foreign money market instrument transactions, which are classified as other investment (because it is difficult to separate them from other foreign banking liabilities, such as certificates of deposit), as described in Chapter 14, "Other Investment Flows."

The Canadian practice conforms to international standards, except for the last item, transactions in foreign money market instruments, which is excluded from the portfolio flows in Canadian statistics because of data problems.

Stocks are securities that represent the ownership of a corporation through shares that are a claim on the corporation's earnings and assets. They include common and preferred equities, as well as warrants.

Bonds are debt securities that obligate the issuer/ borrower to make specified payments to the holder over a specific period. Bonds include the following:

- negotiable certificates of deposit with maturities of more than one year;
- zero coupon (also called strips), as well as any coupons which have been detached from bonds;
- bond packages;
- floating-rate bonds;
- indexed bonds; and
- long-term asset-backed securities, such as collateralized mortgage obligations.

The series exclude mortgages, non-marketable guaranteed investment certificates and options, which are classified in other investment flows (see Chapter 14, "Other Investment Flows").

Canadian money market instruments cover marketable instruments issued by Canadian residents with a term to maturity of one year or less. They generally give the holder the unconditional right to receive a stated, fixed sum of money on a specific date. These instruments are usually issued at a discount to mature at par. They are usually traded in organized markets and include treasury bills, commercial and finance paper, bankers' acceptances, negotiable certificates of deposit (with original maturities of one year or less) and short-term asset-backed securities. They are broken down between Government of Canada paper and other short-term paper. Government of Canada paper includes treasury bills (issued in Canadian dollars) and Canada bills (issued in U.S. dollars). Other money market instruments cover commercial and treasury bills issued by Canadian governments other than the federal government and by government enterprises, bankers' acceptances and other commercial paper, bearer demand notes of banks and other paper of financial institutions. (It is difficult to distinguish the deposits at banks from the paper they issue; this leads to a blurring of the distinction between bank deposits and money market instruments and explains why there is not a specific account for money market under portfolio investment assets.)

13.1.2 Canadian and foreign securities

To qualify as a Canadian security, a security must be a liability of a Canadian resident corporation or government. For example, a Canadian dollar issue of the Australian government is a foreign security. To qualify as a new issue of Canadian bonds sold to non-residents, the Canadian bonds have to be issued in a foreign market. Three types of new issues are differentiated:

- bonds sold in a foreign market in the currency of that market, referred to as domestic issues (for example, a U.S.-dollar Canadian bond issued in the United States);
- bonds issued in a foreign market in a currency other than that market and referred to as Euro bonds (for example, a Canadian dollar bond issued in the United Kingdom); and
- issues floated simultaneously in more than one market referred to as global bonds (for example, U.S.-dollar Canadian bonds issued simultaneously in Canada and in the United States).

For the global bonds, only the portion issued in foreign markets is recorded as new issues in the balance of payments. Retirements cover Canadian bonds issued directly in foreign markets and those issued domestically and subsequently sold to foreigners in the secondary market. They also include bonds redeemed prior to maturity under callable provisions and represent the repayment of capital and accrued interest payable in the case of discounted bonds.

Securities not issued by Canadian residents are treated as foreign securities.

13.1.3 Transactions in securities

Transactions in securities comprise new issues, trade in outstanding securities (both sales and purchases), retirements of debt securities when they arrive to maturity and interest accrued on debt but not paid (inclusive of amortization of discounts or premiums and of coupon interest).

13.2 Data sources

The data sources are surveys conducted by the Balance of Payments Division, as well as administrative sources from the Bank of Canada and the Bank of International Settlements.

The surveys conducted with financial intermediaries represent the bulk of the data. Financial intermediaries are requested to submit trading information on behalf of their clients in electronic form, with details of each transaction, on the following surveys:

- Canada’s International Transactions in Securities—BP-30 (monthly);
- Sales of Short-term Securities to Non-residents of Canada—BP-30A (monthly); and
- Purchases of Short-term Securities from Non-residents of Canada—BP-30B (monthly).

The remaining surveys request information from either the investors in foreign securities or the issuers of Canadian securities and are used to complement the data obtained monthly from financial intermediaries:

- Transactions Between Canada and Other Countries—BP-21A (quarterly);
- Transactions Between Canada and Other Countries—BP-21 (annual);
- Transactions Between Canadian Incorporated Insurance Companies and their Foreign Affiliates, Agencies and Bank Accounts and Other Companies or Persons Outside Canada—BP-27 (annual);
- Transactions Between Canadian Branches of Foreign Insurance Companies in Canada and Head or Other Offices, Companies or Persons Outside Canada—BP-28 (annual); and
- Report by Trust and Mortgage Loan Companies in Canada on Transactions with Non-residents—BP-29 (annual).

In the following, the sources of information are reviewed first for bonds and stocks and then for Canadian money market instruments.

13.2.1 Bonds and stocks

13.2.1.1 New issues of bonds and stocks

New issues of Canadian bonds abroad are largely obtained from monthly administrative data compiled by the Bank of Canada. This information is supplemented by monitoring the financial press and is confirmed by the largest borrowers and investors in the following surveys:

- Transactions Between Canada and Other Countries—BP-21A (quarterly);
- Particulars of Selected Issues of Funded Debt and Foreign Bank Borrowings—BP-55 (annual);
- Geographical Distribution of Selected Long-term Debt Booked in Canada at Canadian Banks and Consolidated Canadian Subsidiaries—BP-56 (annual); and
- Geographical Distribution of Capital—BP-52 (annual).

Other sources include the administrative data on new issues from the Canadian Bond Register (published by FRI Corporation), the Public Accounts, annual reports, and business papers and magazines. The database on bonds maintained by the Bank of International Settlements is also used as a source of information.

The data on new issues of Canadian stocks abroad are obtained from

- public announcements in the financial press or in other public documents;
- monthly and quarterly survey responses on Canada's International Transactions in Securities—BP-30 and Transactions Between Canada and Other Countries—BP-21A, respectively; and
- the annual position survey Geographical Distribution of Capital—BP-52.

For new issues of foreign securities in Canada, flows are largely measured through the monthly and quarterly survey Canada's International Transactions in Securities—BP-30. For the most part, the amounts reported are small, since foreign entities do not generally float new issues in Canada. In fact, it has been virtually a decade since new foreign bonds and stocks in Canada have been of any significance.

13.2.1.2 Trade in outstanding bonds and stocks

Trading in outstanding securities is compiled primarily from the monthly survey directed to Canadian investment dealers (Canada's International Transactions in Securities—BP-30), who are requested to provide trading data between residents and non-residents on behalf of their clients and for their own account. Trading on behalf of banks is to be excluded as these data are obtained from administrative sources. As noted earlier, the information on that survey is provided on a detailed transaction basis and not in aggregate. In addition, some of the trading in foreign securities is obtained from a monthly survey of other Canadian financial institutions, such as mutual funds, pension funds, money managers, and trust companies, which regularly buy foreign securities directly through dealers and brokers outside Canada. Finally, the investment in Canadian securities by Canadian banks is obtained from Geographical Distribution of Assets and Liabilities of Chartered Banks Return (GDAL), submitted by Canadian banks to the Bank of Canada.

13.2.1.3 Retirements of bonds and stocks

The data for retirements of Canadian bonds are derived from the system that tracks the dates of maturity of the various bonds and processes new issues and trade in outstanding bonds (see section 13.3 for more details). The issuers of callable Canadian bonds are contacted, directly or through surveys, to establish the amounts of bonds retired prior to maturity; these repurchases are treated as retirements.

The retirements of foreign bonds are much more difficult to discern; small amounts can be reported on Canada's International Transactions in Securities—BP-30 or found in press reports.

13.2.2 Canadian money market instruments

Several sources are used to measure international transactions in the Canadian money market. As these sources tend to overlap, they are closely edited to avoid duplication. Chief among the sources are the surveys Sales of Short-term Securities to Non-residents of Canada—BP-30A and Purchases of Short-term Securities from Non-residents of Canada—BP-30B, which are sent to security dealers, banks and trust companies. The respondents are required to provide transactions on their own account (except banks, since the information is requested elsewhere) and on behalf of clients. These questionnaires request transactions on an individual issue basis that includes a maturity date. In this way, non-resident holdings of specific securities can be tracked and their retirement can be imputed when they arrive at maturity.

Canadian issuers who place short-term paper directly in foreign markets are another important source. They include provinces, provincial and federal government enterprises and Canadian corporations.

13.3 Methods

13.3.1 System to process Canadian bonds[1]

An extensive and detailed system (dubbed BP-2000) is used to process data on Canadian bonds and is currently being extended to process Canadian money market instruments. In the system, each Canadian issuer is identified by name, sector (federal government, private company and so on) and industrial classification; each security held abroad is listed with the dates of issue and of maturity, the currency of issue, the interest rate, the timing of payments of interest and so on. Because the system is extensive in terms of the details processed, it is used to derive a number of variables such as position, new issues, interest and retirements. This all-encompassing system processes not only flows but also positions and investment income. The system to process Canadian bonds is described below.

13.3.1.1 Valuation of bonds

The system maintains four prices for Canadian bonds: issue price, maturity price, book value and market price at year-end. Each of these prices serves as a basis to derive related statistics. For example, the issue price is used to derive financial flows on new issues while the maturity price is used to generate retirements. Both new issue and retirement prices are used to assist in compiling yields. The book value and the market value are used to calculate positions at period ends.

The issue price represents the proceeds received by the issuer when issuing the bond. At the time of issue, the bonds are generally priced at the prevailing market price. This market price is in turn equivalent to the present value of the stream of future payments, that is, the coupons and principal discounted at the market interest rate. If the coupon rate is set equivalent to the prevailing interest rate, the issue price will be the same as the maturity price. If the coupon rate is different from the prevailing interest rate, the issue will be priced at a discount or premium from the maturity price.

The maturity price is the amount the issuer will pay the holder at the date of redemption of the bond (often referred to as ‘par’ or ‘face value’). It is effectively the future value of the principal after the coupons have been paid out. The maturity price of a bond is the same as the market price that will prevail on that bond at the date of its maturity.

Book value tracks the cost plus the income accrued but not paid out from the point of view of the issuer of a bond. This book value is made up of the issue price plus the investment income expensed but not paid by the issuer. The income expense is calculated as the accrual of the coupon plus the accrual of the difference between the issue price and the maturity price. Hence, at any given time, the book value of the issuer is made up of three parts: the issue price, the coupon accrued but not yet paid, and the amortization of the discount or premium (if any) between the issue and the maturity prices. This book value is currently used to value all Canadian portfolio bonds outstanding in Canada’s international investment position (see Chapter 17, “Portfolio Investment Position”).

When valuing several bonds, such as when measuring positions at a given time, it is extremely important to use a common yardstick, that is, to use prices that are comparable. A prevalent and misleading measure in valuing positions outstanding consists in adding the maturity (or par) values of bonds. Such valuation ignores completely the time value of money, a major factor in valuing bonds. For example, a 10% bond with a par value of $100 due in the year 2003 will have a significantly different price from a similar bond due in the year 2015. The differences are even more accentuated with deep discount bonds. While not perfect, a more appealing value consists in using the prices of bonds prevailing in the market for the period for which the measurement applies. This measure, which is referred to as the market price valuation, has been adopted internationally as the standard in national accounting to value positions outstanding at a given time. Its main advantage is that it uses prices that are comparable at a given time. This advantage outweighs some shortcomings inherent in market price

1. A more detailed description is provided in Lucie Laliberté and Réjean Tremblay, *Measurement of Foreign Portfolio Investment in Canadian Bonds*, (Research Paper No. 12, Balance of Payments Division (67F0001MIB97012), http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

valuation, such as valuing the entire stock of bonds with a marginal price, that is, the market price at which the last transaction occurred or would occur if there was a transaction. Obviously, if all bonds were sold or redeemed at once, the market price would drop drastically. It is unlikely that all bonds could be sold or redeemed at once, and the market price valuation remains an appealing yardstick. Although not incorporated in the official series of Canada's international investment position, the market price valuation of bonds is provided as supplementary information in *Canada's International Investment Position*.

In the Canadian system, the market prices are either observed from a bond-trading survey in the month preceding the valuation, or calculated. To the extent that bonds are traded with non-residents in the month preceding the period of valuation, such as December trading for December-end valuation, the average price on such trading is used to proxy the market prices of the bonds traded. For bonds whose market prices are not readily available, the system devises a market price using as a proxy, the present value of all the future stream of payments of the bond:

$$\text{Present value} = \sum_{t=1}^{N} \frac{C_t}{(1+i)^t} + \frac{M}{(1+i)^N}$$

where C_t is the coupon rate at time t multiplied by the maturity value, that is, coupon interest for the year t

N is the number of years left to maturity

M is the maturity value

i is the market yield of the bond

The coupon rate (C), the number of years left to maturity (N) and the maturity value (M) are readily available from the characteristics of the bond. The market yield (i) of the bond is the most difficult component to obtain as it embodies the credit risk of the issuer and conditions in the financial markets at the time the valuation is conducted. On the basis of a complex mixture of market observations and derived data, the system generates yields for a broad range of bonds. Each bond is then assigned a yield that is incorporated into the above equation to carry out the present value calculation. However, while it factors in certain variables, the present value remains a proxy for market price since it ignores other pertinent variables.

13.3.1.2 Income calculation of bonds

The investment income calculation on bonds follows the debtor principle as it views the income from the viewpoint of the bond issuer and not the bondholder (creditor principle). The investment income is calculated as the accrual of both the coupon and the difference, if any, between the issue price and the maturity price. When the issue price differs from the maturity price, the difference is effectively an income expense (positive for bonds issued at discount and negative for bonds issued at premium) for the issuer. The system amortizes that difference over the remaining life of the bond using the formula of internal rate of return. However, this difference is not paid out or received until maturity. Therefore, the cumulated amortization is recorded as a payable (positive or negative) in the financial account, a payable that will be paid out or reimbursed at maturity (as retirement of capital).

Income in the form of service is generated both at the time of issue (commissions paid by Canadian issuers to foreign financial intermediaries for issuing Canadian bonds in foreign markets) and when trading Canadian bonds with non-residents (Canadian financial intermediaries earn commissions from both the foreign sellers and the foreign buyers of Canadian bonds). These service charges are recorded as financial services in commercial services (Chapter 6, "Commercial Services").

13.3.1.3 Transactions in Canadian bonds

Financial transactions in Canadian bonds are of four major types: new issues, retirements, trade in outstanding securities, and amortization and changes in interest payable.

New issues denominated in foreign currencies are entered in the system in original currency and the system converts them to Canadian dollars using the noon average exchange rate of the month. When the Canadian dollar proceeds of a foreign currency new issue are known, this information is used to calculate the value of new issues, instead of converting at the market exchange rate.

Retirements represent the amount of capital reimbursed by the issuer at the date of maturity of the bond and are generated automatically by the system at maturity. While there is generally one date of maturity, some bonds may have several maturity dates as the retirements are spread over time (for example, sinking fund bonds). Retirements of bonds in foreign currencies are converted to Canadian dollars at the monthly noon average rate in the month of retirement. Again, when the Canadian dollar proceeds are known, this information is used instead to calculate retirements. Repurchases prior to maturity and bonds called prior to maturity are included with retirements.

After having been issued, bonds trade in the secondary market as outstanding securities. Most of the secondary trading between residents and non-residents is on Canadian bonds that have been issued on the Canadian market, especially Government of Canada bonds. Three cases of trading require special treatment: bonds under repurchase agreements, bonds which have been stripped, and trading that is reported as aggregates instead of on an individual bond basis by a few security dealers.

Bonds traded under repurchase agreements (repos) are effectively treated as lending/borrowing where bonds are used as collateral. Hence, the trading in such bonds needs to be reclassified as loans. Most financial intermediaries identify separately the trading involving repurchase agreements. For the others, the system attempts to match, for each financial intermediary, the sale and purchase sides of the same securities within a month and with the same client and treats such trading as repurchase agreements. Bonds traded under repurchase agreements are classified as loans (for more details, see Chapter 18, “Other Investment Position”).

Transactions involving bonds that have been stripped are processed as transactions in bonds issued by the original issuer but are not linked back to the issue which was stripped.

> The strip or zero coupon bond first appeared in Canada in 1982. It is created by a dealer acquiring a block of existing high-quality bonds and then physically separating certain individual interest coupons from the underlying residue. These two units are then sold separately at significant discounts to their face value. The bond residues consist of principal plus undetached semi-annual interest coupons between the call date and the bond issue’s maturity date. Holders of strip bonds receive no interest payments. Instead, the bonds are purchased at a discount, at a price that will result in a certain compounded rate of return.[2]

The procedure selected to reflect strip bonds in the transactions and positions consists in linking these bonds to the issuer but not to the specific issues themselves. The strips show as zero interest bonds in the inventory with the income calculated as the difference between the transaction price and the maturity value.

There are also bonds which are aggregated (not identified on a bond by bond basis) by a few security dealers for a number of reasons. These bonds are regrouped by sector and treated as a component of a synthetic single issue of the sector (for example, bonds issued by provinces).

The sales and purchases for each issue are entered on a monthly basis as transaction values in the inventory and are also revalued to their corresponding book values. To simplify processing, the trading is deemed to have occurred on the fifteenth day of the month of trading, except for the two following cases. For bonds issued after mid-month and traded in the same month, the system deems the trading to have occurred at the date of issue. Bonds that trade the month of maturity are deemed to have traded at the date of maturity.

13.3.1.4 Reconciliation of positions and flows

Positions outstanding at the end of the period can be calculated as the positions at the beginning of the period plus the transactions on bonds plus the foreign currency holding gains or losses of the issuers. The holding gains and losses reflect the valuation method selected: book value (valuation used for official series on position) or market value (valuation used as supplementary information to official series). For more information on valuation due to exchange rate, see Chapter 17, “Portfolio Investment Position.”

Foreign holders are identified on the basis of their respective country of residence, when available, or at least by broad geographical area and whether or not they are related to the Canadian issuers. The

2. Canadian Securities Institute, *The Canadian Securities Course*, (121 King Street West, Suite 1550, Box 113, Toronto ON M5H 3T9, 1992), 158.

identification of ultimate foreign holders presents major difficulties (see Chapter 23, "Looking Ahead").

13.3.2 Processing of other portfolio securities

As mentioned earlier, the system to process the Canadian money market instruments is currently being revamped along the same lines as that used to process Canadian bonds. Canadian stocks and foreign securities are currently processed as aggregates, but there are plans to process them on a security-by-security basis (for more details, see Chapter 17, "Portfolio Investment Position," and Chapter 23, "Looking Ahead").

13.4 Products

13.4.1 Data accuracy

For Canadian portfolio investment flows in foreign stocks and bonds, the accuracy is acceptable. The coverage may be incomplete, as it is difficult to identify all Canadian residents making portfolio investment abroad. It is assumed that most portfolio investment abroad is conducted through the Canadian intermediaries that are surveyed. In addition, the largest direct holders are surveyed if it is established that they use non-resident channels of investment. This procedure may lead to problems of undercoverage which should be alleviated, however, from further investigation of the new survey results on portfolio positions introduced for the reporting year-end 1997 (for more details, see Chapter 17, "Portfolio Investment Position," and Chapter 23, "Looking Ahead"). The results of the new portfolio investment positions survey should help identifying the largest and more active Canadian holders of foreign portfolio securities and improve the coverage of transactions.

The data on foreign portfolio investment in Canadian bonds, stocks and money market paper are most reliable. The data may at times be revised when new transactors are identified or information becomes available through annual surveys of Canadian issuers. However, the geographic distribution of the residence of the foreign holders remains difficult to establish; the Canadian issuers cannot accurately locate geographically the ultimate holders of their securities since the day-to-day operations are increasingly managed by security depositories through nominees.

13.4.2 Data accessibility

Portfolio investment flows are published in the quarterly *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM. They are published on a quarterly and annual basis for bonds, stocks (both foreign and Canadian) and Canadian money market instruments in total and annually according to six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other countries.

In addition, in the monthly *Canada's International Transactions in Securities* and in CANSIM net transactions are also presented on a monthly, quarterly and annual basis in the five types of securities according to the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. Furthermore, Canadian bonds of governments and government enterprises are presented according to the level of government (federal, provincial and municipal) along with corporate bonds. Canadian bonds are broken down by new issues, sales and purchases of outstanding bonds, interest accruals and payments as well as retirements, with a further breakdown by currency of issue. Canadian money market instruments are also presented by the various levels of governments, broken down between gross sales, gross purchases and net transactions. Canadian stocks are presented according to new issues, sales and purchases of outstanding issues. The breakdown available for foreign securities is more limited, with foreign bonds broken down between U.S. government issues and other foreign issues. Gross sales and purchases are published for foreign bonds and foreign stocks.

CHAPTER 14
OTHER INVESTMENT FLOWS

14.1 Concepts

Other investment flows is a residual heterogeneous account that includes all investment other than direct and portfolio investment. It covers financial transactions in loan assets and liabilities, deposit assets and liabilities, official reserve assets and other assets and liabilities.

14.1.1 Loan assets and loan liabilities

Loans are financial claims that refer to direct lending of funds by creditors (lenders) to debtors (borrowers) through arrangements in which the lenders may or may not hold non-negotiable instruments. Transactions in loan assets comprise the following:

- loans by the Government of Canada and its enterprises which cover direct loans to foreign countries and to international agencies but exclude subscriptions to international agencies that are in other assets;
- loans by Canadian banks, both Canadian dollar and foreign currency loans;
- loans by corporations, including mortgage loans; and
- loans by the corporate and personal sectors through reverse repurchase agreements (reverse repos) involving securities used as collateral.

In a reverse repo transaction, one party lends funds to another party, receiving a security as collateral. In actual fact, the lender buys the security from a borrower and agrees to sell it back at a specified price and date. From the viewpoint of the lender or purchaser, this constitutes a reverse repo; from the viewpoint of the borrower or seller, the same transaction is known as a repo.[1]

Transactions in loan liabilities comprise the following:

- corporate, government and government enterprises' borrowing from foreign banks including syndicated bank facilities;
- mortgage loans and other loans; and
- loans by the corporate and personal sectors through repurchase agreements (repos) involving securities as collateral.

14.1.2 Deposit assets and deposit liabilities

Deposits are financial claims that cover notes and coins in circulation and claims reflecting evidence of deposits. Transactions in deposit assets comprise deposits abroad of Canadian banks—including gold and silver and short-term interbank asset transactions—and deposit assets of Canadian depositors other than banks. Deposit liabilities are primarily those lodged by non-residents with Canadian banks (including gold and silver and short-term interbank liability transactions). There are also some small foreign deposits at Canadian trust companies and the Bank of Canada.

14.1.3 Official reserve assets[2]

Reserves are claims on non-residents that are readily available to and controlled by monetary authorities and that can be used for foreign exchange purposes or for other purposes. Transactions in Canada's reserve assets cover official holdings of foreign exchange and other reserve assets of the Exchange Fund Account,[3] the Minister of Finance, the Receiver General for Canada and the Bank of Canada. Some of the activities affecting Canada's reserve assets include official external financing and the foreign exchange market operations by the Bank of Canada, as agent for the Exchange Fund Account, which comes under the authority of the Minister of Finance.

14.1.4 Other assets and other liabilities

Other assets and other liabilities are residual

1. For more details, please refer to Eric Boulay, *Repo Transactions Between Residents of Canada and Non-residents*, Research Paper No. 14, Balance of Payments Division (67F0001MIB97014), http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997.
2. The main components of reserve assets are described in Chapter 18, "Other Investment Position."
3. An account in the name of the Minister of Finance and administered by the Bank of Canada.

categories that include claims other than direct and portfolio investment and that are not in the form of loans or deposits. Transactions in other assets comprise the following:

- Canadian non-bank foreign money market transactions;
- corporations' trade credits and other short-term receivables;
- progress payments;
- transactions in foreign real estate by the Canadian personal sector;
- assets held abroad by immigrants;
- Government of Canada subscriptions to international agencies; and
- Derivatives and other miscellaneous claims on non-residents.

Government of Canada subscriptions are made, in part, through the issuance of non-interest-bearing, non-negotiable demand notes, which are recorded in other liabilities. Subscriptions to the International Monetary Fund are excluded here and are classified in official international reserves.

Derivatives are financial instruments providing payoffs that depend or are contingent on the values of other assets, such as commodity prices, bond and stock prices, or market index values. The international standards were amended in 1998 to exclude the derivatives from portfolio investment and to create a specific derivative account in the financial account independent of the direct, portfolio and other investment accounts.[4] In the Canadian statistics, however, derivatives are included with other investment and are not identified as such because of lack of data. The coverage of derivatives in Canadian statistics is currently limited to options and traded financial futures. Options are contracts that give the purchaser of the option the right, but not the obligation, to buy or to sell a particular financial instrument or commodity at a predetermined price (strike price) within a specific time span or on a specified date. If an option is exercised, the acquisition or sale of the underlying asset, say a security, would be recorded in the appropriate balance of payments account. It is felt, that the amount of transactions in derivatives not covered in the Canadian statistics would not be sizeable on a net basis, although it is recognized that the impact of derivatives would be more important on positions (see Chapter 23, "Looking Ahead").

Transactions in other liabilities include Government of Canada demand note liabilities issued as part of government subscriptions to international agencies; corporations' trade credits and other short-term payables; progress payments; transactions in Canadian real estate by the foreign personal sector; deposit liabilities to Canadian official monetary authorities; liabilities to prospective migrants and other miscellaneous liabilities. Some provisions are also made for transactions in derivatives.

14.2 Data sources

14.2.1 Loan assets and loan liabilities

On the asset side, loans by the Government of Canada to foreign countries and to international agencies are obtained from administrative data of the Canadian International Development Agency and the Public Accounts of Canada. Loans by government enterprises are obtained from the Export Development Corporation and the Canadian Wheat Board and from the Public Accounts of Crown Corporations. Loans by Canadian banks are obtained from Geographical Distribution of Assets and Liabilities of Chartered Banks Return (GDAL), submitted by Canadian banks to the Bank of Canada. Loans by corporations, including mortgage loans, are derived from the annual questionnaire Transactions Between Canada and Other Countries—BP-21 and the quarterly sample survey of Canadian enterprises Transactions Between Canada and Other Countries—BP-21A. Loans under repurchase agreements and derivatives are compiled from the monthly surveys of financial intermediaries Canada's International Transactions in Securities—BP-30.

Loan borrowing by Canadian corporations and government enterprises is obtained from the annual surveys Geographical Distribution of Capital—BP-52 and Particulars of Selected Issues of Funded Debt and Foreign Bank Borrowing—BP-55. The first estimate is projected from the quarterly sample survey Transactions Between Canada and Other Countries—BP-21A. Loans under repurchase agreements, which

4. The amended international standards also call for derivatives to be classified as direct investment and as reserves if conducted by direct investors and monetary authorities. This treatment implies that derivatives are not a mutually exclusive functional account and are therefore more of an instrument category (which contradicts the new international standard) than a functional account as derivatives can be allocated to the various functional accounts.

involve securities as collateral, are reported by Canadian dealers and brokers on the survey Canada's International Transactions in Securities—BP-30. Foreign short-term bank borrowing comes from a combination of survey data and the monitoring of foreign banking data to detect large movements.

Foreign banking claims on Canada are provided by the U.S. Treasury, the Bank of England and the Bank of International Settlements.

14.2.2 Deposit assets and deposit liabilities

Deposit assets and deposit liabilities of Canadian banks are each broken down into four categories: Canadian dollar, foreign currency, gold and silver. They are derived from the administrative data Geographical Distribution of Assets and Liabilities (GDAL), submitted by Canadian banks to the Bank of Canada, and from the survey Gold and Silver Transactions, Assets and Liabilities—BP-11. Deposit assets by Canadian entities other than banks are compiled from foreign banking data obtained from the U.S. Treasury, the Bank of England and the Bank of International Settlements. Foreign deposits, which are from foreign central banks at the Bank of Canada, are derived from administrative data.

14.2.3 Official reserve assets

The data on positions are obtained from administrative data of the Canadian official monetary authorities. The transactions are derived from compiling differences in monthly positions in original currencies.

14.2.4 Other assets and other liabilities

On the asset side, data on subscriptions to international agencies are obtained from the Department of Finance, the Canadian International Development Agency and Public Accounts. Data on foreign money market instruments are compiled from a mixture of administrative data obtained from the U.S. Treasury and from survey data (Sales of Short-term Securities to Non-residents of Canada—BP-30A and Purchases of Short-term Securities from Non-residents of Canada—BP-30B) submitted by Canadian financial intermediaries. The deferred assets of Canadian immigrants are derived from administrative data of Citizenship and Immigration Canada. Data on derivatives are obtained from the monthly survey Canada's International Transactions in Securities—BP-30 of Canadian financial intermediaries. The series on progress payments are derived, from the financial press and several known respondents that are surveyed on an occasional basis. Other assets, which include trade credit and short-term receivables, are obtained on a preliminary basis from the quarterly sample survey Transactions Between Canada and Other Countries—BP-21A and finalized from the annual survey Transactions Between Canada and Other Countries—BP-21.

On the liability side, Government of Canada demand note liabilities are derived from administrative data. The data on short-term payables including trade credits are obtained on a preliminary basis from the quarterly sample survey Transactions Between Canada and Other Countries—BP-21A and are finalized from the results of the annual census survey Transactions Between Canada and Other Countries—BP-21. The series on progress payments are derived from the financial press and several known respondents that are surveyed on an occasional basis. The series on prospective migrant liabilities are derived from administrative data of Citizenship and Immigration Canada.

14.3 Methods

The data on other investment flows are compiled by the Balance of Payments Division from the sources listed above.

14.4 Products

14.4.1 Data accuracy

The accuracy of data varies according to the various accounts. The data on loans and deposits are considered to be of acceptable accuracy; more work is needed to assess the coverage of repurchase agreement transactions, which may contain transactions by banks that may be already reported in the administrative data used to derive transactions of banks. The data on other assets and liabilities are reliable, except for the progress payments and migrants' assets which are of acceptable quality. The coverage of data on derivatives is incomplete (see Chapter 23, "Looking Ahead").

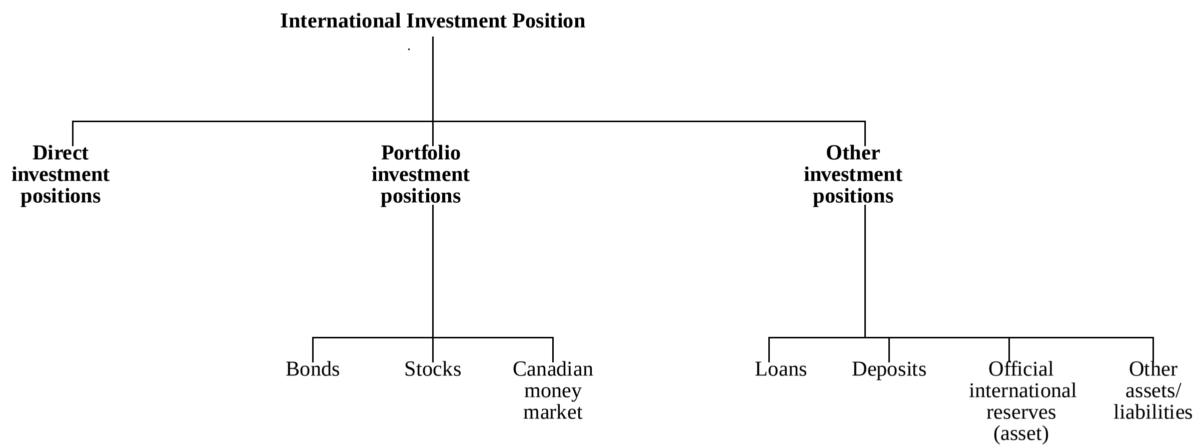
14.4.2 Data accessibility

In the quartely publication *Canada's Balance of International Payments* (available in print and in electronic format on the Internet) and in CANSIM, quarterly and annual transactions in other investment for each of assets and liabilities are published on a net basis in total. Loans under repurchase agreements are also published with a breakdown of the underlying securities. Transactions in Canada's official reserves are published by instrument and by currency. Finally other assets and other liabilities are broken down between short-term receivables/payables and other. The series are published annually for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries.

Repurchase agreements are published on a monthly basis in the monthly *Canada's International Transactions in Securities*.

Part II

International Investment Position


International Investment Position
Direct investment positions
Portfolio investment positions
Other investment positions
Bonds
Stocks
Canadian money market
Loans
Deposits
Official international reserves (asset)
Other assets/ liabilities

CHAPTER 15
CONCEPTUAL FRAMEWORK OF THE INTERNATIONAL INVESTMENT POSITION

Canada's international investment position is the statistical statement that presents the value and composition of the stock of Canadian financial claims on non-residents and Canadian financial liabilities to non-residents at year-end. The Canadian statement is compiled according to international standards and conventions described in the fifth edition of the *Balance of Payments Manual* (1993) of the International Monetary Fund (IMF). These norms are the result of extensive consultations with a group of balance of payments experts, of which Statistics Canada is an active member. Uniformity of concepts among countries and the use of common standards and conventions enhance the comparability of international investment position accounts, a major benefit for data users in this age of globalization.[1]

Canadian financial assets are owned by Canadian residents and embody future economic benefits from non-residents. They are a store of value, but unlike most non-financial assets, they are not directly employed in productive activity. Instead, they are convertible into cash or other financial instruments. They result from past transactions in financial instruments with non-residents.

Canadian financial liabilities, which are obligations to non-residents, result from past transactions in financial instruments with non-residents, and

> their settlement may result in the transfers or use of assets, provisions of services or other yielding of economic benefits in the future.[2]

'Financial liabilities' is a misnomer to the extent that it includes Canadian-issued equity in addition to Canadian debt.

The difference between total financial assets and total financial liabilities is referred to as the net international investment position. Put another way, Canada's net investment position is the difference between what Canada owns (its external assets) and what Canada owes (its external liabilities) to non-residents. Historically, Canada had and still has fewer assets abroad than it has liabilities to non-residents and, hence, shows a net international liability position.

15.1 Canadian resident and non-resident transactors

The international investment position represents the holdings by Canadian resident institutional units of external financial assets and the external liabilities of Canadian resident institutional units. (For more details on the residency of institutional units, please refer to Chapter 1, "Conceptual Framework of Balance of Payments.")

The Canadian institutional units holding external assets acquired them through previous transactions with non-residents as reflected in the financial account of the balance of payments.

The Canadian institutional units issuing external liabilities, on the other hand, may or may not have dealt directly with non-residents. They may have issued their liabilities directly to non-residents, or they may have issued them in the Canadian market, where the liabilities may have been sold to non-residents by other Canadian institutional units. For example, the Government of Canada has a significant portion of its bond liability held by non-residents who acquired these bonds in the secondary market from Canadian residents. In other words, the institutional units with foreign liabilities may have issued their liabilities directly to non-residents or may have been more passive participants in foreign markets, depending on where their liabilities were acquired by non-residents.

15.2 Types of financial assets and financial liabilities

There are three classes of financial assets and financial liabilities in the international investment

1. The international investment position statements of individual countries are published annually in the International Monetary Fund's *Balance of Payments Statistics Yearbook,* (IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA).
2. The Canadian Institute of Chartered Accountants, *CICA Handbook,* (277 Wellington Street West, Toronto ON M5V 3H2, December 1997), 1000.35.

position: direct investment, portfolio investment and other investment. These three classes largely reflect the nature of the investment in another country. In direct investment, the investor residing in one country has a significant influence on the management of an enterprise residing in another country; this means that direct investment also encompasses investment where there is a substantial influence to the point of having a controlling interest. (See Chapter 16, "Direct Investment Position" for the relationship between direct investment and control.) In portfolio investment, the investor in financial instruments does not have a significant influence on the non-resident issuer of the instruments. In other investment, there is also no influence from the investor's viewpoint, but unlike portfolio investment, there is generally no market to trade the instruments used to carry out the investment.

15.3 Valuation of international assets and liabilities

The valuation used for financial assets and liabilities in Canada's international investment position is that recorded in the books of the enterprise in which the investment is made (debtor principle). This is a departure from international standards, which call for market valuation of the international investment position.

To report direct investment at market valuation would entail major difficulties. Businesses do not generally use a market valuation to record their investment in subsidiaries and other affiliated parties in their books, which are the source of data used to compile direct investment. This was recognized by international standards.

> The market price measurement cannot always be implemented because of the absence of regular revaluations. For example, balance sheet value is often the only available reported valuation for direct investment. That value might be assigned on the basis of original cost, a more recent revaluation or current value.[3]

As for portfolio investment, the Canadian statistics provide the market valuation of selected portfolio investments as supplementary information to the official series. Finally, the valuation for other investment can be viewed for all intents and purposes to be a market valuation. Overall, market valuation is available in Canadian statistics, except for direct investment. (For more details, please refer to Chapter 23, "Looking Ahead.")

Changes in Canada's assets and liabilities arise from financial account transactions, as recorded in the balance of payments and from valuation changes. A major source of valuation change is the exchange rate since the items denominated in foreign currencies are converted using the closing exchange rate at the end of the period of reference (the exchange rate effect is dealt with in detail in Chapter 17, "Portfolio Investment Position"). Another source of valuation change arises from the difference between the price at which the transactions occurred and the value at which the claim is recorded in the balance sheet. Since the positions are not currently revalued at market prices, the valuation changes other than exchange rate reflect changes resulting from transaction value to book value, write-ups or write-downs, and reclassification. An example of reclassification would be a common stock initially purchased as a portfolio investment, and reclassified to direct investment when the holding increased to 10% or more of that stock.

15.4 Format of the international investment position

The various components of Canada's international investment position have been aggregated in the past in a number of ways reflecting both data sources and the norms at the times (see section on historical continuity in Chapter 22, "Products"). See Table 15.1 for the basic format in which Canada's international investment position is currently published.

15.5 Relationship to other statistical systems

15.5.1 Relationship to the balance of payments

There is a direct relationship between the financial transactions in the balance of payments and the international investment position.[4] Financial transactions with non-residents increase or decrease the position with non-residents. For example, the acquisition of external assets increases the asset position, whereas the redemption of an external liability decreases the liability position. While all

3. International Monetary Fund, *Balance of Payments Manual*, (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993)), paragraph 108, 29.

Table 15.1
Canada's international investment position format

	Canadian assets	Canadian liabilities	Net
Direct investment			
Portfolio investment			
Bonds			
Stocks			
Money market (liability only)			
Other investment			
Loans			
Deposits			
Official reserves (asset only)			
Other assets/liabilities			

financial flows affect the position, not all changes in position stem from financial flows. The value of assets and liabilities may change as a result of fluctuations in exchange rates or other revaluations and reclassifications. In other words, while only transactions with non-residents are recorded in the balance of payments, the external assets and liabilities reflect both transactions with non-residents and valuation changes.

The relationship between the current account balance and the net international investment position transits via the capital and financial account.

- The net flow of the capital and financial account is equivalent to the balance in the current account, with the sign reversed.
- The international investment position is the result of the cumulation through time of the capital and financial account, with the sign reversed.
- Therefore, the cumulation through time of the current account is equivalent to the net international investment position.

However, because of valuation and other changes that are reflected in the position but not in the transactions, there is not a one-to-one relationship between the cumulated current account deficits and the net international investment position.

4. It should be noted that transactions in non-produced non-financial assets should affect the positions. However, the international standards omit to show the relationship between capital transactions in such assets and the position. In the Canadian series, the transactions in such intangible assets so far have not been significant enough to warrant their classification in position. It is proposed here that the asset and liability resulting from transactions in intangible assets be shown under other investment. See Chapter 19, "Implementation of International Standards."

15.5.2 Relationship to the balance sheet accounts

In the Canadian System of National Accounts, a national balance sheet is derived for all three sectors of the economy: persons and unincorporated business; the corporate sector; and the government sector. The dealings of these three sectors with non-residents are shown as a fourth sector, the 'rest of the world.' While the rest of the world accounts largely correspond to the international investment position accounts, these two sets of accounts differ in two ways: first, the accounts for rest of the world are presented from the non-resident viewpoint, whereas in the international investment position they are presented from a resident viewpoint; second, in the rest of the world accounts, the financial assets and liabilities are presented on a instrument basis and not on a functional basis, as is the case for the international investment position. There may be small differences in classification because of the rearrangement of data such as the treatment of interest payable on bonds classified under bonds in the international investment position and under other claims in the financial flows. However, these differences cancel out at the level of total assets and total liabilities. Overall, there is a complete concordance in the data between the two statements.

15.6 Interpretation of the international investment position

15.6.1 Accounting interpretation

The international investment position presents data related to the country's external financial condition as of a specific time, based on accounting concepts and conventions. It is Canada's balance sheet vis-à-vis non-residents. Assets represent expected future economic benefits from abroad to which the country holds the right and which have been acquired through a current or past transaction with non-residents. In the *System of National Accounts 1993*, assets are defined as

> entities that must be owned by some unit, or units, and from which economic benefits are derived by their owner(s) by holding or using them over a period of time.[5]

5. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*, (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Commission of the European Communities, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 1.26, 5.

In addition, assets represent

> a certain quantum of abstract economic value which is potentially usable to acquire goods and services.[6]

Liabilities are Canada's obligations to convey assets or perform services to non-residents. They represent the amounts owed to foreign creditors or belonging to foreign equity holders.

15.6.2 Analytical interpretation

The data on the international position reveal the extent to which Canada has, over the years, been both a supplier (external assets) and a receiver (external liabilities) with the rest of the world of financial resources. The difference between the external assets and liabilities provides a measure of the net position that is equivalent to that portion of the Canadian economy attributable to the rest of the world. Canada has been historically and continues to be in a net liability position.

6. *Ibid*., paragraph 2.24, 20.

CHAPTER 16
DIRECT INVESTMENT POSITION

16.1 Concepts

16.1.1 Description

Direct investment (asset and liability) allows an investor to have a significant voice in the management of an enterprise operating outside his or her own economy.

For operational purposes in Canada, if an enterprise owns at least 10% of the voting equity in a foreign enterprise, a direct investment relationship is deemed to exist between these two enterprises. The voting equity interest is determined by analysing the whole relationship among enterprises, both domestically and abroad. An enterprise may hold less than 10% interest directly but still have a 10% voting equity interest direct investment relationship through ownership of another enterprise (indirect ownership). Once the direct investment relationship is established among several enterprises, using both direct and indirect ownership, the direct investment itself is measured by the investment between two transactors only. If a Canadian company has a voting ownership interest of at least 10% in a U.S. company, it is is referred to as the direct investor and the U.S. company is referred to as the direct investee. It may be that the U.S. direct investee also has claims on the Canadian direct investor, but these claims should be lower than those of the Canadian company.[1] These liabilities of the Canadian direct investor will be netted against its claims on the U.S. direct investee when presenting the direct investment position. This presentation is referred to as a directional measure of direct investment.

A direct investor can also be the recipient of foreign investment from another foreign company, and if that investment represents 10% or more of the voting equity of the direct investor, the direct investor will be a direct investee of that company. It is important to stress that the notions of direct investor and direct investee are not mutually exclusive. A company can be both a direct investor in a foreign company and a direct investee of another foreign company.

In the Canadian statistics, direct investment is measured as the total value of equity, net long-term claims and, from 1983 onwards, the net short-term claims of non-bank enterprises held by the enterprise across the border.

16.1.2 Valuation

Direct investment position series are valued from the books of the enterprises in which the direct investment is made. This means that Canadian direct investment abroad is measured from the books of the foreign enterprises and not from the books of the resident enterprises having a direct investment abroad. Similarly, foreign direct investment in Canada is measured from the books of the resident enterprises recipient of the direct investment and not from the books of the foreign enterprises.

Differences between book values of direct investments from one period to another arise from the following:

- recording of the transactions at market value in the financial account (but valuation at book value for positions purposes);
- exchange rate fluctuations;
- corporate reorganizations;
- the migration of principal owners; and
- shifts to direct investment, when non-residents increase their ownership to 10% or more of voting interest (or the reverse, when they decrease their ownership to less than 10%).

16.1.3 Distinction between direct investment and control

The notion of direct investment needs to be distinguished from that of foreign control. The International Monetary Fund international standards

1. The international standards indicate that if the mutual holding by two entities is higher than 10%, the direct investment relationship should no longer be treated on a net basis but on a gross basis, that is, both entities would be treated as direct investors in each other. This gross treatment contravenes the directional principle of direct investment and may create serious discontinuities in the series when the equity becomes gradually higher than 10%. The treatment is under review for the Canadian statistics.

focus on direct investment, referring only in a vague manner to control.

> The concept of direct investment… is broader than the SNA concept of foreign-controlled, as distinguished from domestically controlled, resident enterprises.[2]

However, the reverse is true for the *System of National Accounts, 1993*, where the focus is on control.

> The System's concept of foreign-controlled resident is linked to the balance of payments concept of direct foreign investment enterprises in that the former is a component of the latter… While the primary distinguishing feature of direct investment in the balance of payments is significant influence or effective voice in the management, the feature for foreign-controlled enterprises in the System is control.[3]

> Control is defined as the ability to determine general corporate policy by appointing appropriate directors, if necessary. Owning more than half the shares of a corporation is evidently a sufficient, but not a necessary, condition for control. Nevertheless, because it may be difficult to identify those corporations in which control is exercised by a minority of shareholders, it is recommended that, in practice, corporations subject to public or foreign control should normally be confined to those in which governments or non-residents own a majority of the shares. This recommendation is intended only as a practical guideline, however, to which exceptions can be admitted if there is other evidence of control.[4]

Both direct investment and controlling interests result from ownership in an enterprise. However, direct investment reflects a significant influence in the other enterprise and does not need to be as intense as controlling investment, which entails a "continuing power to determine its strategic operating, investing and financing policies without the co-operation of others in a controlling interest."[5]

To determine direct investment or controlling interest, it is necessary to take into account the full intercorporate structure of enterprises, that is, the ownership relationship that exists among the different entities of an enterprise. This means conceptually viewing all business enterprises and going beyond the Canadian border to take into account the full gamut of foreign and domestic ownership of enterprises.

The first step is to distinguish the simple entities from the complex ones (that is, business entities owned by other business entities) (Box A in figure 16.1). The simple enterprises would generally operate in one economy and are not likely to be involved in cross-border investment.

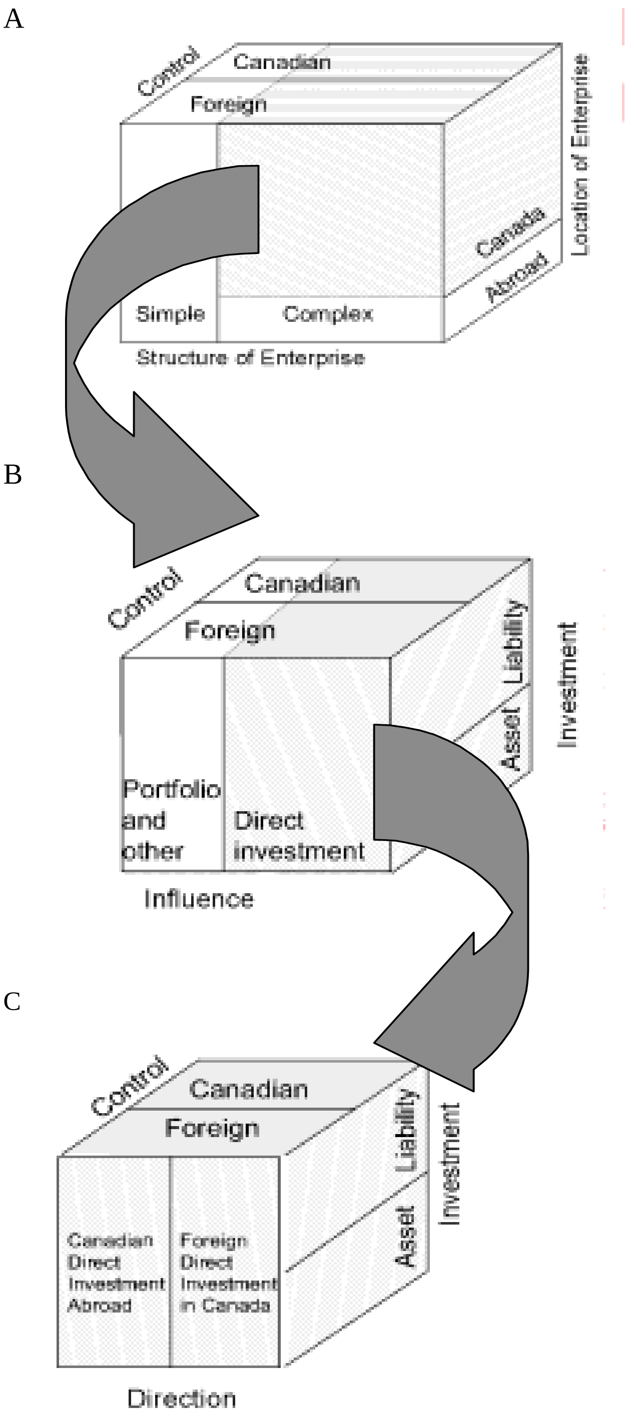
The next step is to focus on complex enterprises in Canada and abroad (Box B); the entities (investors) that own other entities (investees) across the border can be split between those not having a significant influence (portfolio and other investment) and those having a significant influence (direct investment), using the 10% or more threshold to establish a direct investment relationship which can also be a controlling interest if there is 50% or more ownership. The foreign ownership of 10% or more does not need to be by a single investor. For instance, a Canadian entity could be owned 5% each by two foreign entities; if they were related, this would effectively result in a 10% equity interest by a foreign direct enterprise investor in the Canadian entity.

The third step consists in focusing on entities with direct investment (Box C) and distinguishing them on the basis of the direction of their investment. They will be classified under Canadian direct investment abroad if the Canadian entity has at higher equity investment in the foreign entity than the foreign entity has in the Canadian entity; if the reverse is true, they will be classified as foreign direct investment in Canada. Once the direction of the investment is established, any other financial transactions between

2. See International Monetary Fund, *Balance of Payments Manual*, (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 360, 86.
3. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*, (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Commission of the European Communities, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993), paragraph 14.154, 341.
4. *Ibid.*, paragraph 4.30, 91.
5. The Canadian Institute of Chartered Accountants, *CICA Handbook*, (277 Wellington Street West, Toronto ON M5V 3H2, December 1997), 1590.06.

the Canadian direct investor and its direct investee will be shown on a net basis under Canadian direct investment abroad; and any financial transactions between the Canadian direct investee and its foreign investors will show under foreign direct investment in Canada. This netting procedure is referred to as a directional recording of direct investment.

Figure 16.1: Intercorporate structure of enterprises



A company can be both a direct investee and a direct investor. For instance, a number of Canadian subsidiaries of foreign companies (foreign direct investment), conduct direct investment in foreign subsidiaries (Canadian direct investment abroad).

This is to be contrasted with the notion of control. As for direct investment, the investment in equity is used as the basis to establish control of the entity. But unlike direct investment where an entity can be both a direct investor and a direct investee, an entity is either Canadian or foreign controlled but cannot be both. When a company is domestically controlled, this pre-empts it from being under foreign control, and vice versa. This arises from the fact that control represents generally an equity interest of more than 50%; by definition, this excludes the remaining minority interest from having the control. Control can exist with less than a 50% equity interest if, for example, the remaining equity is widely spread.

Most Canadian direct investors abroad are under Canadian control and most foreign direct investees in Canada are under foreign control. This is why foreign direct investment is often confused with foreign control. It should be noted that direct investment refers to the *investment* between two related entities (transactors), one a Canadian resident and the other foreign resident. Control, on the other hand, characterizes the *transactors* themselves, that is, the enterprises.

Data on the control of Canadian enterprises are published at Statistics Canada by the Industrial Organization and Finance Division under the former *Corporations and Labour Unions Returns Act* (CALURA), which was passed in April 1962 with several amendments in subsequent years. The name was changed to the *Corporations Returns Act* effective January 1999 and all reports beginning with February/March 2000 will be issued under the authority of the *Corporations Returns Act*.

The CALURA reports are published annually and focus primarily on corporate financial statistics presented according to country of control, with the purpose of measuring the extent and effects of foreign control on the Canadian economy. The reports are based on share ownership information collected from corporations under the act, and financial information obtained

> under both the CALURA and *Income Tax Act*. Share ownership information is utilized to classify Canadian corporations by country of residence of the controlling interest in the reporting corporation.
>
> The share ownership information is used to meet the growing need for information on who owns and/or controls whom in Canada. An intercorporate ownership register is produced from non-confidential returns filed by Canadian corporations under CALURA.
>
> To provide a framework for examining intercorporate ownership, relationships between corporations have been classified and presented according to their importance. The relationship presented is that involving the ownership or holding of the voting rights of a corporation by another corporate body or group of related individuals. The principal feature of this publication is that ownership relationships between corporations under common control are shown together. This forms what is termed the 'enterprise.' Numerous non-control relationships for related corporations are also shown.[6]

The notion of control is particularly relevant in trade negotiations, which were previously limited to goods but have been extended in recent years to services and investment. As such, they cover not only cross-border trade but also services sold from foreign subsidiaries of domestically controlled enterprises. This is an application where the distinction between control and direct investment can become useful. For more detail on foreign subsidiaries statistics, please refer to Chapter 23, "Looking Ahead."

16.1.4 Distinction between company and enterprise

In Canada, the statistical results for direct investment are derived from the statistical Canadian enterprise, that is, the Canadian company and all its fully consolidated Canadian associates, subsidiaries and branches.

> Each enterprise is classified according to its country or area of control… (Since complete knowledge of the share owners may not be available, the classification of borderline cases involves a measure of judgement based upon all the known factors which could be relevant.) The enterprise includes all the corporations over which the group itself is in a position to exercise control. The concept which has been adopted is, therefore, one of potential control through stock ownership, and the degree, if any, of local autonomy permitted in practice by the owners is not relevant.[7]

For Canadian balance of payments purposes, the questionnaires require that a Canadian parent company report its activities as well as those of its Canadian-related parties by providing a consolidated financial statement for its booked-in-Canada operations. The questionnaires are sent to corporations. Reporting results are enterprise-based because corporations are requested to consolidate, when applicable, the operations of their Canadian-related entities. In other words, while the survey coverage is of corporations, the data reported are those of the Canadian enterprises, that is, the operations of the surveyed corporations and of their Canadian-related parties. This reporting requirement may create duplication when a Canadian corporation and another Canadian corporation consolidated as part of the first corporation are both surveyed as is the case when they operate in different industries. For such cases, an automated 'adjust enterprise' procedure in the system CASTS is applied to eliminate the duplication (see section 16.3).

16.1.5 Distinction between direct investment and other investment

There are a number of borderline cases between direct investment and other investment. A case is real estate investment held by other than corporations, such as by

6. John D. Randall, "A Guide to Statistics on Foreign Ownership Statistics and Control in Canada" (special reprint from *The Canadian Statistical Review*, April 1981), viii and ix.

7. Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods*, (published under the authority of the Minister of Supply and Services Catalogue no. 67-506E, March 1981), 106.

the personal sector;[8] this type of investment is classified in other investment (Chapter 18, “Other Investment Position”) in Canadian statistics and not as direct investment, as called for by international standards.

A further exception to the application of the international standards is made in respect of companies established for the purpose of making portfolio investment in Canada.

> These have not been treated as foreign controlled regardless of their ownership, since they do not in fact give rise to any measure of ‘management’ or ‘control’ over Canadian industry. Thus mutual or closed-end investment funds established in Canada by U.S. interests have been classified portfolio rather than direct investment, despite the fact that the management and practically all the capital involved were of U.S. origin, because the funds’ investments were widely diversified and had no entrepreneurial association.[9]
>
> There are, of course, concerns wholly or substantially owned beneficially by Canadians, whose operations may in fact be controlled by foreigners through processes other than investment, e.g. licensing, franchises, exclusive supply contracts, captive markets, etc., but these are not included in statistics of foreign direct investment.[10]

16.2 Data sources[11]

16.2.1 Surveys

Seven questionnaires targetting various aspects of claims are used to compile direct investment data. Questionnaires are annual quasi census, except for two quarterly sample questionnaires, Transactions Between Canada and Other Countries—BP-21A andInvestment in Canada by Non-Canadian Corporations—BP-22A.

Three annual questionnaires request information on long-term positions:

- Capital Invested Abroad by Canadian Enterprises—BP-59;
- Capital Invested in Secondary Foreign Companies by Canadian Enterprises—BP-59S; and
- Geographical Distribution of Capital—BP-52.

Two deal with long-term flows and short-term positions:

- Transactions Between Canada and Other Countries—BP-21 (incorporated reporting entities); and
- Investment in Canada by Non-Canadian Corporations—BP-22 (branches).

One annual questionnaire, Structure of Canadian Companies in the Reporting Enterprise—BP-53, requests information on the consolidation used by the reporting entities when reporting the operations of their Canadian subsidiaries and other related Canadian entities.

16.2.1.1 Canadian direct investment abroad

The questionnaire Capital Invested Abroad by Canadian Enterprises—BP-59 is sent to Canadian entities having direct investment abroad. It requests information on their foreign subsidiaries, associates (including joint ventures), branches and miscellaneous investment, as well as non-capitalized expenditures abroad (for the companies involved in mining and oil exploration). The questionnaire asks for accounting information for each related foreign entity as recorded in the books of the foreign entity as well the value of the investment as recorded in the book of the Canadian reporting entity (referred to as carrying value).

A supplementary questionnaire, Capital Invested in Secondary Foreign Companies by Canadian Enterprises—BP-59S, is sent to Canadian reporting entities which are surveyed on the Capital Invested Abroad by Canadian Enterprises—BP-59 and whose foreign subsidiaries (referred to as primary investment) have themselves invested in other

8. Teresa Omiecinski, *Non-corporate Foreign Investment in Canadian Real Estate*, (Research Paper No. 1, Balance of Payments Division (67F0001MIB97001) http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1983).

9. Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods*, (published under the authority of the Minister of Supply and Services Catalogue no. 67-506E, March 1981), 106.

10. *Ibid*.

11. The remaining text of the chapter is largely drawn from Christian Lajule, “*Collecting and Reporting FDI in the Canadian Balance of Payments*,” (lecture presented in Istanbul, Turkey, at the OECD Conference on Direct Investment, Statistics Canada, Ottawa, December 1997).

countries (referred to as secondary foreign subsidiaries and affiliates). The format of the questionnaire is very similar to that of Capital Invested Abroad by Canadian Enterprises—BP-59. The results of this questionnaire are used to attribute the investments to the ultimate countries of destination and to record them according to the book value of the ultimate entities. This supplementary information is especially important when the first foreign investment is carried by foreign holding companies.

16.2.1.2 Foreign direct investment in Canada

The questionnaire Geographical Distribution of Capital—BP-52 sent to Canadian entities with foreign direct investment is made up of two major parts: long-term liability and equity. To supplement the information obtained from the questionnaire, the Balance of Payments Division also accesses the Inter-Corporate Ownership (ICO) catalogue of CALURA, compiled by Industrial Organization and Finance Division and noted in section 16.1.3. This catalogue is an index of who owns and/or controls whom in Canada by presenting detailed information on the corporate structure of Canadian businesses. This catalogue not only provides the ultimate country of control of Canadian companies but also presents the countries of residence, the industrial sector and the percentage of voting rights held by various levels of intercorporation ownership. Each company structure can thus be tracked to the ultimate foreign parent. As noted before, the data are primarily derived from non-confidential returns filed by Canadian corporations under the *Corporation Returns Act*.

16.2.1.3 Consolidating structure of the reporting entity

Canadian entities that own other Canadian enterprises are sent the annual questionnaire Structure of Canadian Companies in the Reporting Enterprise—BP-53 to determine their reporting structure, that is, to identify how they consolidate their Canadian subsidiaries and associates (if any) for survey reporting purposes. If they declare a complex reporting structure, they continue to be surveyed on the Structure of Canadian Companies in the Reporting Enterprise—BP-53 on an annual basis; otherwise, they are no longer surveyed on that questionnaire. There are two parts to the questionnaire. Part I requests the names of Canadian subsidiaries for whom data are presented on a consolidated booked-in-Canada basis on related questionnaires, the percentage of equity ownership in that subsidiary, and its industry of operations. Part II requests the names of Canadian entities that are not fully consolidated, the percentage of equity ownership and the dollar value it represents. The percentage ownership information is used to eliminate duplicate reporting between the parent Canadian company and its Canadian-related parties, to the extent that the latter may also be surveyed if they operate in different industries.

16.2.2 Other sources

A number of administrative sources are used to complement the survey results. The monthly list of Canadian companies with non-resident investments of Investment Canada, a branch of Industry Canada, is used to update the survey mailing list.

Supplementary administrative sources provided by financial institutions to the Bank of Canada and the Office of the Superintendent of Financial Institutions are also used, especially to derive foreign direct investment in Canadian banks.

The Canada Customs and Revenue Agency form T-106, filed by Canadian companies on their non-arm's length transactions with non-resident entities, includes dividends, interest and intercompany claims and liabilities and is used to validate survey results and update the list of potential reporting entities.

As indicated in Chapter 12, "Direct Investment Flows," financial information published in the financial press (*Globe and Mail, National Post, Les Affaires* and so on) is systematically analysed and processed against quarterly survey results through a computerized system (dubbed SERIE) developed in the Balance of Payments Division. This system is used both to supplement quarterly flows data on direct investment reported on the quarterly sample questionnaire Transactions Between Canada and Other Countries—BP-21A, and to detect longer-term developments that could have an impact on direct investment data. The importance of the financial press is evidenced by the fact that this source accounted for more than 60% of the first estimate of net inflow of foreign direct investment in Canada for the preliminary estimates of direct investment; for Canadian direct investment abroad, the proportion is almost 50%.

16.3 Methods

A system dubbed CASTS processes the survey results from the seven questionnaires listed above as well as other sources. The system includes all the information on the intercorporate reporting structure of the enterprise (Structure of Canadian Companies in the Reporting Enterprise—BP-53). Procedures ranging from data capture through to validation of data and derivation of flows of capital and year-end positions are applied. Once the data for the year-end positions have been tabulated, two major procedures are executed.

The most elaborate one is 'adjust enterprise,' a program to eliminate duplicate reporting between Canadian holding companies and their Canadian-related parties, as reported by the different questionnaires on foreign direct investment, and to allocate the ownership of assets and liabilities based on the foreign ownership of the Canadian holding companies. The system tracks the ownership structure of the corporations in the enterprise with a view to eliminating duplication resulting from the consolidation of some reporting units by the Canadian holding company. These deductions are done from the book of the Canadian holding company and applied to its shareholders' equity. This adjusting exercise can become quite complex as the most important enterprise includes close to 200 Canadian-related corporations.

The other procedure is the 'carry forward' which uses flows as compiled in IISIS (please refer to Chapter 12, "Direct Investment Flows") to project the next-year positions taking into account the foreign ownership portion, the current year's transactions to convert from market valuation to book valuation, growth factors and exchange rates of the current year.

It should be noted that direct investment in foreign insurance entities excludes the part of reserves that belong to foreign insurees as is the case for mutual insurance entities.

16.4 Products

16.4.1 Data accuracy

A major challenge for data quality consists in maintaining acceptable coverage. Although major efforts are made, it sometimes happens that an enterprise that newly conducts direct investment may not be captured.

16.4.1.1 Canadian direct investment abroad

The data on Canadian direct investment abroad are believed to be reliable. The data are obtained from an annual quasi census survey whose coverage is updated from current information on market developments and validated against administrative data. The coverage is believed to be reasonably complete. Because of its nature, the bulk of direct investment is believed to be concentrated among a relatively small number of enterprises. The survey results confirm this with the 100 largest companies (5% of the coverage) accounting for 80% of the total value of direct investment. For non-responses, the data of the previous year are carried forward in the following year taking into account exchange rates. The series are measured from the books of the ultimate foreign subsidiaries and associates and, as such, do not compare readily with financial flows, which are obtained from the books of the Canadian investor company and which are generally at market value. The data for the most current year are projected and, as such, can be subject to major revisions.

16.4.1.2 Foreign direct investment in Canada

The data on foreign direct investment are believed to be reliable. Again, the most recent year is projected on the basis of financial flows obtained from a quarterly sample survey and information on market developments (which include corporate reorganizations, exchange rates and other factors). These estimates are also subject to revision when the results of the quasi census survey become available.

16.4.2 Data accessibility

In the quarterly publication *Canada's International Investment Position* and in CANSIM, data on direct investment positions are shown by major geographical regions (United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries).

Detailed country and industry breakdowns are also available on a cost recovery basis (see Chapter 22, "Products").

CHAPTER 17

PORTFOLIO INVESTMENT POSITION

17.1 Concepts

17.1.1 Description

Portfolio investment is a rather passive form of investment conducted to maximize expected value of the portfolio (in the form of income and/or the value of the investment) by diversifying across national borders. This investment is comprised of instruments that can usually be traded in secondary markets. Cross-border portfolio investment has increased sharply in recent years because of advances in technology and deregulation that led to a greater choice of financial instruments (for example, securitization of previously non-marketable assets and derivative instruments) and better means of valuing financial instruments—a very crucial element for trading.

Portfolio investment consists of investment in stocks and bonds (both Canadian and foreign) and in Canadian money market instruments.[1] However, departing from international standards, portfolio investment excludes investment in foreign money market instruments, which is indistinguishably included in other investment, since the Canadian statistics cannot currently split foreign money market instruments from foreign bank deposit liabilities.

Changes in stock levels arise from financial flows, exchange rate fluctuations, write-up or write-downs of investment and classification changes. Investments are reclassified between portfolio and direct investment as ownership shares cross the 10% threshold discussed in Chapter 16, "Direct Investment Position."

17.1.2 Valuation

To the extent possible, the securities are valued at the book value of the companies that issue the instruments. Investment in stocks is valued on the basis of the shareholder's equity of the company that issued the stocks. The book value of bond and money market instruments is defined as the price at which the security was originally issued plus interest accruals.

1. These instruments are defined in Chapter 13, "Portfolio Investment Flows."

The valuation at book value is a departure from the international standards, which call for market valuation. However, market valuation of most portfolio investment (Canadian bonds and foreign securities) is provided as supplementary information in the Canadian statistics. But it is not used in the official series in order to maintain uniformity among accounts of the international investment position because other accounts of the statement, notably direct investment, are currently available only on a book value basis (for more details on valuation, see Chapter 23, "Looking Ahead").

17.2 Data sources

Asset positions on foreign securities are compiled from the results of an annual position survey on Canadian holdings of portfolio securities, beginning with the year-end 1997. Previously, the positions were compiled from cumulating flows. The results of the new survey have been integrated for the first time in the 1998 edition of *Canada's International Investment Position.*

Liability positions on Canadian securities are largely derived from the cumulation of transactions adjusted by information in positions. For new issues on Canadian securities, the source is administrative data from the Bank of Canada and a number of public sources, supplemented by survey results of major issuers:

- Geographical Distribution of Capital—BP-52;
- Particulars of Selected Issues of Funded Debt and Foreign Bank Borrowing—BP-55; and
- Geographical Distribution of Selected Long-term Debt Booked in Canada at Canadian Banks and Consolidated Canadian Subsidiaries—BP-56.

Trading in outstanding Canadian securities is obtained from surveys of financial intermediaries:

- Canada's International Transactions in Securities—BP-30;
- Sales of Short-term Securities to Non-residents of Canada—BP-30A; and

- Purchases of Short-term Securities from Non-residents of Canada—BP-30B.

The investment in Canadian securities by Canadian banks is obtained from Geographical Distribution of Assets and Liabilities of Chartered Banks Return (GDAL), submitted by Canadian banks to the Bank of Canada.

17.3 Methods

17.3.1 Canadian portfolio investment abroad

The annual survey that began with the reference year-end 1997 was implemented as part of an international effort to improve data on external portfolio investment. Over 30 countries undertook a portfolio survey for the reference year 1997, which was co-ordinated by the International Monetary Fund.[2] The purpose of co-ordinating the survey at the international level was to

> improve the statistics on cross-border holdings of securities, as well as provide a check on the coverage of portfolio investment financial flows and associated investment income data; and exchange data among participating countries (respecting confidentiality constraints) to improve countries' estimates of their external porfolio investment liabilities, as well as associated financial flows and investment income data.[3]

The Canadian survey is conducted by the Balance of Payments Division of Statistics Canada. It measures portfolio holdings of Canadian financial institutions by security on an annual basis. Most respondents file electronically. As the respondents maintain both their Canadian and foreign securities on the same accounting support, they file for all of their portfolio holdings. This is especially useful where the investment is in Canadian pooled funds (considered Canadian securities) with some or all the proceeds ultimately invested abroad (foreign securities). The survey coverage represents a mixture of end-investors and other institutions, such as fund managers, who report on behalf of end-investors.

Although implementation of a detailed Canadian security survey was very resource-intensive in the initial stage, security-by-security electronic reporting has a number of advantages:

- audit of results in an iterative manner (using characteristics reported by some respondents to supplement those omitted by other respondents);
- speed in compiling results as evidenced by preliminary results available four months after the reference period;
- potential to reconcile with financial flows of the balance of payments, which are also collected on a security-by-security basis, but largely from brokers on behalf of end-investors; and
- potential to calculate income, identify valuation changes and derive market value.

17.3.2 Foreign portfolio investment in Canadian bonds and money market

The procedures to process portfolio Canadian bonds and money market instruments are described in detail in Chapter 13, “Portfolio Investment Flows.” Because of its major impact on the accounts of international investment position, notably on the value outstanding of Canadian bonds held by non-residents, the exchange rate valuation is described here in detail.[4]

17.3.3 Exchange rate valuation in Canadian bonds

Canadian bonds (Canada's liability) issued in foreign currencies are revalued at year-end to reflect the closing rate of exchange of the period. The complex computerized system BP-2000, described in Chapter 13, “Portfolio Investment Flows” (section 13.3.1.1), is also used to calculate, on a bond-by-bond basis, the impact of exchange rate fluctuations on the value of Canada's liabilities.

The exchange rate valuation on Canadian bonds is calculated on a monthly basis for each bond and then can be aggregated to quarterly or annual values. The calculation must deal with three situations: bonds held by non-residents throughout the period (position outstanding); bonds acquired from non-resident (new

2. International Monetary Fund, *Coordinated Portfolio Investment Survey, Survey Guide*, (IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, August 1996).
3. International Monetary Fund, *IMF Committee on Balance of Payments Statistics, Annual Report 1998*, (IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, April 1999), 8.
4. Christian Lajule, “Exchange Rate Valuation on Canadian Bonds,” unpublished document, Statistics Canada, Ottawa, September 1999.

issues and sales) during the period; and bonds purchased from non-residents (retirements and purchases) during the period. In the absence of precise information on the exchange rate for transactions during the period, it is assumed that these transactions take place at the average noon rate for the month. For transactions in the month, the exchange rate effect is based on the difference between the average noon rate and the closing rate of the period (sales) or the closing rate of the previous period (purchases). The formula used for this calculation is as follows:

$$[[Tx_{t} - Tx_{t-1}]/Tx_{t-1}] *Tx_{t-1}*V_{i} = ExV_{i,t}$$

or

$$[Tx_{t} - Tx_{t-1}]*V_{i} = ExV_{i,t}$$

where

Tx_{t}: closing rate of exchange at the end of the period ($Tx_{c,t}$) or average noon rate ($Tx_{n,t}$) for purchases during the month

Tx_{t-1}: closing rate of exchange at the end of the previous period ($Tx_{c,t-1}$) or average noon rate ($Tx_{n,t}$) for sales during the month

V_{i}: value in Canadian currency of bond i in foreign currency

$ExV_{i,t}$: value of the exchange rate effect for bond i for the period t

Summing values of $ExV_{i,t}$ across bonds and time periods gives aggregate exchange rate effects.

The following numerical examples illustrate the procedure. For this example the closing exchange rate for the period t–1 is 1.26, the closing exchange rate for the period t is 1.32 and the average noon rate for the period t is 1.30. The three bonds in the example are a US$100.00 bond held throughout the period, a US$25.00 bond sold during the period and a US$18.00 bond purchased during the period.

A) Exchange rate effect for the US$100.00 bond not transacted during the period:

$Tx_{c,t}$: 1.32

$Tx_{c,t-1}$: 1.26

V_{i} : US$100.00

[1.32 – 1.26]* US$100.00 = CAN$6.00

$ExV_{a,t}$: CAN$6.00

B) Exchange rate effect for the US$25.00 bond sold during the period:

$Tx_{c,t}$: 1.32

$Tx_{n,t}$: 1.30

V_{i}: US$25.00

[1.32 – 1.30]* US$25.00 = CAN$0.50

$ExV_{b,t}$: CAN$0.50

C) Exchange rate effect for the US$18.00 bond purchased during the period:

$Tx_{n,t}$: 1.30

$Tx_{c,t-1}$: 1.26

V_{i}: US$18.00

[1.30 – 1.26]* US$18.00 = CAN$0.72

$ExV_{c,t}$: CAN$0.72

Total exchange rate effect: ExV_{t} = $6.00 + $0.50+ $0.72= CAN$7.22

It should be noted that the total exchange rate effect could in principle also be derived residually. This procedure consists in taking the difference between the opening and closing positions at closing rates of the outstanding value of foreign currency bonds and by deducting from that value the transactions (sales and purchases) that took place during the period.

In the preceding example, the exchange rate calculation could be derived the following way:

$$Tx_{c,\,t} \times \sum_{i=1}^{n} V_{i,\,t} - Tx_{c,\,t-1} \times \sum_{i=1}^{m} V_{i,\,t-1} - \left(Tx_{n,\,t} \times \sum_{s=1}^{h} V_{s,\,t} - Tx_{n,\,t} \times \sum_{p=1}^{k} V_{p,\,t} \right) = ExV_t$$

Where:

$Tx_{c,t}$: closing rate of exchange at the end of the period t

$Tx_{c,t-1}$: closing rate of exchange at the end of period t–1

$Tx_{n,t}$: average noon rate during the period t

$V_{i,t}$: value of bond i in foreign currency outstanding at the end of period t

$V_{s,t}$: value of bonds sold in foreign currency during the period

$V_{p,t}$: value of bonds purchased in foreign currency during the period

ExV_t: value in Canadian currency of the exchange rate effect for the period t

The numerical example would be:

$Tx_{c,t}*V_{i,t}$	(US$100.00+ US$25.00) * 1.32 = CAN$165.00
$Tx_{c,t-1}*V_{i,t-1}$	(US$100.00 + US$18.00) * 1.26 = CAN$148.68
$Tx_{nt}*V_{s,t}$	US$25.00 *1.30 = CAN$32.50
$Tx_{nt}*V_{p,t}$	US$18.00 * 1.30 = CAN$23.40
ExV_t =	$165.00- $148.68- $32.50+ $23.40 = $7.22

While, in theory, the results are the same for the two procedures, the sources of data on flows and positions are different and not always completely in harmony. Differences in the valuation of bonds between flows and positions can also cause a discrepancy. However, the advantage of the direct measure is the ability to isolate, in practice, the exact portion of exchange rate effect in analysing the differences between flows and position, and to concentrate on explaining the residual discrepancy. The direct measure also gives the ability to easily analyse the exchange rate effects by type of instrument or by institutional sectors. For example, one can easily examine the exchange rate impacts on the debts of federal as compared with provincial governments. The change due to exchange rate fluctuations is published annually as supplementary information to Canada’s international position. The exchange rate effect can be calculated monthly, quarterly or annually.

17.3.4 Foreign investment in Canadian equities

The Canadian equities data are updated on a yearly basis, with financial flows reported on monthly surveys of Canadian investment dealers and large Canadian investors. These positions are in turn complemented by data obtained from the positions survey Geographical Distribution of Capital—BP-52.

17.4 Products

17.4.1 Data accuracy

With the implementation in 1997 of the Canadian survey of portfolio investment, the estimates of Canadian holdings of foreign securities are now felt to be most reliable. However, the survey coverage does not include Canadian individuals investing directly in foreign markets. The difficulties of capturing investment by individuals is common to all countries but is not perceived for the time being to result in significant undercoverage in Canadian statistics. This may rapidly change, however, with the increasing ease of online investing (for more details, see Chapter 23, “Looking Ahead”).

The data on foreign holdings of Canadian securities are most reliable, except for the geographical allocation of foreign portfolio holders. The geographical breakdown does not always reflect the country of beneficial owner, as the latter may use custodians in other countries. It is expected, however, that the survey results from other countries will help in improving the geographical allocation.

17.4.2 Data accessibility

The data on portfolio positions at year-ends are published in *Canada's International Investment Position* and in CANSIM. They are presented for bonds and stocks (both Canadian and foreign), as well as for Canadian money market instruments, in total and for the six geographical areas: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. In addition, a sectoral distribution is provided for Canadian bonds and Canadian money market instruments. For Canadian bonds, the contributors to net change in book value and market values by sector are also provided.

Canada's International Transactions in Securities (monthly) provides the sectoral breakdown in portfolio positions for Canadian bonds and Canadian money market instruments as well as a geographical distribution in six groupings for the total of Canadian bonds and the total of Canadian money market instruments at quarter-ends and year-ends.

Detailed country, industry, currency and terms to maturity aggregations are also available on a cost-recovery basis.

CHAPTER 18
OTHER INVESTMENT POSITION

18.1 Concepts

Other investment position is a residual heterogeneous account that includes all investment other than direct and portfolio investment. It covers loan assets and liabilities, deposit assets and liabilities, official reserve assets and other assets and liabilities.[1]

18.1.1 Loan assets and loan liabilities

Loan assets include Government of Canada loans extended directly to foreign countries and to international organizations. These loans are made, in part, by the issuance of non-interest-bearing, non-negotiable demand notes, which are recorded as other liabilities. The following are also included in this account:

- export loans by agencies of the Government of Canada, such as the Export Development Corporation and the Canadian Wheat Board;
- loans of banks and other businesses; and
- loans made under repurchase agreements involving securities as collateral.

Excluded are loans and subscriptions to the International Monetary Fund (IMF), classified in official international reserves, and subscriptions to international agencies, classified as other assets.

An offsetting entry in assets is recorded to account for allowances related to

- concessional loans to developing countries that are part of Canada’s international development assistance program;
- Canada’s net position vis-à-vis subscriptions to the capital of, and loans to, international financial institutions; and
- potential debt or debt service relief measures for financially troubled countries under multilateral agreements.

Also included are some of the provisions set up by Canadian chartered banks on their foreign loans.

1.These terms are defined in Chapter 14, “Other Investment Flows.”

Loan liabilities comprise corporate, government and government enterprises borrowing from foreign banks, including syndicate bank facilities, mortgage loans and other loans, such as loans made under repurchase agreements (repos) involving securities as collateral.

18.1.2 Deposit assets and deposit liabilities

Deposit assets comprise deposits abroad of Canadian banks, including gold and silver and short-term interbank claims, and deposit assets of Canadian depositors other than banks. Deposit liabilities comprise foreign deposits at Canadian banks (including gold and silver and short-term inter-bank liabilities) and exclude bank debentures and the share capital of banks held by non-residents. (Debentures are recorded under portfolio Canadian bonds, the share capital of Schedule I banks under portfolio Canadian stocks and the share capital of Schedule II banks under foreign direct investment in Canada). There are also liabilities of trust companies and of the Bank of Canada.

18.1.3 Official international reserves

Official international reserves cover official holdings of foreign exchange and other reserve assets of the Exchange Fund Account, the Minister of Finance (including the position with the IMF), the Receiver General for Canada and the Bank of Canada. Reserve assets comprise monetary gold, special drawing rights (SDRs), reserve position with the IMF, foreign exchange assets (consisting of currency and deposits and securities) and other claims. The following describes monetary gold, SDRs and reserve position in the IMF.

Gold is defined as monetary gold only because it is held by monetary authorities:

> Authorities that add to their holdings of monetary gold by acquiring commodity gold (that is, newly mined gold or existing gold offered on the private market) or that released monetary gold from their holdings for non-monetary purposes (that is, for sale to private

holders or users) have monetized or demonetized the gold, respectively. Any increase/decrease in monetary gold holdings that results from monetization/ demonetization is treated as a reclassification of gold; such an increase/decrease is not shown in the balance of payments but is reflected in the international investment position. If the gold being monetized/ demonetized is acquired from/sold to a non-resident, that transaction should be recorded as an import/export under goods in the current account and, in the financial account, as a credit/debit under the financial item that was used/received to finance that import/export.[2]

SDRs are international reserve assets created by the International Monetary Fund to supplement other reserve assets that periodically have been allocated to IMF members in proportion to their respective quotas. SDRs are not considered liabilities of the Fund, and IMF members to whom SDRs are allocated do not incur actual (unconditional) liabilities to repay SDR allocations. The Fund determines the value of SDRs daily by summing, in U.S. dollars, the value—which are based on market exchange rates—of a weighted basket of currencies. The basket and weights are subject to revision from time to time. SDRs can be used, among other transactions, to acquire other members' currencies (foreign exchange), to settle financial obligations, and to extend loans. Changes in the SDR holdings of monetary authorities can arise through (i) transactions involving SDR payments to or receipts from the Fund, other participants in the SDR Department of the Fund, or other holders or (ii) allocation or cancellation. Transactions such as those enumerated under (i) are included in the balance of payments; allocations/cancellations are not entered in the balance of payments but are reflected in the international investment position.[3]

An IMF member may have, in the Fund's General Resources Account, a position that is recorded under the category for reserve assets. This position is referred to as the member's reserve position in the Fund. The member's reserve position is the sum of the reserve tranche purchases that a member may draw upon and any indebtedness of the Fund (under a loan agreement) that is readily repayable to the member. Reserve tranche purchases are purchases from the Fund of other currencies that do not cause Fund holdings of a member's currency to exceed the member's quota (minus holdings that reflect the member's use of Fund credit). A purchase from the Fund is recorded as an increase in foreign exchange holdings and a decrease in the reserve position in the Fund; a repurchase is recorded as a decrease and an increase, respectively. Purchases in the reserve tranche are not regarded as a use of Fund credit, are not subject to charges, and do not require repurchase. In addition to reserve tranche purchases, members may use Fund resources in connection with compensatory and contingency financing, buffer stock financing, the extended Fund facility, and the credit tranches—including policy on enlarged access—without having those purchases and holdings included in Fund holdings of member currencies for the purpose of defining the reserve tranche. A member's drawing (other than against its reserve tranche position) constitutes the use of Fund credit.[4]

18.1.4 Other assets and other liabilities

Other assets include :

- Canadian non-bank holdings of foreign money market instruments;
- trade receivables and other short-term receivables with unrelated companies and, up to 1983, with related companies of non-bank enterprises (from 1983 onward, short-term inter-company claims of non-bank enterprises are reclassified as direct investment);
- progress payments;
- real estate investment abroad of the personal sector;
- assets held abroad by immigrants;

2. As defined in the International Monetary Fund's *Balance of Payments Manual* (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), monetary gold is generally construed to be at least 995/1000 pure.
3. International Monetary Fund, *Balance of Payments Manual,* Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993, paragraph 440, 99.
4. *Ibid.*, paragraph 441, 100.

- Government of Canada subscriptions to international agencies excluding those to the International Monetary Fund which are classified as official international reserves;
- derivatives; and
- other miscellaneous claims on non-residents.

Other liabilities include :

- Government of Canada demand note liabilities;
- trade payables and other borrowings from unrelated companies and, up to 1983, from related companies of non-bank enterprises (from 1983, short-term intercompany liabilities of non-bank enterprises are reclassified under direct investment);
- foreign real estate investments in Canada;
- mortgage liabilities of the personal sector;
- dividends declared but not paid;
- special drawing rights;
- progress payments;
- liabilities to prospective immigrants;
- value of Canadian securities held in nominee accounts for non-residents; and
- other miscellaneous liabilities.

18.2 Data sources

18.2.1 Loan assets and loan liabilities

On the asset side, loans by the Government of Canada to foreign countries and to international agencies are obtained from administrative data from the Canadian International Development Agency and from the Public Accounts of Canada, for loans by various departments. Loans by government enterprises are obtained from the Export Development Corporation and the Canadian Wheat Board and from the Public Accounts of Crown Corporations. Loans by Canadian banks are obtained from administrative data, the Geographical Distribution of Assets and Liabilities banks return (GDAL), submitted to the Bank of Canada. Loans by corporations, including mortgage loans, are derived from two sample surveys of Canadian enterprises: Transactions Between Canada and Other Countries—BP-21 (annual) and Transactions Between Canada and Other Countries—BP-21A (quarterly). Loans under repurchase agreements and derivatives are compiled from monthly surveys of financial intermediaries (Canada's International Transactions in Securities—BP-30).

Loan liabilities include borrowing by Canadian corporations and government enterprises consisting of foreign bank loans, including foreign syndicated bank borrowing, other loans and mortgage loans. These liabilities are obtained from the annual surveys Geographical Distribution of Capital—BP-52 and Particulars of Selected Issues of Funded Debt and Foreign Bank Borrowing—BP-55. The first estimate is projected from the quarterly sample survey Transactions Between Canada and Other Countries—BP-21A. Repo loans, which involve securities as collateral, are reported by Canadian dealers and brokers. Foreign short-term bank borrowing comes from a combination of foreign banking data and survey data.

18.2.2 Deposit assets and deposit liabilities

Both deposit assets and deposit liabilities with Canadian banks are broken down into four categories: Canadian dollar, foreign currency, gold and silver. They are derived from administrative data submitted by Canadian banks to the Bank of Canada and the questionnaire Gold and Silver Transactions, Assets and Liabilities—BP-11. Deposit assets of Canadian entities other than banks are compiled from foreign banking data obtained from the U.S. Treasury, the Bank of England and the Bank of International Settlements. Foreign deposits, which are from foreign central banks, at the Bank of Canada are derived from administrative data. Foreign deposits of trust companies are derived from the survey Report by Trust and Mortgage Loan Companies in Canada on Transactions with Non-residents—BP-29.

18.2.3 Official international reserves

These are obtained from administrative data of the Bank of Canada.

18.2.4 Other assets and other liabilities

On the asset side, data on subscriptions to international agencies are obtained from the Department of Finance, the Canadian International Development Agency and Public Accounts. Data on foreign money market instruments are compiled from a mixture of administrative data from the U.S. Treasury and survey data (Sales of Short-term Securities to Non-residents of Canada—BP-30A; Purchases of Short-term Securities from Non-residents of Canada—BP-30B) obtained from Canadian financial intermediaries. The deferred assets of Canadian immigrants are derived from administrative data of Citizenship and Immigration Canada. The series on progress payments are derived from the financial press and several known respondents that are surveyed on an occasional basis. Data on derivatives are obtained from the monthly survey (Canada's International Transactions in Securities—BP-30) of Canadian financial intermediaries. Other assets are obtained from an annual survey (Transactions Between Canada and Other Countries—BP-21) and a quarterly sample survey (Transactions Between Canada and Other Countries—BP-21A) of Canadian enterprises.

On the liability side, Government of Canada demand note liabilities are derived from administrative data. The data on short-term payables including trade credits are obtained on a preliminary basis from the quarterly sample Transactions Between Canada and Other Countries—BP-21A and are finalized from the results of the annual census survey Transactions Between Canada and Other Countries—BP-21. The series on progress payments are derived from the financial press and several known respondents that are surveyed on an occasional basis. The series on prospective migrant liabilities are derived from administrative data of Citizenship and Immigration Canada.

18.3 Methods

This account is compiled by the Balance of Payments Division from survey and administrative data. Administrative data from Citizenship and Immigration Canada are extensively used to compile assets held abroad by immigrants (for more details, see Chapter 11, "Capital Account").

18.4 Products

18.4.1 Data accuracy

The estimates on loan assets and liabilities are believed to be reliable to the extent that they are obtained from administrative data. The data obtained from survey sources are of acceptable accuracy. The series of short-term borrowings from foreign banks are believed to be acceptable; they are partly derived from foreign banking data.

The estimates of deposits at chartered banks are believed to be most reliable. They are obtained from administrative records. The series on non-bank deposits abroad (inclusive of foreign treasury bills) are believed to be acceptable. The data are largely obtained from foreign banking data and are thus dependent on classifications of residency applied by the reporting financial institutions outside Canada. The data in recent years have shown large unexplained fluctuations.

The estimates on official international assets are most reliable coming from administrative data whose accounting practices meet balance of payments requirements.

Other assets include various series whose overall quality is believed to be acceptable. Data on subscriptions to international agencies are obtained from administrative sources, which are very reliable. The series on short-term receivables are believed to be reliable. The data are obtained from an annual census survey and for the most current year, the data are projected from a quarterly sample survey and are therefore subject to revisions when the annual census survey results are available. The series on deferred immigrants' assets are considered acceptable. They are based on administrative records filed by prospective immigrants at the time of visa application. The remaining accounts in this series are acceptable but are not significant in magnitude.

Other liabilities include various series whose overall quality is believed to be acceptable. The series on short-term payables are believed to be reliable. The data are obtained from an annual census survey and for the most recent year, the data are projected from a quarterly sample survey and are therefore subject to revisions when the annual census survey results are available. Series on official SDR liabilities and Government of Canada demand notes are believed to be most reliable; they come from official records.

18.4.2 Data accessibility

In the annual publication *Canada's International Investment Positions* and in CANSIM, annual positions in other investment for each of assets and liabilities are published for the six geographical groupings: United States, United Kingdom, Other European Union, Japan, Other OECD and Other Countries. Positions on Canada's official reserves are published by instrument and by currency. Finally, other assets and liabilities are broken down between short-term receivables/payables and other.

Part III

Overview of the Statistical Framework

CHAPTER 19
IMPLEMENTATION OF INTERNATIONAL STANDARDS

In 1997, Canada released its balance of payments and international investment position statistics in accordance with the standards of the fifth edition of the *Balance of Payments Manual* of the International Monetary Fund, which was published in 1993. (The importance of these standards was stressed in Chapter 1, "Conceptual Framework of the Balance of Payments"). In order to ensure the maximum continuity in series, the new format in the Canadian series was extended as far back as 1926, the first year of official series.

This project was implemented by the Balance of Payments Division of Statistics Canada in five stages over a four-year period that ended with the publication of the data in June 1997.

The first stage consisted of assessing the new Balance of Payments and System of National Accounts[1] standards against existing Canadian practices. This was done in order to identify where Canadian practices differed from international standards.

The second stage was to gather the historical data into the division's electronic time series database. The database was loaded with historical data that had previously been stored in either electronic or paper form. These historical data covered current account data from 1926 to 1961, financial account data from 1926 to 1971 and the international investment position from 1926 to 1987. The more recent years for all these series were already covered in the database. A close edit was then conducted on the historical data to ensure that they conformed with data already published.

The third stage consisted of identifying and linking the various dimensions of a series. This step involved going back to publications and internal ledgers to gather all the various dimensions of historical data. Much care was taken to ensure that these various dimensions of historical data conformed to published control series. This work can be viewed as a delicate work of restoration. It involved co-ordination of many series as well as the various dimensions (such as country, sector, quarter or year and currency) of these series. Previously, these dimensions were often published independently of one another.

The fourth stage consisted of extending the new standards back in time by devising new treatments, revising past data and modifying the survey formats to yield current statistical results according to the new standards. Examples of this are direct investment profits, which were extended back to 1961, and trade in goods valued at the border, which were extended back to 1926.

The fifth and final stage consisted of changing the products according to the new standards. This meant that all of the tables for publications, the matrices of CANSIM (the electronic dissemination database used at Statistics Canada) and the data submissions to international agencies had to be recorded and reformatted. It also involved extensive documentation of the changes and of the content of the new standards.

In the following sections, the major changes that were implemented to meet the international standards are first reviewed. With the implementation of these changes, Canadian practices are fundamentally in conformity with the international standards. There remain areas, which are generally not of major significance, where Canada does not conform to the standards. This is followed by a section detailing the limited remaining areas where international standards were not applied.

19.1 Major changes made to implement international standards

(A summary is provided in Table 19.1 at the end of this chapter.)

19.1.1 Balance of payments

The current account now excludes capital transfers and progress payments as well as the monetization/

1. Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 1993*, (prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Commission of the European Communities, Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993).

demonetization of gold. Capital transfers and progress payments were reclassified to a renamed capital and financial account. The capital account now comprises capital transfers and non-produced non-financial assets but excludes financial transactions. Non-produced non-financial assets were previously shown as financial transactions. Financial transactions are regrouped under the financial account.

19.1.1.1 Current account

The current account now comprises three broad accounts: goods and services; investment income; and current transfers. Previously, there were two broad classifications of merchandise and non-merchandise transactions. Non-merchandise transactions consisted of services, investment income and transfers.

Goods: Goods (previously referred to as ‘merchandise’) were redefined in terms of both valuation and content. Exports and imports of goods are now valued at the border of the exporting economy; that is, the valuation of goods now includes inland transportation costs to the border of the exporting country. These inland freight charges are recorded as adjustments to the customs trade data. Previously, goods were valued at the plant of the exporting economy and the transportation cost to the border was classified in services as part of transportation. Goods now also include all goods crossing the border to be processed.

The monetization/demonetization of gold, which represents gold sales and purchases between the Canadian monetary authorities and Canadian residents, is now excluded from goods. These transactions were previously shown as imports/ exports of goods. This procedure, known as monetization/demonetization of gold and used to shift gold from a ‘monetary’ asset to a ‘commodity’ and vice versa, is now handled outside the balance of payments in a ‘revaluation and other changes’ account from 1968. Prior to 1968, the demonetization/ monetization is maintained as part of the balance of payments accounts for purposes of historical integrity.[2]

Goods no longer include progress payments. Progress payments, which represent sales of capital goods by instalments, are now recorded as financial transactions in the financial account. Previously, in lieu of entering a lump sum payment when the good was delivered, a series of progress payments on capital goods such as airplanes were recorded. When the item actually crossed the border, the export or import value was deducted from the trade data since it was already accounted for through a cumulative series of progress payments. This treatment was used to the extent that the progress payments could be identified in data sources. The goods are now recorded as imports/exports only when delivered, that is, when they cross the border. At the same time, the corresponding progress payments are included in the financial account.

Services: The new standards on services that comprise travel, transportation, commercial services[3] and government services were implemented in two phases: in 1996[4] and in 1997.

The main changes to the services series adopted in 1996 were as follows:

- the travel series were expanded to include education (largely postsecondary) and medical services (largely limited to those financed by provincial authorities), as well as to exclude international passenger fares;
- a distinction was made between travel for business and for personal purposes;
- transportation was expanded to include the international passenger fares and certain business services auxiliary to transportation;
- commercial services were expanded to include services to persons and exclude transportation services;
- medical services were excluded from government services and put in travel;
- the previous series (other services) was discontinued and its components redistributed to travel (student outlays) and commercial services (the remainder);
- the details of commercial services were restated according to the new standards; and

2. For the years prior to 1968, the treatment consisted in recording as exports all Canadian gold production, as explained in more detail in Chapter 3, “Goods.”

3. In the Canadian data, this summary term refers to services other than travel, transportation and government services.

4. For a full discussion of the issues, process and systems used to convert to the new standards in 1996, please refer to Hugh Henderson, *Implementation in Canada of the International Standards for Services Trade—On with the Fifth*, (Research Paper No. 13, Balance of Payments Division (67F0001MIB97013), http://statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

- a number of sub-categories were added, further extending the breakouts called for in the international standards.[5]

The main changes adopted in 1997 were the following:

- transportation of goods to the border and processing were moved from services to goods;
- a new methodology was adopted to recognize earnings by Canadian- and U.S.-domiciled truckers for the transport of goods in the other's country (it was previously assumed that domestic truckers operated only in their own economy);
- courier services was moved from transportation to commercial services;
- disbursements of the federal government for international organizations and programs were reclassified from government services to current transfers; and
- administrative expenses related to Canada's official assistance were included in government services receipts, with a counterpart entry also added in current transfer payments.

Investment income: Investment income is now classified as direct investment, portfolio and other investment. These three functional accounts are in turn broken down, when applicable, according to interest, dividends and direct investment profits. The new classification superseded a heterogeneous classification based on a mixture of characteristics.

Within the other investment account, interest revenues on assets of Canadian banks are now shown separately from interest expenses on their liabilities. These revenues and expenses were previously recorded on a net basis by broad geographical area. For instance, if the banks earned lower interest revenues from the United States than they had interest expenses in that country, the net expense was recorded under payments and no entry was made in the receipts account for the United States. If the reverse applied—that is, if revenues were higher than expenses in that country—the only entry would be a net receipt in the receipts account.

Current transfers: This account now excludes migrants' funds, inheritances, pension payments to federal government employees and debt forgiveness by the Canadian government. Except for pensions of federal government employees, these components are all considered capital transfers and have been moved to the new capital account of the capital and financial account. The pensions of federal government employees are in financial liabilities.

Contributions of the federal government to international agencies and programs were shifted to current transfers from government services.

Administrative expenses related to Canada's official assistance were added to current transfers. (The resulting receipts arising from these administrative expenses were added to government services.)

19.1.1.2 Capital and financial account

The capital and financial account is now presented under two broad subheadings: the capital account and the financial account. Previously, there was only one broad category, the capital account.

19.1.1.2.1 Capital account

The name 'capital account' had been used in the previous presentation to refer to different content. This new account includes receipts and payments of migrant's funds; receipts and payments of inheritances; debt forgiveness of the federal government; acquisition of land abroad by the Canadian government; and acquisition and disbursements of non-produced non-financial assets. The three first components were previously in the current account transfers; the fourth was previously in government services and the fifth in financial transactions.

The coverage of migrants' funds was also expanded to include funds left abroad. Previously, migrants' transfers referred only to funds brought into Canada.

19.1.1.2.2 Financial account

The financial account, previously known as the 'capital account,' contains all the transactions in financial assets and financial liabilities. For both assets and liabilities, the financial account is broken down among direct investment flows, portfolio investment flows and other investment flows.

5. Please refer to Statistics Canada, *Canada's International Transactions in Services* (Catalogue nos. 67-203-XPB and 67-203-XIB).

This functional classification supersedes the previous classification, which was based on a mixture of characteristics.

Direct investment flows: For direct investment flows, the geographical allocation of flows from takeover activities was modified to reflect the country of the new owners for inward investment and the location of the acquisition for outward investment (debtor principle). These flows were previously allocated to the countries of the previous owners (transactor principle). For example, if a Canadian company buys a U.K. company from a U.S. investor, the investment is now recorded as going to the United Kingdom. Previously the investment would have been recorded as going to the U.S. owner.

Portfolio investment flows: Portfolio investment flows, which previously contained only bonds and stocks, was expanded to include transactions in Canadian money market securities. Canadian money market securities were previously shown separately. Foreign investment in Canadian bonds now includes the interest accruals on these bonds. These accruals were previously recorded as other short-term payables. Interest accruals now include accruals from coupons as well as the amortization of premiums/ discounts between the issue price and the maturity value. In the past, the recognition of amortization as income applied only to deep discount bonds. The series on new issues of bonds was revised to exclude new issues in Canada that were subsequently sold during the month of issue in another country. These transactions are now classified as trade in outstanding bonds; the new treatment begins in 1994 with trading during the month of issue left as new issues prior to 1994.

Other investment flows: Other investment flows now includes transactions in deposit assets; transactions in deposit liabilities of Canadian banks; Canadian governments' foreign loans and assets; and foreign short-term assets of the Canadian non-bank sector. These accounts were previously shown separately. Canadian banks' transactions in financial assets and financial liabilities denominated in foreign currencies are now recorded on a gross basis. These transactions were previously recorded on a net basis by broad geographical areas; for example, if the banks had higher deposits assets in the European Union than they had deposit liabilities in that area, all the transactions in both deposits assets and liabilities were entered as a net flow in deposit asset for the European Union. The portfolio investment of Canadian residents in foreign money market instruments continues to be recorded in other investment because of the difficulty in separating the investment in securities from deposits at foreign banks.

Certain data on derivatives are included in other investment as the data sources are insufficient to warrant identifying these accounts separately. The offsetting account for monetization/demonetization of gold is now eliminated from transactions in reserves and is classified as a revaluation of official reserves. In the same way, the allocations of Special Drawing Rights (SDR)[6] to Canada by the International Monetary Fund are no longer shown in the balance of payments but rather are reclassified as revaluation of official reserves assets.

19.1.2 International investment position

The changes described in the financial account were also implemented in the international investment position when applicable. In addition, certain valuation changes were effected.

Valuation of Canadian bonds: Bonds are valued according to the books of the Canadian issuers, that is, according to the debtor principle. 'Book value' is defined as the price at which the bond was originally issued plus interest accruals. Interest accruals comprise the accruals from the coupons plus the amortization of the difference between the maturity price and the issue price. The series on interest accruals was previously classified with other liabilities.

The market value on Canadian bonds is provided as supplementary information to the book value. This supplementary information is provided beginning with the reference year 1990.

Exchange rate effect: The effect of fluctuations of the Canadian dollar on accounts denominated in foreign currencies is identified separately.

6. For a description of SDR, please refer to Chapter 18, "Other Investment Position."

19.2 Remaining differences with international standards[7]

(A summary is provided in Table 19.2 at the end of this chapter.)

Although much effort has been directed at implementing the international standards, there remain a few areas where they have not been adopted. Such periodic departures were primarily prompted by pragmatic considerations, notably lack of data, but in some cases also reflected reservations about the international standards. While the departures may appear lengthy in number, their impact in terms of value is not significant, except for the valuation at market price of direct investment positions.

19.2.1 Balance of payments

19.2.1.1 Current account

Goods: Goods are normally valued at ‘transaction value.’ It is difficult to ascertain whether such prices are at market price, as called for by international standards. This is especially relevant since a substantial portion of Canada’s trade in goods is carried out with foreign-related parties. Transactions with foreign-related parties often involve transfer pricing. The international standards relax somewhat the rules of market prices for transactions among related parties, given that a significant portion of the worldwide trade is carried out among related parties located in different countries.

> Thus, for transactions between affiliated parties, …compilers may have no other choice, in practice, but to accept a valuation in terms of explicit costs incurred in production or any other values assigned by the enterprise.[8]

While the transaction value of customs is generally used in the Canadian statistics, there are a few cases where supplementary information is used instead of customs valuation and is incorporated through balance of payments adjustments. An example of such supplementary information is the information coming from the Canadian input–output system on selected primary resources.

Trade in goods is valued at the border in conformity with standards; exceptions to this rule are rare and of relatively low value. Exports of some newsprint, for instance, are adjusted to be inclusive of freight to the point of destination.

Reflecting the usual problems of coverage from lack of data sources, no attempt is made in the Canadian statistics to incorporate migrants’ effects into goods, even though this is called for by international standards. The Canadian treatment is internally consistent, as capital transfers also exclude migrants’ effects.

Data limitations and lack of demand have meant that the standard breakouts for goods are not developed; that is, there is no separate identification in the goods accounts on goods for processing, repairs on goods, goods procured in ports by carriers, and non-monetary gold.

Travel: International standards specify that travel should include and identify the personal expenditures of foreign migrant workers or Canadian migrant workers. Data limitations bar their explicit identification in the Canadian data.

According to international standards, the health series should also include out-of-pocket or incidental expenditures on goods and services while travelling for health purposes. These expenditures are left in other personal travel because they are difficult to identify separately.

Certain expenditures on education also remain in other personal travel. This practice was adopted because of data limitations. Examples of these expenditures include full-time programs of less than a year and international students at the elementary and secondary levels. The revenues earned by providers of professional education are to be found in commercial services, as called for by international standards.

International standards specify that cruise outlays should be included in travel. In Canada, most cruise outlays are shown with passenger transportation services under transportation.

Transportation: In a departure from international standards, certain items are retained in transportation services. Ships’ stores are in this category: they remain indistinguishably with port expenditures.

7. This note parallels a companion document: Kishori Lal, “Remaining Differences Between the 1997 Canadian System of National Accounts and the 1993 International System of National Accounts,” in *The Review of Income and Wealth 1999, Journal of the International Association for Research in Income and Wealth* (New York, N.Y., 1999).

8. International Monetary Fund, *Balance of Payments Manual, (*Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 100, 28.

Charters without crew cannot be separated from rentals with crew, although some charters without crew were identified as of 1997 and have been included with equipment rentals (see below).

The detailed components by mode of transportation that international standards call for are not altogether followed. This is because of confidentiality restrictions and weakness in data sources. For example, rather than only showing ocean transportation, the Canadian data present water transportation inclusive of inland waterway transport. According to international standards, inland waterway transport is a subcomponent of other transport.

Commercial services: The term 'commercial services' used in Canadian statistics does not exist in international standards and has been adopted in Canada to refer to services other than travel, transportation and government. However, this is only a presentational issue since the Canadian statistics can easily be grouped to meet the international classification of communications, construction, insurance and other financial services, computer/information services, royalties, services to persons, and other business services.

In *construction*, goods supplied directly to or from Canada for cross-border construction activities remain largely recorded in Canada's export and import of goods rather than with construction or miscellaneous services to business, as called for by international standards. Furthermore, the Canadian expenditures related to revenues of construction services, such as expenditures for local supplies, are classified as construction payments in the Canadian statistics, a departure from international standards, which call for such services to be included with other services.

For construction activities, the corporate accounting followed by the survey respondents is applied, irrespective of the one-year rule of thumb. If the respondents establish a foreign enterprise (for example, by maintaining full separate accounts in the host country, paying local income taxes and having a substantial physical presence there), their activities are classified as direct investment. Otherwise, the activities are recorded as cross-border provision of services.

Insurance services are presented on the basis of gross premiums and claims in the Canadian statistics. This differs from international standards, which call for a special treatment for services, capital transfers and financial flows.[9] Several attempts were made to produce data according to international standards, but the results proved not to be analytically useful, despite using much improved data on insurance. In the Canadian statistics, receipts are the sum of premiums received by Canadian residents from abroad and claims paid to clients in Canada by non-resident insurers. Payments are the sum of claims paid abroad by insurers resident in Canada and premiums paid to outside insurers by policyholders in Canada. This gross treatment is equivalent to the treatment accorded the great majority of other goods and services in the Canadian statistics.

It should be noted that freight insurance services cannot be identified beyond saying some elements may be present in non-life insurance premiums and claims or embedded in goods valuation. According to international standards, freight insurance services should be in insurance services.

In *financial services*, fees associated with foreign exchange transactions and financial services rendered by means of foreign correspondent banking are not as yet measured. Also excluded are imputed financial intermediary services indirectly measured (FISIM).[10]

Information services exclude direct subscriptions to newspapers and periodicals, which are covered in goods (as a balance of payments adjustment for postal imports) rather than with information services because of data limitations.

Merchanting is the buying and selling of goods that do not enter or leave the economy from which the trader is conducting business. An apt measure of transactions has not been found for the Canadian activity and represents an exclusion from the international standards. The entry for the international category for merchanting and other trade-related services is represented by commissions, as a related trade service. For practical reasons, certain values for contract production abroad are assigned to the miscellaneous services to business account.

9. The international standards call for rearrangement of gross premiums and claims data into two separate components. The first is a service charge (premiums earned less claims expensed) that would be entered as the insurance service. The other component, which is the difference between gross premiums and the service charge, would be entered for life insurance under other investment of the financial account, and for non-life insurance under transfers in the current account.

10. However, FISIM are included in the non-resident sector in the other components of the Canadian System of National Accounts. The exclusion of FISIM as services is in conformity with international standards of the balance of payments, which in this case differ from the System of National Accounts 1993.

Commissions should, in principle, include fees paid by the importer after the free on board (f.o.b.) point of export. However, such buying commissions have been viewed by the former Revenue Canada (now called Canada Customs and Revenue Agency) as less common than selling commissions. Fees paid by the importer after the f.o.b. point of export are taken as an appropriate part of valuation for duty and are valued with goods. Non-financial commissions include auction commissions assigned in international standards to legal services.

In *equipment rentals*, for practical reasons, a limited distinction has been made between rentals with operators and rentals without operators. Under international standards, rentals with operators should be reported under various other specific services, and rentals without operators should be reported here, under equipment rentals.

Miscellaneous services to business covers significant amounts of fees paid or received by automotive companies for charges such as retooling, warranties and like charges linked to the production of new models. These charges are not believed to be included in the valuation of goods. These series are without an international counterpart, but after internal review in conjunction with the 1997 historical revisions it was concluded, again for practical purposes, to continue to treat these as services transactions. The U.S. statisticians assume that such charges are already part of goods valuation.

Provisions of commuter and seasonal worker remuneration as own account service providers are entered as miscellaneous services. International standards classify these as income of employees. Insufficient data preclude their articulation as labour income in the Canadian system.

Investment income: For the time being, income is limited to property income and excludes income from compensation of employees. This exclusion is a departure from international standards. As indicated, labour income is assigned in the Canadian data to the miscellaneous services to businesses series. The income could be deemed as representing units of own-account labour. The Canadian treatment has been adopted because of data limitations.

19.2.1.2 Financial account

Direct investment flows: This account does not include real estate investment by persons. Such investment is classified as other investment. This is a departure from international standards as it is the Canadian practice to limit direct investment to the business sector.

Portfolio investment flows: Canadian investment in foreign money market instruments is excluded from portfolio investment. It is classified as other investment as these transactions cannot be distinguished from other investment transactions because of data limitations.

Other investment flows: Other investment flows include transactions in Canada's reserve assets. In international standards, reserve assets is a separate category. The Canadian practice is only a presentational issue since the reserve account is identified separately in other investment.

Other investment also includes some elements of derivatives. According to a 1998 amendment to international standards, derivatives should be identified on their own as a functional account.[11] Data limitations preclude the separate identification of transactions in derivatives in Canadian statistics.

19.2.2 International investment position

The departures from international standards noted for the accounts of the financial account also apply to the corresponding accounts of the international investment position. There are two additional areas that need be noted: valuation and articulation of non-produced non-financial assets.

Canada's official international investment position accounts are valued from the books of the entities in which the investment is made. The international standards call for market value. Except for direct investment, Canada already produces or could produce the accounts at market value. For instance, the market valuation of selected portfolio investments is already provided as supplementary information to the official series (Canadian investment in foreign securities and foreign investment in Canadian bonds). Efforts will be made in the near future to value

11. However, derivatives proved not to be a mutually exclusive functional classification as transactions in derivatives for direct investment and reserves purposes are reclassified under these two functional accounts. The need for such reclassification tends to demonstrate that derivatives are financial instruments (which contradicts the international standard) rather than a functional account.

Canadian portfolio stocks at market value. The remaining portfolio investment (Canadian money market instruments) and other investment largely represent short-term capital and, as such, the book value of the issuers can generally be equated to market value. As for direct investment, major conceptual difficulties are viewed in attempting to derive the market value for that account; the procedures that may be used (such as replacement cost, discounting models of earnings and market/book value ratios) have intrinsic problems. These difficulties have also been recognized by the international standards.

> Although this *Manual*, in concordance with the *SNA*, affirms the principle of using market price as the basis for valuation, it is recognized that in practice, book values from the balance sheet of direct investment enterprises (or investors) are often used to determine the value of stock of *direct investment.* This practice reflects the fact that enterprise balance sheet values … represent the only source of valuation of assets and liabilities readily available in most countries … To facilitate international comparisons, countries that publish data based on market values derived indirectly should, when it is feasible, also publish data collected on a balance sheet (book value) basis if the two types of data differ.[12]

Non-produced non-financial assets are reflected in other investment position in the Canadian statistics. In the international standards, transactions in such assets are clearly dealt with; however, no mention is made of their impact and classification in the international investment position. It is proposed that the asset and liability resulting from transactions in such assets be shown under other investment positions.

12. International Monetary Fund, *Balance of Payment Manual* (Fifth edition, Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 377, 89.

Table 19.1
Canada’s Major Changes Implemented to Conform with International Standards

	Before	After
Current account	1 Transactions grouped as merchandise and non-merchandise	1 Transactions grouped as goods and services, investment income and current transfers
Goods	1 Term: merchandise 2 Valuation at the plant 3 Inclusion of progress payments 4 Inclusion of monetization/demonetization of gold 5 Exclusion of some processed goods; included in services	1 Term: goods 2 Valuation at the border of the exporting country 3 Exclusion; included in financial account 4 Exclusion; included in valuation adjustment 5 Inclusion
Services	1 Transactions grouped as freight and shipping, travel, business services, government services and other services	1 Transactions grouped as transportation, travel, commercial services and government services
Transportation	1 Term: freight and shipping 2 Exclusion of international passengers fares; included in travel 3 Inclusion of inland freight to the exporting border 4 Exclusion of services auxiliary to transportation; included in business services. 5 Exclusion of resident truck earnings in other country 6 Inclusion of courier services	1 Term: transportation 2 Inclusion 3 Exclusion; included in goods 4 Inclusion 5 Inclusion 6 Exclusion; included in commercial services
Travel	1 Inclusion of international passenger fares 2 Exclusion of education services; included in government services 3 Exclusion of health charges financed by provinces; included in government services 4 No identification of business and personal travel	1 Exclusion; included in transportation 2 Inclusion 3 Inclusion 4 Identification of business and personal travel
Commercial services	1 Term: business services 2 Inclusion of processing in goods 3 Inclusion of services auxiliary to transportation 4 Identification of other services 5 Exclusion of courier services; included in transportation 6 Exclusion of services to persons; included in other services 7 Many sub-categories not broken out	1 Term: commercial services 2 Exclusion; included in goods 3 Exclusion; included in transportation 4 Inclusion of other services in travel and in commercial services 5 Inclusion 6 Inclusion 7 Identification of sub-categories

Table 19.1
Canada's Major Changes Implemented to Conform with International Standards (continued)

	Before	After
Government services	1 Inclusion of health financed by provinces 2 Inclusion of disbursements to international organizations and programs 3 Exclusion in counterpart receipts of administrative expenses related to official assistance 4 Inclusion of purchase of foreign land by Canadian government	1 Exclusion; included in travel 2 Exclusion; included in current transfers 3 Inclusion 4 Exclusion
Investment income	1 Heterogeneous composition 2 Exclusion of reinvested earnings on direct investment; included as valuation adjustment 3 Netting of banking income 4 No identification of portfolio income; included in other income	1 Transactions grouped as direct investment, portfolio and other investment 2 Inclusion 3 Grossing up banking income 4 Identification of portfolio income
Current transfers	1 Inclusion of capital transfers (migrants' funds, inheritances and debt forgiveness) 2 Exclusion of federal disbursements to international organizations and programs; included in government services 3 Exclusion of payments of administrative expenses related to official assistance 4 Inclusion of pension payments to federal government employees	1 Exclusion; included in capital account 2 Inclusion 3 Inclusion 4 Exclusion; included in financial account
Capital and financial account	1 Term: capital account, made up largely of financial transactions	1 Term: capital and financial account, made up of capital transactions and financial transactions
Capital account	1 Inclusion of financial transactions 2 No identification of capital account transactions 3 Exclusion of migrants' funds; included in current transfers 4 Exclusion of inheritance and debt forgiveness; included in current transfers 5 Exclusion of intangible non-produced non-financial assets (intellectual property, etc); some included in financial transactions 6 Exclusion of purchases of foreign land by Canadian government	1 Exclusion; included in financial account 2 Identification of capital account transactions 3 Inclusion and expansion to cover funds left abroad 4 Inclusion 5 Fuller inclusion of such assets when acquired or disposed 6 Inclusion

Table 19.1
Canada's Major Changes Implemented to Conform with International Standards (concluded)

	Before	After
Financial account	1 No identification	1 Identification; made up of direct investment, portfolio investment and other investment
Direct investment flows	1 Takeover flows recorded using the transactor principle	1 Takeover flows recorded using the debtor principle
Portfolio investment flows	1 Exclusion of Canadian money market securities; included in other investment 2 Exclusion of accrued interest in Canadian bonds; included in other investment 3 Inclusion of repurchase agreements 4 Exclusion of foreign securities held by Canadian banks	1 Inclusion 2 Inclusion 3 Exclusion; included in other investment 4 Inclusion
Other investment flows	1 Inclusion on a net basis of foreign currency transactions of banks 2 Inclusion of Canadian money market instruments 3 Exclusion of repurchase agreements; included in portfolio investment 4 Inclusion of monetization/demonetization of gold 5 Inclusion of SDR allocation	1 Inclusion on a gross basis 2 Exclusion; included in portfolio investment 3 Inclusion 4 Exclusion; included in valuation adjustment 5 Exclusion; included in valuation adjustment
International investment position	1 Heterogeneous composition	1 Positions grouped as direct investment, portfolio investment and other investment
Portfolio investment position	1 Book value on Canadian bonds 2 Same comments as in portfolio investment flows	1 Market valuation on Canadian bonds provided as supplementary information 2 Same comments as in portfolio investment flows
Other investment position	1 Same comments as in other investment flows	1 Same comments as in other investment flows

Table 19.2
Remaining Differences Between Canadian Practices and International Standards

	Canadian pratices	International standards
Current account		
Goods	1 Valuation at 'transaction value' which may differ from market value, notably for trade with foreign related parties	1 Market valuation
	2 Exclusion of migrants' effects	2 Inclusion
	3 No identification of goods for processing, repairs on goods, goods procured in ports by carriers and non-monetary gold	3 Identification
	4 Exclusion of ship stores; included in transportation	4 Inclusion
	5 Inclusion of goods crossing the Canadian border under construction service contracts	5 Exclusion; included in commercial services
	6 Inclusion of commission fees on buying goods after the f.o.b. point of export	6 Exclusion; included in commercial services
	7 Exclusion of automobile charges linked to the production of new modes; included in commercial services	7 Inclusion
	8 Inclusion of some freight insurance	8 Exclusion; included in commercial services
Travel	1 No identification of personal expenditures of transborder workers	1 Identification
	2 Inclusion in other personal travel of certain expenditures on health (e.g. personal expenditures) and education (e.g. full-time program of less than one year and for elementary and secondary levels)	2 Exclusion; included as part of health and education series in travel
	3 Exclusion of cruise outlays; included in transportation	3 Inclusion
Transportation	1 Incomplete breakout of sub-categories under transportation services	1 Full breakout
	2 Combination of ocean and inland waterway transportation	2 Identification
	3 Inclusion of ship stores, cruise outlays, charters without crews	3 Exclusion; included in goods, travel and commercial services, respectively
Commercial services	1 Summary term referring to services other than travel, transportation and government	1 No term
	2 Inclusion in construction of projects longer than one year	2 Frequent exclusion; often included in direct investment
	3 Exclusion in construction of goods crossing the Canadian border under construction contracts; included in goods	3 Inclusion
	4 Exclusion of some charters without crews; included in transportation	4 Inclusion; included in commercial services
	5 Inclusion in insurance services of gross premiums and claims	5 Inclusion under services, current transfers and other investment

Table 19.2
Remaining Differences Between Canadian Practices and International Standards (continued)

	Canadian pratices	International standards
Current account		
Commercial services Cont'd	6 No identification of freight insurance and incomplete inclusion in non-life insurance and in goods	6 Identification and inclusion in insurance
	7 Exclusion in financial services of fees on foreign exchange and on foreign correspondent banking	7 Inclusion
	8 Exclusion of merchanting; no estimate	8 Inclusion
	9 Exclusion of commission fees on buying of goods after the f.o.b. point of export; included in goods	9 Inclusion
	10 Inclusion in commissions of auction commissions	10 Exclusion; included in legal service in commercial services
	11 Inclusion in equipment rentals of rentals with operators	11 Exclusion; included with other specific services
	12 Inclusion in miscellaneous services to business of automotive charges linked to the production of new models	12 No item
	13 Inclusion in miscellaneous services of cross-border workers' renumeration	13 Exclusion; included in a separate labour income account
	14 Inclusion in miscellaneous services of commercial (non-institutional) education	14 Inclusion as other personal, cultural and recreational services other than audio-visual
	15 Inclusion only of trade union activities in personal, cultural and recreational service other than audio-visual	15 Content appears wider
Income	1 Inclusion of investment income and exclusion of labour income	1 Inclusion of investment and of labour income
	2 Exclusion of cross-border workers remuneration; included in commercial services	2 Separate identification as labour income
Current transfers	1 Exclusion of non-life insurance transfers; included in commercial services	1 Inclusion
Capital account	1 Exclusion of migrants' effects; no estimate	1 Inclusion
Financial account		
Direct investment flows	1 Exclusion of real estate investment by persons; included in other investment	1 Inclusion
Portfolio investment flows	1 Exclusion of foreign money market securities; included in other investment	1 Inclusion

Table 19.2
Remaining Differences Between Canadian Practices and International Standards (concluded)

	Canadian pratices	International standards
Financial account		
Other investment flows	1 Inclusion of foreign money market securities 2 Inclusion of foreign portfolio securities of Canadian banks 3 Inclusion of Canada’s reserve assets 4 Inclusion of some elements of derivatives 5 Exclusion of some elements of insurance claims of life insurance; included in commercial services	1 Exclusion; included in portfolio investment 2 Exclusion included portfolio investment 3 Exclusion; included in a separate reserve account 4 Exclusion; included in a separate derivative account 5 Inclusion
International Investment Position	1 Same comments as in corresponding accounts of financial account	1 Same comments as in corresponding accounts of financial account
Direct investment position	1 Valuation of book value of issuers	1 Market valuation
Portfolio investment position	1 Valuation at book value of issuers but market value is also provided as supplementary information for Canadian bonds and foreign securities	1 Market valuation
Other investment position	1 Valuation at book value of issuers, which could be viewed as proxy for market value given that these accounts are generally short-term	1 Market valuation

CHAPTER 20
DATA SOURCES

The data inputs to compile Canada's balance of payments and international investment position accounts are composed of surveys, administrative data and various other sources. The present chapter describes two sources of data: the surveys conducted by the Balance of Payments Division, and the annual reconciliation of Canada's current account with that of the United States. The surveys that are conducted by the Division represent a major data source.[1] The annual reconciliation is used as both an audit of the data and a source of information, as the reconciliation often results in an exchange of data between the two countries.

20.1 Balance of Payments Division surveys[2]

The Balance of Payments Division conducts 30 surveys. Of these, 21 are annual, 5 are quarterly and 4 are monthly (see Appendix 1 for a list of the questionnaires used for these survey programs). The annual and monthly surveys are quasi censuses, while the quarterly surveys have a sample coverage. The surveys seek information related directly to the respondents, except for one annual survey and the monthly surveys, which seek information from financial intermediaries on third party transactions.

Fourteen surveys are designed to obtain financial information on transactions with non-residents and six surveys seek data on positions with non-residents. Most surveys of financial transactions are applicable in greater or lesser degree to all types of companies. However, some surveys focus on specific types of companies, such as those engaged in transportation, insurance transactions, trust and mortgage loan activities, and security brokerage. The six position surveys comprise three groups: two surveys directed primarily at the measurement of Canada's external liabilities; three directed primarily at the measurement of Canada's external assets (two on direct investment, the other on portfolio investment); and one recording the organizational structure of the enterprises. The results of the last survey are used to help in processing other survey results.

In terms of coverage, four of the divisional surveys have a sizeable universe (over 1,000). These four survey programs are large because the surveys apply to all types of companies. These surveys focus on liabilities (Geographical Distribution of Capital—BP-52), on assets (Capital Invested Abroad by Canadian Enterprises—BP-59), on uses and sources of funds (Transactions Between Canada and Other Countries—BP-21) and on trade in services (International Transactions in Commercial Services—BP-21S).

The universe of the other surveys is smaller as they are either industry-specific or cover only a sample of respondents. The specific industries covered are:

- financial institutions (Canadian Portfolio Investment—BP-54);
- insurance companies and branches (Transactions Between Canadian Incorporated Insurance Companies and their Foreign Affiliates, Agencies, and Bank Accounts and Other Companies or Persons Outside Canada—BP-27; Transactions Between Canadian Branches of Foreign Insurance Companies in Canada and Head or Other Offices, Companies or Persons Outside Canada—BP-28; and International Transactions Between Insurance Brokers in Canada and their Foreign Affiliates, Agents, and Other Companies or Persons Outside Canada—BP-17);
- trust companies (Report by Trust and Mortgage Loan Companies in Canada on Transactions with Non-residents—BP-29);
- brokers (Canada's International Transactions in Securities—BP-30);

1. The questionnaires used to conduct the surveys can be found on the Internet at < www.statcan.ca/english/services>.

2. This section is largely extracted from Gerard Meagher, *BOP Plans for Participation in UESP, (*unpublished document, Statistics Canada, Ottawa, December 12, 1997).

Table 20.1
Coverage of Balance of Payments Division Questionnaires

List of questionnaires		Balance of payments											International investment position		Periodicity			Sample size		Contents	
		Current account			Financial account																
					Assets			Liabilities													
Transaction questionnaires		Transportation	Commercial services	Investment income	Canadian direct investment abroad	Portfolio foreign securities	Other investment	Foreign direct investment in Canada	Portfolio Canadian bonds	Portfolio Canadian stocks	Portfolio Canadian money market	Other investment	Assets	Liabilities	Annual	Quarterly	Monthly	Large (over 1000)	Small (less than 1000)	General	Industry specific
BP-11	Gold and silver transactions, assets and liabilities						■					■					■		■		■
BP-20	Great Lakes–St. Lawrence shipping transactions	■													■				■		■
BP-21	Transactions between Canada and other countries			■	■		■	■				■	■	■	■			■		■	
BP-21A	Transactions between Canada and other countries			■	■		■	■				■	■	■		■			■	■	
BP-17	International transactions between insurance brokers in Canada and their foreign affiliates, agents, and other companies or persons outside Canada		■												■				■		■
BP-21S	International transactions in commercial services		■												■			■		■	
BP-21SQ	International transactions in commercial services		■													■			■	■	
BP-22	Investment in Canada by non-Canadian corporations			■				■							■				■	■	
BP-22A	Investment in Canada by non-Canadian corporations			■				■								■			■	■	
BP-24	Report of cargo, earnings and expenses of ocean vessels operated by non-resident companies	■													■				■		■
BP-25	Report of cargo, earnings and expenses of ocean vessels operated by Canadian companies	■													■				■		■
BP-26	Report on imports of crude petroleum and petroleum products and other shipping operations	■													■				■		■
BP-27	Transactions between Canadian incorporated insurance companies and their foreign affiliates, agencies and bank accounts and other companies or persons outside Canada		■				■					■			■				■		■
BP-28	Transactions between Canadian branches of foreign insurance companies in Canada and head or other offices, companies or persons outside Canada		■				■					■			■				■		■
BP-29	Report by trust and mortgage loan companies in Canada on transactions with non-residents			■			■					■	■	■	■				■		■
BP-30M	Canada's international transactions in securities							■	■	■	■						■		■		■
BP-30Q	Canada's international transactions in securities							■	■	■	■					■			■		■
BP-30A	Sales of short-term securities to non-residents of Canada									■	■						■		■		■
BP-30B	Purchases of short-term securities from non-residents of Canada									■	■						■		■		■
BP-31	Futures Trading with Non-residents						■					■				■			■		■
BP-58	Transactions of Foreign Airlines with Residents of Canada	■						■							■				■		■

Table 20.1
Coverage of Balance of Payments Division Questionnaires

List of questionnaires		Balance of payments											International investment position		Periodicity			Sample size		Contents	
		Current account			Financial account																
					Assets			Liabilities													
Position questionnaires		Transportation	Commercial services	Investment income	Canadian direct investment abroad	Portfolio foreign securities	Other investment	Foreign direct investment in Canada	Portfolio Canadian bonds	Portfolio Canadian stocks	Portfolio Canadian money market	Other investment	Assets	Liabilities	Annual	Quarterly	Monthly	Large (over 1000)	Small (less than 1000)	General	Industry specific
BP-52	Geographical distribution of capital			■				■	■	■	■	■		■	■			■		■	
BP-53	Structure of Canadian companies in the reporting enterprise							■	■	■				■	■			■		■	
BP-54	Canadian portfolio investment					■							■		■				■		■
BP-55	Particulars of selected issues of funded debt and foreign bank borrowings								■			■		■	■				■		■
BP-56	Geographical distribution of selected long- term dept booked in Canada at Canadian banks and consolidated Canadian subsidiaries								■			■		■	■						
BP-59	Capital invested abroad by Canadian enterprises			■	■	■	■						■		■			■		■	
BP-59S	Capital invested in secondary foreign companies by Canadian enterprises				■	■	■						■		■				■	■	
BP-60	Canadian investment in non-Canadian corporations				■										■				■		■
BP-61	Investment in Canada of non-Canadian partnerships							■							■				■		■

- transportation (Transactions of Foreign Airlines with Residents of Canada—BP-58; Report of Cargo, Earnings and Expenses of Ocean Vessels Operated by Non-resident Companies—BP-24; Report of Cargo, Earnings and Expenses of Ocean Vessels Operated by Canadian Companies—BP-25; and Report on Imports of Crude Petroleum and Petroleum Products and Other Shipping Operations—BP-26);
- governments (Particulars of Selected Issues of Funded Debt and Foreign Bank Borrowings—BP-55);
- banks (Geographical Distribution of Selected Long-term Debt Booked in Canada at Canadian Banks and Consolidated Canadian Subsidiaries—BP-56; and Gold and Silver Transactions, Assets and Liabilities—BP-11); and
- secondary foreign subsidiaries of Canadian enterprises (Capital Invested in Secondary Foreign Companies by Canadian Enterprises—BP-59S).

The quarterly sample questionnaires are the International Transactions in Commercial Services—BP-21SQ, Transactions Between Canada and Other Countries—BP-21A, and Investment in Canada by Non-Canadian Corporations—BP-22A.

The Balance of Payments survey collection operations are reviewed in the following sections. The survey universe, the survey frame and the methods of collection are described. The survey information is collected either by mailing hard copy questionnaires or by requesting electronic submissions of data. The mailing system is reviewed in detail below. The electronic reporting is very similar, except that data are received by tapes, diskettes or e-mail.

20.1.1 Universe

The universe of transactors for balance of payments purposes is sizeable, as it embraces all Canadian institutional units (Canadian transactors) that might engage in international transactions. The size of international transactions may vary greatly: one or two large financial transactions might mean the difference between a net inflow and a net outflow in the financial account of the balance of payments. Therefore, efforts are made to measure all major international transactions.

The statistical units of the Balance of Payments Division surveys consist largely of Canadian companies that consolidate all of their Canadian operations and are accordingly referred to as Canadian enterprises. In addition, the statistical units for the surveys on Canadian direct investment abroad also include majority-owned foreign affiliates of Canadian enterprises.

20.1.2 Balance of payments survey frame

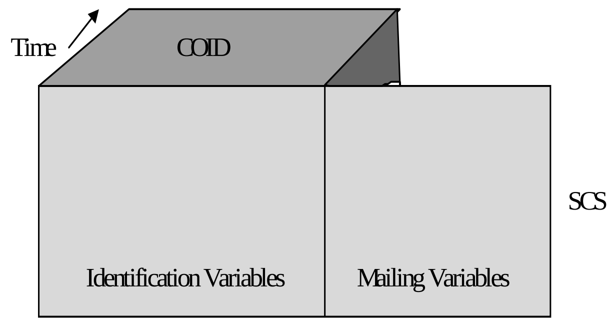
The Balance of Payments Division survey frame has been developed over the years and is believed to contain up-to-date coverage of all Canadian enterprises having international transactions. This frame is constantly updated through a number of sources. When a company is identified as having international transactions (either through administrative data or other public sources), further information about that company is obtained through online access to a Canada Customs and Revenue Agency file that contains the names and addresses of all corporations in Canada.

There are plans to link the frame to the Statistics Canada business register, a registry of all Canadian businesses maintained by the Business Register Division.[3]

The survey frame information is maintained in two systems: the Company Identification System (COID) and the Survey Control System (SCS). Information in the COID includes name, sector, industrial classification, country of control and province of head office of the enterprise. This identification information has a time dimension and it is used as the backbone of all the Balance of Payments Division processing systems, since it provides identification and classification information on the statistical units over time (see Figure 20.1). Most balance of payments systems need to know this information for a specific time in the past, that is, for the period for which the survey results are processed. Most changes to this kind of information are made in the time period in which they actually occurred, although there are at times changes made to an earlier period.

3. Please refer to Chapter 23, “Looking Ahead.”

Figure 20.1
Survey frame variables



The frame information that is used for mailing the questionnaires is maintained in the SCS (see Figure 20.1). Mailing address, phone number, fax number and contact name are some examples of this type of information. It is not necessary to maintain changes to this information over time—only the most current information is necessary for mailing. The SCS consists of two subsystems: the annual subsystem and the monthly/quarterly subsystem. Each of the two subsystems has two main parts: a survey frame and a response log. The survey frames contain information about the enterprises and are constantly being updated. The response logs contain information about mailings and response status. A response log is created when questionnaires are mailed and is updated as questionnaires are received. The logs always reflect the ‘last-best’ data. There is an annual and a monthly/ quarterly response log for each year.

20.1.3 Survey Collection System

The questionnaires are mailed from the Balance of Payments Division mailing frame. Summary definitions and procedures are printed on each questionnaire and a code list of countries is included in each envelope. A guide with more detailed definitions and procedures is also included when the questionnaire is sent for the first time or when requested by respondents.

When a mailout or follow-up is required, the appropriate survey frame (annual or monthly/ quarterly) is accessed and, for each chosen survey, the ‘in-context’ enterprises are selected. Questionnaire labels and response log entries are then generated.

20.1.4 Coverage and responses

The bulk of the survey work revolves around the annual questionnaires. In 1998, there were approximately 20,000 annual questionnaires mailed to about 8,500 enterprises. Follow-up consists of letters mailed three months, four months and five months after the original mailing. The fourth follow-up consists of a letter plus another set of questionnaires. An additional follow-up of 2,000 respondents is done by the central operational group at Statistics Canada. For the latter follow-up, respondents are selected based on response history in prior years. An annual survey is conducted entirely electronically and is filed by over 250 respondents. The respondents are notified and followed up by fax, requesting that they supply electronic forms of their data.

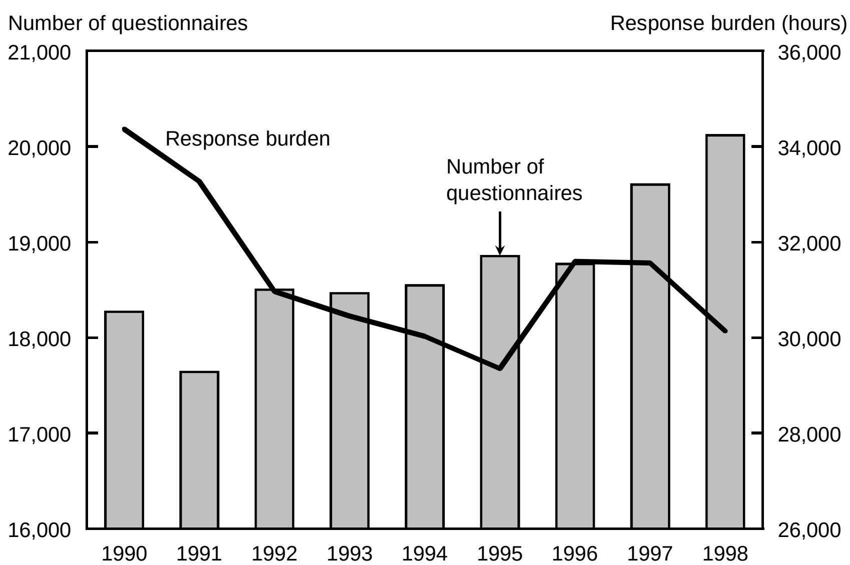
Over 900 questionnaires are mailed every quarter. A fax follow-up is sent one month after the mailing and a phone follow-up list is generated one week after the fax.

Almost 200 questionnaires are mailed every month. There is no automated monthly follow-up.

The average response rate for the annual surveys is 80%, for the quarterly surveys 75%, and for the monthly surveys almost 100%.

Figure 20.2 shows the sample size and resulting respondents' burden for all balance of payments surveys by year. These figures were produced using the Statistics Canada methodology for calculating response burden. The sample size is the sum of all questionnaires mailed throughout the year (excluding deletions, follow-ups and re-mails). The response burden is calculated for each survey and then summed to a total. For each survey, an estimate is made of the amount of time it takes to complete the questionnaire. This estimate is multiplied by the sample size of the survey to give an imposed burden for each survey in hours.

Figure 20.2
Questionnaires and response burden by year



Over the years, much of the decrease in response burden has been achieved through preprinting questionnaires and electronic reporting. The increase in response burden in 1996 was due to much improved coverage on business services (International Transactions in Commercial Services—BP-21S). This increased coverage was a reaction to users' requests for additional information on commercial services.

It should be noted that some of the response burden falls on non-residents. This happens when a foreign subsidiary in Canada, for example, sends its questionnaire(s) to its head office abroad where records are kept or where accounting responsibility or responsibility for clearance of corporate information lies.

20.2 Canada–United States current account reconciliation

The Canada–United States current account reconciliation was undertaken[4] because of the extensive economic links between the two countries and the need to explain differences in the published Canadian and U.S. estimates of the bilateral current account. In principle, the bilateral current account of one country should mirror the bilateral current account of the other country. The reconciled estimates are intended to assist analysts who use both countries' statistics and to show how the current account estimates would appear if both countries used common definitions, methodologies and data sources.

4. For an historical perspective, please refer to Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods,* (published under the authority of the Minister of Supply and Services Catalogue no. 67-506E, March 1981), 297–319. A fuller description of the process can also be found in a joint publication of Statistics Canada and the U.S. Bureau of Economic Analysis, *Reconciliation of the Canada–United States Current Account,* 1990–91.

Differences occur in the bilateral Canadian and U.S. current accounts as published by Statistics Canada and by the Bureau of Economic Analysis (BEA) because of differences in the definitions, methodologies and statistical sources used by each agency. Although the published Canadian and U.S. estimates are reconciled and there is extensive exchange of data between Canada and the United States, differences in the published estimates remain. Complete substitution of reconciled estimates for published estimates and complete exchange of data is not feasible for several reasons. For trade in goods, imports in the U.S. accounts would be affected because the United States attributes Canadian re-exports to the country of origin rather than to Canada, the last country of shipment. For some accounts, protection of the confidentiality of source data bars the exchange of data. Finally, some requirements, such as valuation adjustments, differ when integrating the international and national (domestic) accounts in each country.

The longstanding Canada–United States current account reconciliation is among the leading examples of the benefits that can be derived from international data sharing. The reconciliation process and the exchange of data have resulted in greater accuracy of the published estimates of transactions between Canada and the United States and increased efficiency in producing the estimates. The exchange of data between Canada and the United States for transactions such as trade in goods, travel, passenger fares, Canadian and U.S. government transactions, and some transportation transactions covers over 80% of the value of the Canadian and U.S. current account and has led to the elimination of some differences in Canadian and U.S. published estimates.

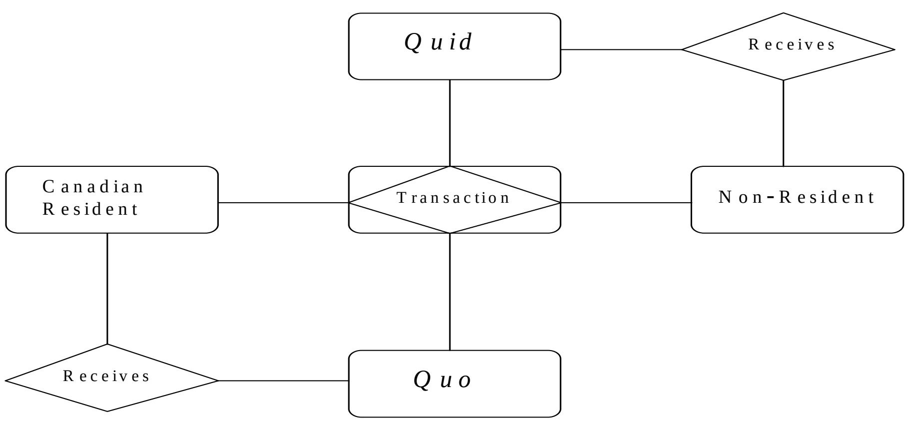
CHAPTER 21

PROCESSING SYSTEMS

Data-processing methods play a crucial role in the statistical process. They bridge imperfect sources of information to arrive at an analytically useful set of accounts. Even the best information sources are marred with gaps and duplications. Processing systems have been devised according to specifications provided by subject matter specialists. The results of these systems must always be subjected to a great deal of professional judgment. Good professional judgment can only be acquired through training and experience.

The focus in the present chapter is on the processing systems. Included here is a description of the data model, databases, selected procedures and staff organization.

Figure 21.1
Balance of payments data model



21.1 Data model[1]

The records in the Balance of Payments Division are organized on the basis of a model composed of three entities: a Canadian resident transactor (1) conducting a transaction (2) with a non-resident transactor (3). Each transactor is identified according to residency and other characteristics. Obviously, more identification is collected on the Canadian transactor. The transactions are also identified according to their characteristics.

1. Section 21.1 and 21.2 are taken from Gerard Meagher, *Development of the Balance of Payments Nomenclature*, (Research Paper No. 10, Balance of Payments Division (67F0001MIB97010), http://www.statcan.ca/english/services, Statistics Canada, Ottawa, 1997).

21.2 Databases

21.2.1 Microdata

The microdata are amassed and processed in 12 different computer systems. The 12 systems were largely devised over the years around the surveys. The records at the micro level can be broadly classified under two headings: information on the transactors and information on their transactions. Information on the transactors is maintained in two systems: the Company Identification System (COID), which contains current and historical classification information, and the Survey Control System (SCS), which is used principally for mailing. These two systems contain the characteristics of the transactors: BOPkey (unique identifier), company name, type of company (for example, private corporation or public enterprise), industrial code and country of control code. COID is maintained to assist in processing the reported transactions of transactors. The BOPkey is a unique identifier used by all the systems that process reported transactions. The BOPkey is the link between the transaction systems and COID. This allows the different systems to use the same classification information, putting them on a common basis and avoiding duplication.

The data on transactions are processed and maintained in 10 systems that are largely survey based. The data in these systems generally undergo two kinds of editing: simple and complex. The simple edits include code verification and total checks. These edits are either done at data capture or by edit programs within the various systems.

The more complex edits are performed by the analysts. The complex editing entails assessing the survey results against other sources of information in order to verify, complement or replace data. The results of the surveys are often amalgamated with other sources to produce the estimates that are published in any of the four publications. Administrative data are used to verify data collected by other means or to supplement survey data. Information from the media is also used extensively to improve the results of quarterly sampling.

Many other sources of information are also used, but not as routinely. Examples of these are the annual reports of companies and the *Financial Post* cards. Multiple sources of information are very useful in auditing survey results but need to be integrated to avoid double counting of transactions.

On a weekly basis, media information is entered into a system (SERIE) where it is confronted against the mailing frame to help determine whether the companies are surveyed; if they are not, contacts are established with the identified companies. The system then ensures that the identified companies receive questionnaires in the next cycle of annual surveys.

Another feature of the systems is that they do more than edit and impute survey results. They also calculate new variables from existing information. For example, BP-2000—an extensive database on all Canadian bonds held by non-residents—calculates (on a bond-by-bond basis) the interest accrued, the interest paid, the interest payable, the retirements and the position outstanding at period-ends. This is done on a monthly basis, taking into account fixed and floating interest rates, exchange rates and many other characteristics of the bond. For example, if the bond was originally issued at a discount, the income is accrued between the issue and the maturity values. The system also generates automatically all the bonds that arrive to maturity and calculates the term to maturity by currency and by period (see Chapter 13, “Portfolio Investment Flows”), as well as the effect of the exchange rate (see Chapter 17, “Portfolio Investment Position”).

Another example is the CASTS system, which, among other things, deconsolidates survey results for direct investment (this system is described in Chapter 16, “Direct Investment Position”). The deconsolidation is needed in cases where two corporations in the same enterprise file questionnaires, and when one of the corporations fully consolidates the business of the other (typically, its Canadian subsidiary). The information from both corporations is needed to obtain information on the amount of foreign investment in the first corporation and the industry of operations of the second. Such intercorporate arrangements occur often when the foreign direct investment is first channeled through a Canadian company that in turn sets up several related Canadian corporations.

Other systems, such as SIS (see Chapter 6, “Commercial Services”), SERIE and IISIS (see Chapter 12, “Direct Investment Flows), have been developed throughout the years. All these systems are linked to COID and produce microdata that are aggregated and loaded into a macrodata system, which is described below.

21.2.2 Macrodata

After being edited, the microdata for a given period are aggregated and loaded into one of the 4,000 balance of payments and international investment position accounts maintained in the FAME system. The FAME system focuses on the aggregated accounts described in parts I and II of this publication. Each account is a time series that can be described in terms of attributes that provide information on the resident transactor, the foreign transactor and the transaction.

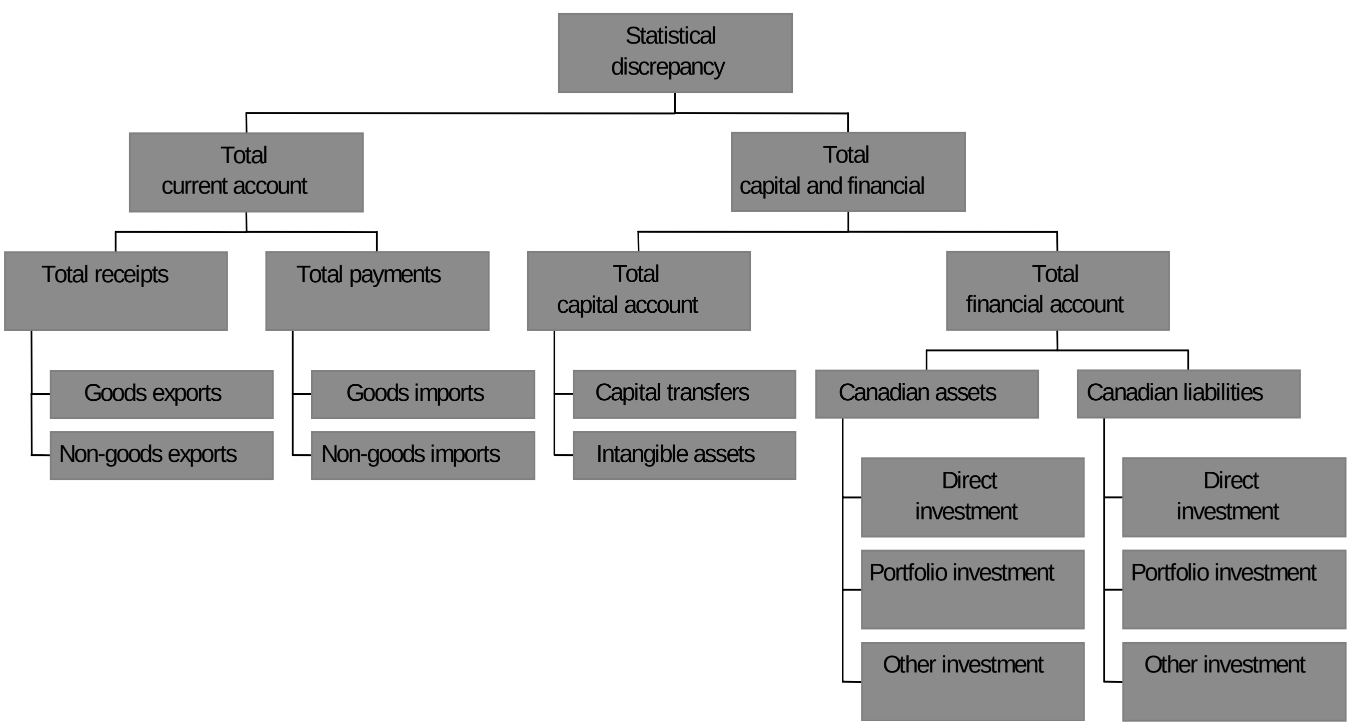
In FAME, there are two major types of databases: one for raw data, and the other for seasonally adjusted data. Only the current account series are seasonally adjusted, as it was established that most series of the financial account are not sufficiently affected by seasonal influences to be seasonally adjusted usefully.[2]

There are three main databases: 'Work,' 'Draft' and 'Published.' The Work database includes the original data and the formulae. The Draft database contains the results of formulae applied to original data. The Work and Draft databases are constantly updated and at any one time there is only one version, the most recent. Data are migrated from Work to Draft and then to Published. At any time, changes can be made to any point in time in the Work database, but only changes for the current revision period are moved to the Draft database. After the data in Draft are finalized, the entire Draft database is copied to a Published database. Each Published database holds the data 'as published' for a given reference period. This provides a very useful tool to review the revisions of a given account.

In FAME, the series are first combined to produce the accounts and are then aggregated to produce the balance of payments and international investment position. The time-series functions of FAME are used for analysis and for production of publications and other outputs.

2. However, the financial account is seasonally adjusted in the context of financial flows accounts.

Figure 21.2
FAME account structures



21.3 Selected procedures

21.3.1 Quarterly and annual estimates

Methods differ for the quarterly estimates, which are preliminary, and the annual estimates, which are more definitive.

The quarterly methodology intends to establish estimates on a current basis and to integrate the quarterly allocations of the definitive estimates that have become available. Most balance of payments flows are initially derived from three quarterly sample surveys. The results of these sample surveys, combined with administrative data and other related information, are used as preliminary quarterly estimates. These quarterly estimates are eventually superseded by the results of the annual questionnaires, which are also combined with administrative data and related information.

This methodology can be used because the quarterly sample surveys are not really samples in the statistical sense of the word. For example, for direct investment, the quarterly results are complemented with the results of a fine screening of the financial press to detect large transactions, such as acquisitions and sales of existing interests. The media information is entered into a system, SERIE, which is in turn integrated with both the mailing frame system (SCS) and with IISIS. SCS is used to help identify whether enterprises are already surveyed by BOP. IISIS is used to ensure that transactions have been reported by the enterprises. IISIS is described in Chapter 12, “Direct Investment Flows.” Furthermore, a macro-adjustment is made to the quarterly flows to account for the transactions that are measured by the annual Transactions Between Canada and Other Countries—BP-21 and that are deemed too small to be surveyed quarterly. The macro-adjustment is eventually replaced with the results of the annual questionnaire. Every year, the quarterly macro-adjustments are reviewed on the basis of the most recent results of the Transactions Between Canada and Other Countries—BP-21.

A similar system is used for transactions in business services. The quarterly survey BP-21SQ sample is selected from the prior year’s data from all sources (not just the annual International Transactions in Commercial Services—BP-21S). If an enterprise is selected for the sample and it is not already on the balance of payments BP-21A, it is added to the BP-21SQ.

21.3.2 Flows and position estimates

In the case of flows and positions, the sources of information are generally independent and the results are reconciled. The linking of the two methods presents at times many difficulties, especially when valuation changes greatly modify the positions, but year after year procedures are devised and refined to facilitate the conduct of the reconciliation on an on-going basis. A concerted effort was made in the mid-1990s to link electronically the related series on investment income, flows and positions in FAME.

21.3.3 Geographical distribution

21.3.3.1 Principles of geographical allocation

The accounts in the balance of payments and the international investment position are constructed with a geographical distribution. For balance of payments purposes, the transactions are generally recorded according to the country of residence of the foreign transactor, which is referred to as the transactor principle. For imports of goods, the country of the former owner of the good is assumed to be the last country of shipment. For exports of goods, the country of destination is assumed to be the ultimate owner. For services, the allocation is made on the basis of the country rendering or receiving the services. For portfolio transactions, the transaction will show the country that sold or bought the instruments traded, regardless of the country of issue of that instrument. An example is a Canadian bond issued in the U.S. market and eventually sold to a U.K. investor. Assuming no data limitation, the balance of payments would show a sale of new bond to the United States (transactor principle) while the Canadian bond liability in the international investment position would be with the United Kingdom (creditor principle).

The investment income, the direct investment flows and all the international investment position accounts are allocated according to the debtor/creditor principle. The investment income is allocated using the issuing country in the case of external assets and the foreign holding country in the case of expenses on external liabilities. For direct investment, the transactor and debtor/creditor principles generally give the same geographical allocation, except in cases of acquisitions/sales of direct investment. For example, a Canadian company may buy a U.K. company from a U.S. company. According to the transactor principle, the transaction would be recorded as being with the United States, whereas under the debtor/creditor principle it will show with the United Kingdom—consistent with the claim on the United Kingdom of the international investment position.

In conducting the reconciliation of changes in positions between two periods at the country level, some of the financial accounts compiled according to the transactor principle need to be reclassified in accordance with the debtor/creditor principle of the international investment position statistics.

Apart from this conceptual approach, there are practical difficulties in identifying transactions by countries, notably in portfolio transactions. For example, a Canadian bond issued in London may be bought by residents of a number of countries, and it is very difficult to trace back to the ultimate holders of the security.

It should be noted that while all the accounts of the balance of payments balance with the all-countries balance, the accounts with any one country do not necessarily balance. The imbalance does not only arise from errors and omissions, as is the case for the all-countries balance, but is also conceptual in nature. Indeed, a current account balance with one country need not balance with the capital and financial account of that country. For example, an account receivable from exports to the United States may be used to finance financial operations in the United Kingdom. The balancing is carried out through the 'statistical discrepancy and inter-area transfers' account.

> An item is provided for multilateral settlements to restore an accounting balance by serving as an offset to the inconsistencies in regional balances. That item may be seen to represent, in concept, the settlement of an imbalance in the compiling economy's transactions with one region by a transfer to or from that region of claims on, or liabilities to, some other region or regions.[3]

21.3.3.2 Published geographical distribution

From 1926 to 1983, the published accounts on Canada's balance of payments and international investment position are presented according to three geographical areas: United States, United Kingdom and Other Countries. From 1983, the breakdown is United States, United Kingdom, Japan, Other European Union (previously EEC), Other OECD and Other Countries. The countries are regrouped according to their date of entries into broad groupings such as the European Union and the OECD. As such, there are breaks in the groupings to the extent that specific countries move between groupings at various times. International organizations are classified by convention in the Other Countries grouping.

There are selected series where a finer geographical breakdown is published: goods, services and direct investment.

21.3.3.3 Historical geographical allocation

Although historical data (1926 to 1983) were cast according to the three groupings, the statistics were originally compiled according to the following groupings:

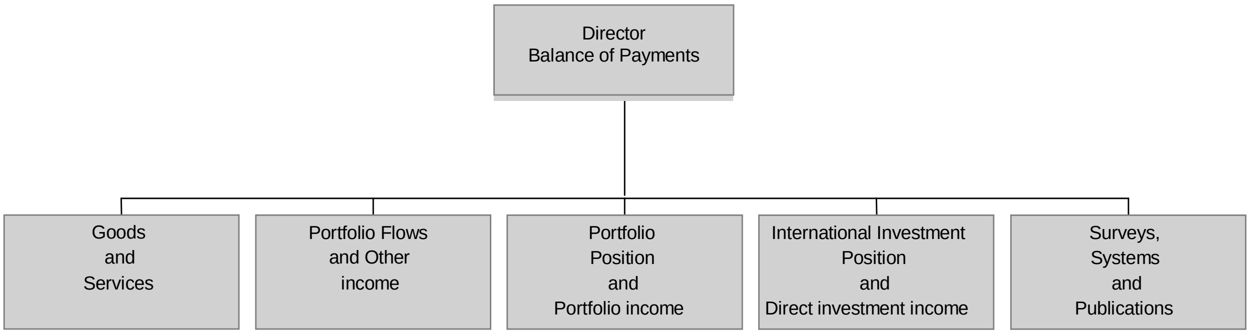
1926–1937:	United States, United Kingdom, Other Countries
1938–1945:	United States, United Kingdom, Other Commonwealth Countries, Other Countries
1946–1972:	United States, United Kingdom, Rest of Sterling Area, Other OECD Countries in Europe, Other Countries
1973 to present:	United States, United Kingdom, Other EEC (EU), Japan, Other OECD, Other Countries.

21.3.4 Industrial classification

The industrial classification currently used is the SIC-C 1980. It will be replaced with the North America Industrial Classification System (NAICS) in coming years.

3. International Monetary Fund, *Balance of Payments Manual*, (Fifth edition, IMF Publication Services, 700 19th Street NW, Washington DC 20431 USA, 1993), paragraph 491, 117.

Figure 21.3
Work organization of the Balance of Payments Division



21.4 Work organization

The statistics on Canada's balance of payments and international investment position are produced and published by the Balance of Payments and Financial Flow Division. The staff directly involved in the production of these statistics amounts currently to about 40 persons (see Figure 21.3 for work organization of the Balance of Payments Division).

The work is highly interdependent. For example, the investment income is generally estimated by the staff involved in deriving positions but is analysed and integrated in the current account.

The statistical activities on balance of payments and international investment position have been carried out since the 1920s, always under the aegis of Statistics Canada (previously known as the Dominion Bureau of Statistics). The lessons learned from the past remain highly relevant in today's operations, where concepts have been clarified and greater use is made of processing systems.

Seminal work on balance of payments began outside the Dominion Bureau of Statistics with Robert H. Coats (the first Dominion Statistician), Jacob Viner and Professor Frank A. Knox. The work at Statistics Canada relating to the balance of payments started in the 1920s under the Internal Trade Branch (along with prices, retail and wholesale trade, and the census of merchandising and services).

During the foreign exchange controls, which extended from September 16, 1939 to late 1950, the responsibility for balance of payments statistics remained with the Dominion Bureau of Statistics, although there was close liaison with the Foreign Exchange Control Board and other government agencies concerned with Canada's financial relations.

By 1943, a special section responsible for the field of balance of payments was established and the new section was shifted to the International Trade Division.

> The staff in the Bureau's International Payments Section at the end of the war consisted of about eight persons on general work plus a group ranging up to 35 at peak periods employed in coding and analysing the returns on international travel.[4]

> In August 1952, the International Trade Division comprised a total staff of 131, including 10 positions involved in balance of payments work.[5]

In 1962, the balance of payments section was shifted from the International Trade Division to become part of the National Accounts and Balance of Payments Division. In mid-1976, it became a division of the System of National Accounts Branch.

> The staff employed in early 1975 totalled 51 persons including about four persons provided for temporary project developments. Most of the increase from 42 persons in 1972 was

4. Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods, (*published under the authority of the Minister of Supply and Services Catalogue no. 67-506E, March 1981), 41.

5. *Ibid.*, 42.

necessitated by rapid growth both in the volume and complexity of transactions.[6]

6. Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods, (*published under the authority of the Minister of Supply and Services Canada Catalogue no. 67-506E, March 1981), 44.

International travel since the 1920s and financial flows, since their formation in 1962, have been closely associated with the balance of payments over the years. International travel is now part of the Culture, Tourism and the Centre for Education Statistics Division, while the Financial Flows Section is part of the Income and Expenditure Accounts Division.

CHAPTER 22
PRODUCTS

The usefulness of the statistical output hinges upon the quality of the data. As noted in the Introduction, data quality embraces relevancy, accuracy, timeliness, coherence, interpretability and accessibility of the data. Parts I and II of this document deal extensively with the various aspects of data quality at the level of the specific accounts of the balance of payments and international investment position statements.

Other aspects of quality at the overall level of the two major statistical statements are covered in the present chapter. A first section covers the timeliness and accessibility of data by providing an overview of the products, their periodicity, the revision policy and how they can be obtained. (Appendix 4, "Accessibility of Products," regroups in one location the various channels of accessibility of data.) A second section focuses on the coherence of the accounts over time, notably the challenges in fitting historical data into current formats. A third section discusses relevancy by focusing on the requirements of supranational organizations of the data described in the present document. The critical role of analysis to ensure relevancy is also discussed in Chapter 23, "Looking Ahead." The interpretability of data is greatly facilitated by setting the data against a background of economic and institutional events that affected the Canadian external sector, as provided in Appendix 3, "Chronology of Events."

22.1 Products

The statistics are released in print and in electronic format (see Appendix 4 for a complete listing).

22.1.1 Overview of regular programs

The statistics described here are used to produce four statistical statements on a regular basis.

Canada's Balance of International Payments presents quarterly data on the current account (receipts, payments and balances, both raw and seasonally adjusted) and the capital and financial account (transactions in assets and liabilities) by geographical region. Some 60 days after the quarter of reference, the data are released electronically in *The Daily,*[1] *Infomat*[2] *and* CANSIM.[3] A few weeks later, the paper publication *Canada's Balance of International Payments* (Catalogue no. 67-001-XBB) and its electronic counterpart (Catalogue no. 67-001-XIB) are available. *The Daily* and *Infomat* provide an analysis as well as quarterly and annual data for the most recent three years at the aggregate level; CANSIM provides full historical quarterly data back to 1951 and full annual data back to 1926; *Canada's Balance of International Payments* (quarterly) provides an analysis of results for the latest quarter, a summary of data sources and data quality as well as quarterly data for the last six years. Historical issues go back to 1926. (Generally, historical data have been published at the time of the first quarter of the current year. The most recent historical issue was published in the first quarter of 1997.)

Canada's International Investment Position presents annual data on Canada's international assets and liabilities by broad geographical area, including a breakdown on direct investment, by industry and by group of countries, as well as Canadian bond and money market liabilities by sector. Some 90 days after the year of reference, the data are released electronically in *The Daily*, *Infomat* and CANSIM, as well as in the annual paper publication *Canada's International Investment Position* (Catalogue no. 67-202-XPB) and its electronic counterpart (Catalogue no. 67-202-XIB). *The Daily* contains an analysis of the most recent year and data for the most recent six years at the total level; CANSIM provides historical detailed annual data back to 1926; *Canada's International Investment Position* provides an analysis of the most recent year, a summary of data sources and data quality, and detailed data for the most recent 10 years, with historical issues (the most recent published in the 1996 issue) going back to 1926.

1. Electronic bulletin of Statistics Canada freely available on Internet.
2. Weekly bulletin of Statistics Canada also available in paper format and for a fee.
3. Electronic database of Statistics Canada available for a fee. For more details on how to access the products, please refer to Appendix 4.

Canada's International Transactions in Securities presents monthly data on

- portfolio transactions in Canadian and foreign stocks and bonds, as well as in Canadian money market instruments by geographical area and by issuing sector (government, government enterprise or private corporation); and
- portfolio transactions by type of transactions (new issue, retirement or trade in outstanding) and for Canadian bonds the change in interest payable.

Some 60 days after the reference month, the data are released electronically in *The Daily*, *Infomat* and CANSIM, and in the monthly paper publication *Canada's International Transactions in Securities* (Catalogue no. 67-002-XPB) and its electronic counterpart (Catalogue no. 67-002-XIB). *The Daily* and *Infomat* provide an analysis of the most recent month and data for the most recent four months at the total level; CANSIM provides the historical detailed data back to 1970; *Canada's International Transactions in Securities* provides an analysis of the most recent month, a summary of data sources and data quality (in the December issue) and detailed data for the 12 most recent years.

Canada's International Transactions in Services presents annual and, beginning in 1997, quarterly data on revenues and expenses for international services, by type of services and by geographical area. Annual data are shown for revenues and expenses of commercial services by country of control and industry of the Canadian transactors and by relationship with foreign clients. Some 180 days after the reference year, the data are released electronically in *The Daily*, *Infomat and* CANSIM, as well as in the annual paper publication *Canada's International Transactions in Services* (Catalogue no. 67-203-XPB) and its electronic counterpart (Catalogue no. 67-203-XIB). *The Daily* and *Infomat* provide an analysis of the most recent year and the last two years of data at the total level; CANSIM provides the historical detailed data back to 1990; *Canada's International Transactions in Services* provides an analysis of the most recent year and a summary of data sources and data quality as well as certain detailed data for the last 10 years. The historical figures most recently published in 1997 extend back to 1961.

The accounts are published in accordance with the revision policy of the Canadian System of National Accounts. Quarterly data for a given year are revised in any quarter of the current year; the data for the previous four years are revised in the first quarter of the year; historical revisions for longer periods are carried out occasionally, usually every five or ten years. Monthly data on securities for a given year are revised in any month during the current quarter of the current year; the revision of data for the quarters and the years follows the same pattern as that of the release of the quarterly balance of payments. Annual data on services and on international investment position follow the same revision pattern of the yearly revision of balance of payments.

22.1.2 Analytical papers

In addition to regular statements, research papers are published from time to time to shed light on selected aspects of the various international accounts. These papers are available free of charge on the Internet (www.statcan.ca/english/services) or for a small fee for a paper version. The following research papers are available to date:

- *Non-corporate Foreign Investment in Canadian Real Estate, 1977–1980* (Teresa M. Omiecinski, 1983)
- *Foreign Investment in the Canadian Bond Market, 1978 to 1990* (Lucie Laliberté, 1990)
- *Characteristics of Canadian Importing Firms, 1978–1986* (Barry Mersereau, 1992)
- *The Statistical Discrepancy in Canada's Balance of Payments, 1962–1991* (Fred Barzyk and Lucie Laliberté, 1992)
- *Canada's Public Debt Held by Non-Residents: Historical Perspectives, 1926–1992* (Lucie Laliberté, Christian Lajule and Diane Thibault, 1993)
- *Globalization and Canada's International Investment Position, 1950–1992* (Lucie Laliberté, 1993)
- *The Foreign Investment of Canadian Trusteed Pension Funds, 1970–1992* (Jean-Pierre Corbeil and Thomas Dufour, 1993)
- *Recent Trends in Canadian Direct Investment Abroad—The Rise of Canadian Multinationals, 1969–1992* (Frank Chow, 1993)

- *Direct Investment Profits—in Canada and Abroad, 1983–1993* (Diane Thibault and Emmanuel Manolikakis, 1994)
- *Development of the Balance of Payments Nomenclature* (Gerard Meagher, 1996)
- *Reconciliation of the Canada–United States Current Account, 1994 and 1995* (Lucie Laliberté and Anthony J. DiLullo, 1996)
- *Measurement of Foreign Portfolio Investment in Canadian Bonds* (Lucie Laliberté and Réjean Tremblay, 1996)
- *Implementation in Canada of the International Standards for Service Trade—On With the Fifth* (Hugh Henderson, 1996)
- *Repo Transactions Between Residents of Canada and Non-residents, 1991–1995* (Éric Boulay, 1997)
- *Canada's International Legal Services, 1995–1996* (Colleen Cardillo, 1997)
- *Canada's International Management Consulting, 1990–1996* (Willa Rea, 1997)
- *Canada's Implementation of BPM-5, 1997* (Statistics Canada, 1997)

22.1.3 Other products

"Canada–United States Current Account Reconciliation" is published in the third quarter issue of *Canada's Balance of International Payments.*

Tables can also be produced to meet specific users' requirements. The following are examples of customized tables:

- Portfolio Investment in Canadian Bonds, by Sector and Currency of Issue
- Portfolio Investment in Canadian Bonds, by Period of Maturity
- Portfolio Investment in Canadian Bonds, by Currency of Issue and by Maturity Date, Year End 1998
- Portfolio Investment in Canadian Bonds, Debt Service Projections by Currency of Issue for 1997 to 2001, Year End 1998
- Canadian Direct Investment Abroad, by Country and Geographical Area
- Canadian Direct Investment in the United States, by Industry
- Canadian Direct Investment in the United Kingdom, by Industry
- Canadian Direct Investment in Other EU Countries, by Industry
- Canadian Direct Investment in Japan and Other OECD Countries, by Industry
- Canadian Direct Investment in All Other Foreign Countries, by Industry
- Canadian Direct Investment in the United States, Contributors to Net Change in Book Value
- Foreign Direct Investment in Canada, by Country and Geographical Area
- Foreign Direct Investment in Canada from the United States, by Industry
- Foreign Direct Investment in Canada from the United Kingdom, by Industry
- Foreign Direct Investment in Canada from Other EU Countries, by Industry
- Foreign Direct Investment in Canada from Japan, by Industry
- Foreign Direct Investment in Canada from Other OECD Countries, by Industry
- Foreign Direct Investment in Canada from All Other Foreign Countries, by Industry
- Foreign Direct Investment in Canada from the United States, Contributors to Net Change in Book Value

22.2 Historical continuity of time series

There is a major trade-off in ensuring historical continuity[4] in the data. While providing a consistent format, a common format applied back in time may distort the historical reality. The requirements to make data comparable throughout time are as follows:

- the format of the statement is identical for current and historical data (usually the most current format is used);

4. A full review of the history of balance of payments and international investment position statistics, is provided in Statistics Canada, *The Canadian Balance of International Payments and International Investment Position, A Description of Sources and Methods (*published under the authority of the Minister of Supply and Services Catalogue no. 67-506E, March 1981).

- the same items from the underlying accounting records are classified under the same captions;
- the accounting principles followed in preparing the statements are not changed (or if they are changed, the changes and their effects are disclosed); and
- a summary of the accounting principles is presented.

These requirements may in turn create major problems of historical interpretation. The statisticians have to be careful not to re-invent history. The circumstances of the country may have changed in substance and the current frame may not be suitable to represent the reality of historical events and transactions. For example, historical data may be presented according to today's trading partners, which may be totally irrelevant for past periods. Commonwealth countries at one time played a preponderant role in Canada's trade, but this is no longer the case. Another example is gold, which was viewed as a monetary asset in earlier days when the gold standard prevailed. In using statistics, it is important that events of the time be kept in mind to assure a fuller understanding of the information (see Appendix 3, "Chronology of Events affecting the external section of the Canadian economy since 1944"). Furthermore, there may be events or transactions that occur in recent years only and that were virtually non-existent in previous years; a notable example is repurchase agreements, a relatively new form of financing.

Notwithstanding these historical constraints, users need comparability of long time series to assist them in interpreting trends and other analytical data. On the basis that consistency and comparability outweigh historical constraints, the statistics on Canada's balance of payments and international investment position were restated into a common format to reflect the international standards of the fifth edition of the International Monetary Fund's *Balance of Payments Manual* and are now available in a common format from the reference year 1926 onwards.[5]

5. For an analytical review of historical data, please refer to Lucie Laliberté, "*Globalization and Canada's International Investment Position, 1950–1992*" (Research Paper no. 6 Balance of Payments Division *www. statcan.ca/english/services. Statistics Canada, 1993,* and Lucie Laliberté, Christian Lajule and Diane Thibault, "*Canada's Public Debt held by Non-residents: Historical Perspectives, 1926–1992 (*Research Paper no.7 Balance of Payments Division *www. statcan.ca/ english/services. Statistics Canada, 1993)*."

22.3 Supranational organization as major users

Most international institutions rely on data to conduct their policies and a significant part of these data is provided by countries. In fact, the need for countries to provide data to international agencies predates the existence of the current institutions.

> Important work has been done in recent years by the Economic and Financial Section of the League of Nations, which has been urging upon governments the importance of compiling and publishing such statements (balance of payments), and has attempted to co-ordinate and standardize balance of payments enquiries. Its three-fold purpose is (1) to have as many countries as possible furnish a statement; (2) to improve and standardize methods; and (3) to make reports easily available.[6]

The quarterly balance of payments data, the annual international investment position and the annual transactions in services data are provided on a on-going basis to the International Monetary Fund (IMF). These data are provided in partial fulfillment of Canada's obligations under the Articles of Agreement of the International Monetary Fund.

> **Section 5. *Furnishing of information***
>
> a) The fund may require members to furnish it with such information as it deems necessary for its activities, including, as the minimum necessary for the effective discharge of the Fund's duties, national data on the following matters...
>
> (vi) international balance of payments, including (1) trade in goods and services, (2) gold transactions, (3) known capital transactions, and (4) other items;
>
> (vii) international investment position, i.e., investments within the territories of the member owned abroad and

6. Canada Dominion Bureau of Statistics, *The Canadian Balance of International Payment: A Study of Methods and Results,* published by Authority of the Hon. W.D. Euler, M.P, Minister of Trade and Commerce, Ottawa, Printer to the King's Most Excellent Majesty, 1939, 13.

investments abroad owned by persons in its territories so far as it is possible to furnish this information.[7]

In 1996, the IMF approved a voluntary code for the dissemination of statistics known as the Special Data Dissemination Standard.[8] Canada was one of the first countries to adopt the standard, which covers both the balance of payments and the international investment position. Recent changes to this standard require countries to provide more detailed data on international reserves and external debt.

7. International Monetary Fund, 1993, Articles of Agreement, April 1993 (Washington).

8. For more information on this standard please see the Data Standards Bulletin Board on the IMF Web site at http://www.imf.org.

The annual transactions in services data and the annual direct investment data are also provided to the Organisation for Economic Co-operation and Development (OECD) and its Development Assistance Committee. The Asia-Pacific Economic Cooperation Organization (APEC) also receives data annually on services and direct investment.

Quarterly summaries and annual details of transactions in cross-border services are provided to the World Trade Organiztion, which also requires fuller statistical requirements, notably for foreign affiliate trade.[9]

9. An exploration of the statistical implications of the WTO’s General Agreement on Trade in Services is found in Hugh Henderson, *A Canadian Perspective of Linking Services Categories of the World Trade Organization and the Balance of Payments Compilers*, (lecture presented at the Tenth Meeting of the International Monetary Fund Committee on Balance of Payments Statistics, Washington, D.C., Statistics Canada, Ottawa, October 1997).

CHAPTER 23
LOOKING AHEAD

Economic statisticians compile still pictures of a continually changing scene. They need to conceptualize the essence of economic activities, search for data sources and devise methods of processing to produce statistics that meet users' needs. The statisticians of Canada's balance of payments and international investment position through the years have succeeded in building a statistical system that is a very valuable corporate asset, as evidenced by the quality of its products. As with any asset, however, it needs to be maintained and further developed. This is especially important with the very rapid changes experienced in recent years in the international economic and financial markets, often referred to as globalization. Since there continue to be very limited statistical resources available, maintenance and development efforts need to be targeted in specific areas and efficient strategies developed.

As an overall assessment, major efforts in recent years focussed on implementing the concepts, improving the processing systems and enhancing the timeliness and scope of products. This chapter identifies areas for further work, suggesting possible implementation strategies. For the sake of presentation, the areas for further work are regrouped under concepts, sources, processing and products, though the areas often encompass more than one category of the statistical process.

23.1 Concepts

Harmonized, well understood and stable concepts are a prerequisite to translating basic economic events into data that are compiled, organized and presented in standardized statistical frameworks. Over the last decade or so, intensive development work was carried out at the international level to clarify concepts, and the resulting standards and conventions were successfully implemented in Canada's external statistics. As described in Chapter 19, "Implementation of International Standards," Canada's practices are largely in conformity with international standards.

The only area of consequence where Canada does not conform to standards is market valuation of direct investment positions. It should be noted that in the overall area of market valuation of positions, Canada made great strides over the last few years. The market valuation of foreign portfolio investment in Canadian bonds and of Canadian portfolio investment in foreign securities was implemented. The market valuation of foreign portfolio investment in Canadian stocks could be implemented in a few years' time, when the database on a stock-by-stock basis becomes available (see section 23.3.2.1). The market valuation of portfolio investment was made possible because of the security-by-security processing system adopted by the Balance of Payments Division. Had a simpler processing system based on aggregated transactions been adopted—as was done by several countries—it would have been very difficult to derive market valuation of securities. This is because each security has it own market value, depending upon its characteristics, such as interest rate, term to maturity, currency and so on. The system in place uses the characteristics of the securities and formulae to generate reliable market prices. Gains in accuracy could be achieved by making greater use of commercial databases where market prices are readily available and to use derived values only when prices are not available from the market.

Unlike portfolio investment, the valuation at market price of direct investment positions presents hurdles that are currently viewed to be serious enough to preclude satisfactory results. Indeed, except for the United States, very few countries have attempted to produce a market valuation of direct investment. One of the difficulties in Canada is that most direct investment is carried out through wholly owned subsidiaries that are not valued at market price. Methods to determine the market value of direct investment present a number of challenges. For instance, methods of price valuation based on assets of the subsidiaries cannot be easily used because very little information is available on the financial statements of direct investment enterprises. Furthermore, these methods do not apply easily to service-oriented firms. Methods of pricing based on future earning models depend upon assumptions and forecast on interest rates and yields, areas where statisticians have generally little expertise. Furthermore, the market valuation results will differ significantly depending upon the methods selected and there is currently no consensus among statisticians as to the most appropriate valuation method. This is why, for the time being, the market valuation of direct investment is not considered an area of high priority in Canada. However, the monitoring of research developments by other countries will continue to be pursued with a view to adopting models that result in stable products.

23.2 Data sources

The Balance of Payments Division has a tradition of conducting its own surveys (dating back to the early 1930s). The surveys are specifically targeted to collect information on the external sector of the economy (see chapter 20, “Data Sources”). Conducting surveys brings a major responsibility to ensure that both the coverage and the content of the questionnaires are continuously reassessed. This is especially important with the rapidly changing economic reality of recent years, notably in financial markets. If data sources are no longer representative, they result in inaccurate data that distort reality and may mislead analysts and policy makers. In addition to the various means currently used to keep updating its survey coverage, the Division must keep unearthing and exploiting new data sources to confront and supplement the survey results.

There are five areas where additional data sources could be further exploited: electronic trade, other Statistics Canada surveys, tax data, partner countries data and new data on foreign affiliate trade.

23.2.1 Electronic trade

Electronic trade across the border by businesses is not a new phenomenon. In the existing statistics, goods that are traded, either by businesses or by persons, will be captured by customs documentation. To the extent that persons conduct electronic trade in goods, such as ordering books, this trade would be captured from customs documentation or from the balance of payments adjustment on mail order (the latter estimate, which is referred to in Chapter 3, “Goods,” would need to be updated). As for trade in services, sales and purchases of business are captured in surveys of cross-border activities. What is not captured, however, is the recent ‘virtual explosion’ in electronic trade by persons over the last few years. More specifically, the trade in services and financial transactions with non-residents by individuals is not currently captured by the current statistical system of the Canadian balance of payments. Such trade may become important following the spectacular growth of international advertising and Internet usage. The delivery for such trade could be online and/or by consumers moving across the border. Ways to measure such trade will have to be found in the very near future. For example, this may be done by using surveys of Canadian household consumers or estimating such trade from studies of businesses involved in electronic trade with final consumers.

23.2.2 Business data from other areas of Statistics Canada

Major developments are underway at Statistics Canada with the Project to Improve Provincial Economic Statistics (PIPES). There are at least three areas that can be used to improve the estimates for balance of payments and international investment position purposes: the business register, the unified enterprise survey and the media database.

There is currently a project to link the balance of payments survey frame (as described in Chapter 20, “Data Sources”) with the central business register of Statistics Canada. The link to the business register will provide a wealth of information on survey respondents, such as their intercorporate ownership structure, industrial coding, business number, gross revenues and so on. It will also facilitate the conversion of the industrial coding of the balance of payments business frame from the existing Standard Industrial Classification (SIC-C) to the North American Industry Classification System (NAICS). The latter coding will enable a better integration with the domestic series that are being converted to NAICS and will greatly facilitate comparisons with U.S. and Mexican statistics as these two countries adopt the NAICS classification.

The balance of payments statisticians can also take advantage of results from Statistics Canada’s Unified Enterprise Survey (UES). This survey started covering selected industries for reference year 1997, with plans to extend it to all industries in the business sector of the economy during the next several years. There are questions in the general UES that would help identify companies transacting with non-residents. In cases where the information provided on the UES is not sufficient to build estimates, it could at least be used to improve the coverage of the balance of payments surveys.

There is currently a project in the System of National Accounts to process electronic information from the financial press for PIPES purposes. The software that is being developed to process provincial information could easily be modified to process news on international transactions. This source could supplement and eventually replace the printed information (for example, newspapers) currently used for the economic intelligence system SERIE (see Chapter 12, “Direct Investment Flows”) of the Balance of Payments Division.

23.2.3 Tax data

A significant component of Canada’s external accounts is compiled directly from administrative data, such as customs data and the number of international travelers crossing the border. From time to time, tax data have also been used in benchmark studies. There are at least three areas where tax data could be further exploited: forms related to foreign affiliates, General Index of Financial Information (GIFI), and the Goods and Services Tax (GST).

Canada Customs and Revenue Agency has introduced over the last few years new administrative forms that should help in improving the coverage of Canadian investment abroad. The forms T1134A (Information Return Relating to Foreign Affiliates Not Controlled) and T1134B (Information Return Relating to Controlled Foreign Affiliates) request details on Canadian holdings in foreign countries, including names of foreign affiliates and selected financial information. The contents of that information should be very useful to audit the coverage and value of direct and portfolio investment abroad.

GIFI contains an extensive list of financial statement items that are filed by Canadian corporations. There are a number of items related to the external accounts such as “Due to foreign-related parties,” “Shares in foreign-related corporations,” “Loans, advances to foreign-related corporations,” and “Royalties expenses—non-resident” (amounts reported as non-resource royalties paid to non-residents, such as copyrights, movies, patents, performing rights and trademarks). This source of information could be used to fill survey data gaps.

GST data have been used in the past to assist in identifying exports of services. This should be pursued. For instance, if an enterprise exports services, the ratio of its GST to sales will be lower than if it sells solely into the domestic market (GST does not apply to exports among other exemptions).

23.2.4 Partner countries’ data

For a number of years, Canada has been using foreign sources to build up some external accounts, notably foreign banks’ data on deposits abroad by the Canadian non-bank sector and the Canada–United States current account reconciliation (see Chapter 20, “Data Sources”). This should be actively pursued as foreign data generally contain a wealth of information at a relatively low cost, considering that such transactions may not be readily available from Canadian domestic sources.

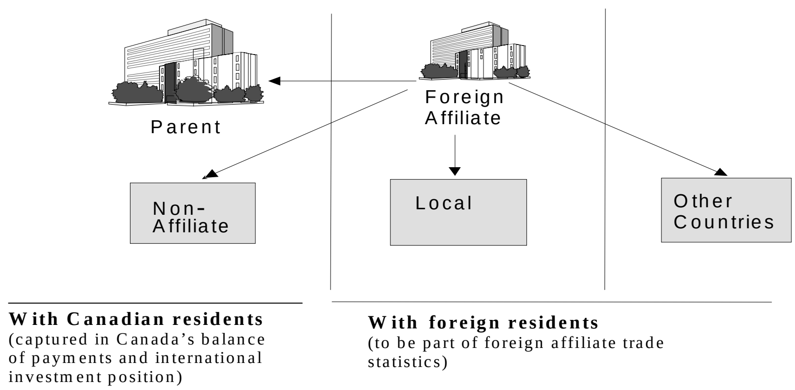
The reconciliation with the United States, now conducted at the current account level, could be extended to the capital and financial account and to the international investment position. Significant progress has been made in that direction through comparisons of the investment income where yields and positions were reconciled. There would be major gains in data quality pursuing these areas, especially for direct investment.

Reconciliation work is generally a very resource-intensive exercise. Therefore, for countries other than the United States, only the important accounts could be targeted. This could be done by making greater use of, for example, international databases, such as the OECD bilateral data on direct investment, to help identify Canada’s major investors.

23.2.5 Foreign affiliate trade

The Balance of Payments Division is currently developing additional statistics on foreign affiliates of Canadian companies starting with the reference year 1999. These statistics, which are beyond the traditional framework of balance of payments as they include transactions of non-residents with other non-residents, are developed through the expansion of the statistical system already in place for balance of payments purposes. Figure 23.1 provides a graphic view to illustrate the statistics. Following is a brief overview on the rationale for such statistics as well as

Figure 23.1
Operations of the foreign affiliate[1]



1. Adapted from Colleen Cardillo, *Measuring Foreign Sales of Canadian Firms*, (unpublished document, Statistic Canada, 1997).

on the framework that will be used.

First, these statistics should provide a more encompassing measure of Canada's trade, notably transactions in services. Services represent a predominant proportion of Canada's domestic production, easily surpassing goods and it often comes as a surprise to users that in international trade, the relationship is reverse with goods representing most of trade. Part of the explanation is that service transactions generally require the simultaneous presence of both the producer and the consumer of the service, a condition difficult to meet when the two transactors are located in different economies. This is why services producing entities are likely to establish operations abroad (a foreign presence) when they want to expand into foreign markets.

Second, statistics on foreign affiliates will also shed more light on the various aspects of Canadian direct investment abroad (CDIA). Over the last 10 years there has been a rapid growth in CDIA, which now surpasses foreign direct investment in Canada. This is a dramatic shift given the historical predominance of foreign direct investment in the Canadian economy. This shift has created a need by policy makers for a better understanding of the operations of foreign affiliates of Canadian companies.

In the short run, the principal demands for information centre on baseline information to support trade negotiations, particularly information on the links between direct investment and international trade. In the longer term, more profound issues will have to be addressed, such as what variables affect the international decisions of multinationals, and how these decisions affect national prospects for growth, productivity and, ultimately, employment.

In terms of coverage, the statistics will be produced for foreign entities that are 50% or more owned (majority-owned foreign affiliates) by Canadian companies. This should cover most of the foreign entities since Canadian direct investment abroad is largely conducted through wholly owned subsidiaries and branches.

The existing survey for Canadian direct investment abroad is being extended to request more details from the Canadian companies with majority-owned foreign affiliates. For each majority-owned foreign affiliate (MOFA), the focus will be on the following items:

- the sales of goods and services by the foreign affiliates;
- the destination of the sales of the foreign affiliates—local markets, exports to a third country or exports to the 'home' country;

- the employment of the foreign affiliates; and
- the financial and operating performance of the foreign affiliates.

It is expected that some preliminary results will be available in the year 2000. By 2001, more comprehensive data on the operations of MOFAs should be available beginning with the reference year 1999.

The counterpart of such statistics—that is, details on foreign direct investment in Canada by foreign-owned enterprises—is largely captured in existing surveys of domestic production activities. However, the current information is not compiled by Canadian-controlled and by foreign-controlled enterprises. Such compilation would be done by using the business register of Statistics Canada, which provides the intercorporate ownership among the various business entities in Canada and the link between a legal entity and its establishments, the units used for production surveys. The timing to derive such data remains to be established.

23.3 Methods

In the last decade, major efforts were deployed to re-engineer the computer systems of the Balance of Payments Division in two areas: the time series for all the accounts (FAME), and the relational database for portfolio investment (BP-2000). With major investments recently made in advanced systems, efforts should be made to further exploit these systems.

23.3.1 Time series FAME system

In the area of time series, the development work in recent years consisted in ensuring coherence in time and consistency among accounts in FAME. The system is extensively used for publication purposes, but it could be used for further analytical purposes if the nomenclature of the accounts were refined to reflect the multiple characteristics associated with each series.

23.3.1.1 Operational nomenclature

Developmental work[1] has been carried out, but has not yet been implemented, to code each series according to 14 attributes. This work is briefly illustrated here. For example, the series D21IN6.U.S., foreign direct investment into Canadian corporations from the United States, coded as F.STK##.U.S.A.A.IN.C####..ALL#..L..L, would translate into the following: a flow, of stocks, from U.S., affiliated companies, into Canadian, corporations, all industries, unknown investment type, all currencies, in an unknown province, increasing liabilities, from an unknown country of control, from an unknown province of control, of long-term maturity.

The analysts would not be expected to memorize such names, nor even the positions or their meanings. Instead, aggregate series names (dubbed aliases such as D21IN6.U.S.) would be used to maintain but still hide all of the aspects of an account and present a more coherent, logical view to the user. The attribute coding of the series was not implemented at the time of writing and only the aliases are used to identify the series. In the future, more of the data will be loaded directly from the microdata systems, which will in turn facilitate the coding of series by their attributes. The attribute coding of each series will allow the user to find such things as all of the transactions in a particular currency, industry and so on.

23.3.1.2 Positions, flows and investment income links

The system could be further used by operationalizing the series links between the flows and positions as well as those between the investment income and the positions. Programs were written to link these series, but the results are yet to be used on an ongoing basis to audit and analyze the relationship among flows, positions and investment income.

23.3.2 Portfolio system (BP-2000)

In portfolio investment, recent developments consisted in adopting a data model where the various aspects of the transactors (both residents and non-residents) and the securities traded were identified, processed and stored in one location (BP-2000). The system processes foreign portfolio investment in Canadian bonds and will soon include money market instruments held by non-residents on a security-by-security basis (see Chapter 13, “Portfolio Investment Flows”). Its scope should be expanded to cover foreign investment in Canadian stocks, Canadian investment in foreign securities and, ultimately, to handle all portfolio investment in Canada.

1. For more details, please refer to Meagher, Gerard, *Development of the Balance of Payments Nomenclature* (Research paper no. 10, http://www.statcan.ca/english/services, Statistics Canada, 1996).

23.3.2.1 Foreign investment in Canadian stock

The data on Canadian stock could be obtained from the Canadian public companies (that is, Canadian companies whose shares trade on the stock exchanges) to obtain the list of their ultimate shareholders, including addresses and the types of securities, as well as the amount held; this request would likely involve the companies' transfer agents as the companies do not necessarily maintain such lists. The U.K. statisticians conducted extensive research in that area and their experience could be used as a starting point. Once established, this benchmark position could be subsequently updated using the monthly data on security trading, which is collected on a security-by-security basis on Canada's International Transactions in Securities—BP-30. Benchmark positions should be re-established from time to time.

Another source would be used to improve the geographical allocation of Canadian portfolio stock and bonds held by non-residents. As explained in Chapter 17, "Portfolio Investment Position," the International Monetary Fund compiled the results for all participating countries of the co-ordinated portfolio survey on investment for the reference year 1997. This provides a new data source to identify the foreign portfolio holders of Canadian bonds and stock, which in turn could be used to enhance the geographical breakdown of Canada's portfolio liability. The importance of this source of information should grow over time given the increasing mobility of capital across borders.

23.3.2.2 Canadian investment in foreign securities

Another avenue for expanding contents of the portfolio data lies with integrating the survey results on transactions and the survey results on positions of Canadian portfolio investment in foreign securities (see Chapter 17, "Portfolio Investment Position"). These two sources are currently processed and used independently of one another.

23.3.2.3 An all-encompassing domestic and foreign portfolio investment

Lastly, the system to process portfolio investment with non-residents could be extended to cover all portfolio transactions and positions with both residents and non-residents. This means further integration of the government securities data, as compiled by the Public Institutions Division, and of corporation securities. The integration is already underway and should be actively pursued. Such a database could be used for financial flows purposes and for the derivation of investment income and the calculation of market valuation (including valuation changes) for the Canadian System of National Accounts purposes.

23.4 Products

Over the last decade, the focus has been to increase the accuracy, frequency, scope, detail and timeliness of the published data and, with the present document, to provide users with a complete description of the infrastructure used to compile the data. The main objective yet to be addressed is the enhancement of data analysis. Analysis is an integral part of the statistical process and needs to be pursued on four fronts: ongoing description of the statistical infrastructure; data developments to improve the statistics; data analysis for information purposes; and identification of emerging issues to assist decision makers from both the public and private sectors.

23.4.1 Ongoing description of the statistical infrastructure

As described in the present document, data are the end products of complex statistical processes. The description of the concepts, methods and processes that are the foundation of statistics is often referred to as 'metadata.' In this age of information, metadata is becoming increasingly important for users who are faced with a plethora of statistics and who need to assess the credibility of data by knowing by whom and how the data have been compiled.

However, the description of the data infrastructure has been generally handled outside the data production cycle and, as such, requires a substantial effort from experienced staff. This will become increasingly difficult to achieve because of the much higher rotation of staff than in the past and the increasing complexity of the subject matter and of the underlying statistical infrastructure. The failure to maintain descriptive documentation may lead to a loss of institutional memory; difficulties in adapting the systems and procedures to emerging problems; inability to explain the rationale for selection of methods, which in turn results in a inadequate understanding of processes; and the dissemination of partial metadata information, which may not be consistent over time and among components.

Measures need to be taken to integrate the management of the metadata into the day-to-day operations of the division. The metadata should be centralized in one location in the same way as the Division now centralizes time series in FAME. The present document could be used as the basis of a central repository and be updated when changes are made to standards, conventions, processing systems, data sources and data products. This centralized documentation could also be fed electronically to other systems requiring information on metadata, ensuring that changes made in one place are propagated automatically through hyperlinks. For instance, the central documentation should be fed into the data sources and data quality sections of the various publications of the division. From time to time, important changes in the metadata of specific or several accounts could be published in the form of serial papers. With the electronic age, such serialization is much easier to achieve than in the past when serialization was difficult to manage because of problems of duplication, delays, lack of articulation, obsolence, omissions and inconsistencies. These pitfalls can now be mitigated with an efficient use of informatics.

The central divisional documentation could also update the inventory of surveys and the inventory of the products and services maintained as part of the corporate inventory of Statistics Canada. It could also be used to feed the descriptive part of data (metadata) of CANSIM II, the successor of CANSIM, which will provide users with data and metadata, as well as software to manipulate the data. With such an approach, the flexibility offered by the divisional program is maintained without losing the benefits of coordination at the corporate level.

23.4.2 Data developments

The rapid market developments of recent years at the international level have meant the entry of new market participants and the creation of new instruments to conduct cross-border transactions. Such developments may not always be captured by the existing statistical system, especially if they are conducted through new channels. An innovative approach is needed to incorporate these transactions in the accounts. Derivative contracts represent an example of complex and relatively new transactions that are not fully reflected in the Canadian external statistics. However, the experience of other countries shows that derivatives transactions are not material for financial transactions as a whole, and the resulting accounts are difficult to interpret.

There is, however, a great demand by users who perceive the impact of these transactions to be significant, as they often mistake the underlying value of the contracts with the transactions themselves. Because of their importance to users, estimates are needed for derivative activities. This does not necessarily mean conducting a survey. Rather, studies could be carried out to assemble available information such as the survey on derivatives conducted by the Bank of Canada under the aegis of the Bank of International Settlements and the annual reports of Canadian banks. The studies should also take into account derivative contracts of Canadian bond issuers in foreign currencies (who are likely to hedge their foreign currency exposure) and the experience of other countries (for example, Australian Bureau of Statistics and the Bank of England). In other words, a data development study could attempt to create a picture of this market. While pieces would be missing or overlapping, the study would still provide some preliminary estimates that could be integrated into the balance of payments. The study results would prepare the way for eventually conducting a survey, if and when warranted.

In addition to identifying gaps, data development also encompasses eliminating overlaps that may arise from using multiple sources. Such sources are often processed in different systems that work independently from one another. Furthermore, the more complex the systems, the more they may monopolize existing resources, leaving insufficient time to audit the results. In fact, complex systems tend to foster mechanistic and rigid processing of transactions, which in turn hampers the incorporation of new developments. An instance of potential overlap in the balance of payments is that of security trading of banks. In recent years, as a result of deregulation, banks purchased brokerage firms. The latter firms report on the BP-30 survey their own trading as well as those of their clients. It has not been determined whether the survey reports now include the security trading of banks. This should be investigated to avoid duplication since the banks' trading in securities is already reported as part of the banks' balance sheet.

23.4.3 Descriptive Analysis

Once the data are produced, they need to be further analysed to provide information on new developments and how and why they occurred. The development of an analytical framework presupposes a good knowledge of the various economic theories and an understanding of the functioning of the market. Theories help in explaining existing observations, delineating the causes and effects of changes, and making sense of the mass of observations provided by the statistics. As the circumstances change, so do the variables needed to explain developments. This is especially critical in a period of rapid economic change, as is the case with the globalization of the Canadian economy. Canada's external developments used to affect a relatively small number of Canadian businesses. This is no longer the case as external developments affect virtually all businesses and consumers in Canada. This means that the analysis can no longer be limited to the external accounts but also needs to encompass the impact on the domestic accounts. While much has been achieved in terms of analysis (as described in Chapter 21, "Products"), further work is required. The ultimate purpose of analysis is to explain the functioning of the economy.

23.4.4 Analysis of emerging trends

Identifying emerging issues—that is, issues that matter for decision-makers—is essential for gearing the statistical apparatus to focus on these issues. As is the case for the descriptive analysis, emerging issues need to be set within analytical frameworks. This should assist in selecting a coherent and economical set of key variables that can be measured to provide a firm basis to conduct empirical work on these theories.

In recent years, the deregulation[2] and technological improvements in communication and transportation resulted in an increasing role for the market economy and a greater influence from external events on the domestic economy. This, in turn, widened the targeted range of decision-makers from predominantly policy makers to businesses, research institutions, academics and informed individuals; and from largely Canadian decision-makers to decision makers outside the Canadian economy as their influence on the Canadian economy increased dramatically. Decision makers need access to much more detailed data than those set out by the existing standards on external accounts and it is essential that the scope and detail of statistics be extended to meet these new requirements. For instance, direct investment and portfolio investment constitute two areas where more information needs to be provided. Direct investment is the channel used by multinationals to set up operations in another country. In carrying out their productive activities in other countries, multinationals are major employers and users of technology, and it is important to understand the driving forces behind their activities. Issues surrounding their comparative advantage, such as the content of the international capital and industrial composition, are important in assessing their impact on the economy.

Portfolio investment largely represents the channeling of the savings of the personal sector. Foreign portfolio investment in Canada constitutes a major source of financing for both Canadian businesses and governments, hence its importance to fuel investment, a major engine of production growth. Conversely, Canadian portfolio investment abroad largely represents deferred consumption for retirement purposes and it is important to monitor the structure and evolution of such Canadian saving, especially with the aging Canadian population.

23.4.5 Management of analysis

A high priority has to be given to analysis, as it is the driving force behind any statistical product. Organizationally, statistical programs are delivered at the divisional level at Statistics Canada. Such a specialized approach at the divisional level has many advantages, such as fostering an intimate understanding of the relationship between the statistics and economic and institutional developments; enabling flexibility in adapting sources and methods that are specific to the data needs; providing quick responses to changing circumstances; maintaining institutional memory; and facilitating the identification of relevant data sources.

However, it has some pitfalls for analysis, notably descriptive and emerging issues analysis where there is no sufficient time left following the production of the data. The analysis suffers even further when it encompasses variables beyond those produced by the divisional programs. Because of these major constraints at the divisional level, Statistics Canada recently put in place initiatives to enhance the management of analytical activities and to integrate

2. See Appendix 3, "Chronology of Events Affecting the External Sector of the Canadian Economy Since 1950."

analysis among programs. The Balance of Payments Division should actively participate in these initiatives, especially given the ubiquitous impact of globalization on the Canadian economy.

23.5 Conclusion

Good quality statistics reflect the knowledge, skill, ingenuity and judgment of statisticians. These attributes are essential for the statistician in performing the full gamut of statistical activities, from the identification of data sources to providing analytical output, that are useful to users. First, the statisticians need to master the conceptual and statistical framework to be in a position to identify relevant data sources and integrate them into the existing processing systems according to the underlying concepts. The identification of data sources requires the statistician to keep informed of new developments. In obtaining data sources, the statisticians have to be sensitive to the burden they may impose on respondents through surveys and they should use ingenuity in tapping alternative sources to the extent possible, such as administrative data and other indicators. Second, they have to keep aware of new software technology to incorporate it into their processing systems so as to become more efficient. Third, they have to know economics, accounting, and finance to fully understand the intricacies and dynamism of the transactions to be measured and to have a good knowledge of the evolving institutional and political context in which the transactions occur. Fourth, they also have to keep aware of existing and upcoming users' needs and to exercise judgement in focusing their limited resources on products that meet these needs. Fifth, after having assembled their source material, the statisticians have to exercise a great deal of professional judgement in translating these imperfect and partial data sources into meaningful statistics. Finally, they need analytical skill in using economy theories to transform these statistics into information that is useful to users.

Efforts in assembling the pieces of a statistical process from concepts to analysis of products are well worth the outcomes. As George Jaszi lyrically described for the System of National Accounts, there is a sense of beauty in the results of an economic statistical system and this equally applies to the external accounts:

> The overview that emerges makes the system an unrivalled tool for macro-economic analysis…. The overview has always been to me a thing of beauty, much like the view from a plane. The landscape can be seen in its correct proportions: mountains and hills and plains, bare or covered by vegetation; rivers winding through them; factories and farms, with wheat fields and herds of cattle here and there.[3]

3. G. Jaszi, *An Economic Accountant's Audit,* (lecture on Economics in Government, American Economic Review, Papers and Proceedings of the ninety-eigth Annual Meeting of the American Economic Association, New York, December 28-30, 1985, vol. 76 no. 5).

Appendices

Appendix 1
Questionnaires[1] of the Balance of Payments Division

List of BOP Questionnaires	SDDS[2]	Frequency	Title
BP-11	1501	Monthly	Gold and silver transactions, assets and liabilities
BP-17	1533	Annual	International transactions between insurance brokers in Canada and their foreign affiliates, agents, and other companies or persons outside Canada
BP-20	1505	Annual	Great Lakes – St. Lawrence seaway shipping transactions
BP-21	1506	Annual	Transactions between Canada and other countries
BP-21A	1507	Quarterly	Transactions between Canada and other countries
BP-21S	1533	Annual	International transactions in commercial services
BP-21SQ	1533	Quarterly	International transactions in commercial services
BP-22	1510	Annual	Investment in Canada by non-Canadian corporations
BP-22A	1511	Quarterly	Investment in Canada by non-Canadian corporations
BP-24	1513	Annual	Report of cargo, earnings and expenses of ocean vessels operated by non-resident companies
BP-25	1514	Annual	Report of cargo, earnings and expenses of ocean vessels operated by Canadian companies
BP-26	1515	Annual	Report on imports of crude petroleum and petroleum products and other shipping operations
BP-27	1516	Annual	Transactions between Canadian incorporated insurance companies and their foreign affiliates, agencies and bank accounts and other companies or persons outside Canada
BP-28	1517	Annual	Transactions between Canadian branches of foreign insurance companies in Canada and head or other offices, companies or persons outside Canada
BP-29	1518	Annual	Report by trust and mortgage loan companies in Canada on transactions with non-residents
BP-30	1519	Monthly	Canada’s international transactions in securities
BP-30Q	1519	Quarterly	Canada’s international transactions in securities
BP-30A	1519	Monthly	Sales of short-term securities to non-residents of Canada
BP-30B	1519	Monthly	Purchases of short-term securities from non-residents of Canada

1. These questionnaires are available electronically at www.statcan.ca
2. Identifier from the Survey Data Documentation System (SDDS) which provides documentation on all Statistics Canada surveys.

List of BOP Questionnaires	**SDDS[2]**	**Frequency**	**Title**
BP-31	1520	Quarterly	Futures trading with non-residents
BP-52	1522	Annual	Geographical distribution of capital
BP-53	1523	Annual	Structure of Canadian companies in the reporting enterprise
BP-54 (electronic format only)	1538	Annual	Canadian portfolio investment
BP-55	1525	Annual	Particulars of selected issues of funded debt and foreign bank borrowings
BP-56	1526	Annual	Geographical distribution of selected long-term debt booked in Canada at Canadian banks and consolidated Canadian subsidiaries
BP-58	1528	Annual	Transactions of foreign airlines with residents of Canada
BP-59	1529	Annual	Capital invested abroad by Canadian enterprises
BP-59S	1530	Annual	Capital invested in secondary foreign companies by Canadian enterprises
BP-60	1531	Annual	Canadian investment in non-Canadian corporations
BP-61	1532	Annual	Investment in Canada of non-Canadian partnerships

2. Identifier from the Survey Data Documentation System (SDDS) which provides documentation on all Statistics Canada surveys.

Appendix 2
Historical Statistics

Table 1
Balance of Payments, All Countries - Annual

				Capital and Financial Accounts							Statistical Discrepancy
	Current Account			Capital Account			Financial Account			Total	
Year	Receipts	Payments	Balance	Inflows	Outflows	Net	Assets	Liabilities	Net		
D No.	*58000*	*58016*	*58032*	*58814*	*58815*	*58049*	*58051*	*58061*	*58050*	*58048*	*58071*
						millions of dollars					
1926	1,650	1,522	128	15	-16	-1	..	..	..	..	..
1927	1,618	1,629	-11	15	-14	1	-119	142	23	24	-13
1928	1,773	1,808	-35	15	-12	3	-18	60	42	45	-10
1929	1,632	1,945	-313	14	-12	2	94	243	337	339	-26
1930	1,286	1,625	-339	11	-9	2	-44	375	331	333	6
1931	967	1,142	-175	5	-4	1	95	78	173	174	1
1932	804	901	-97	4	-3	1	42	32	74	75	22
1933	831	833	-2	3	-3	-	2	-9	-7	-7	9
1934	1,024	954	70	2	-4	-2	-62	-52	-114	-116	46
1935	1,150	1,024	126	2	-3	-1	-32	-121	-153	-154	28
1936	1,437	1,192	245	2	-3	-1	-32	-202	-234	-235	-10
1937	1,601	1,419	182	3	-5	-2	-59	-110	-169	-171	-11
1938	1,366	1,267	99	5	-5	-	-47	-58	-105	-105	6
1939	1,461	1,338	123	10	-5	5	-34	-104	-138	-133	10
1950	4,227	4,542	-315	57	-61	-4	-576	794	218	214	101
1951	5,126	5,645	-519	77	-70	7	-17	467	450	457	62
1952	5,643	5,447	196	85	-94	-9	-242	444	202	193	-389
1953	5,456	5,899	-443	91	-96	-5	-26	640	614	609	-166
1954	5,217	5,631	-414	89	-99	-10	-241	735	494	484	-70
1955	5,840	6,497	-657	86	-116	-30	114	543	657	627	30
1956	6,445	7,785	-1,340	99	-131	-32	-307	1,655	1,348	1,316	24
1957	6,488	7,906	-1,418	124	-157	-33	-199	1,408	1,209	1,176	242
1958	6,403	7,478	-1,075	97	-159	-62	-176	1,202	1,026	964	111
1959	6,778	8,209	-1,431	109	-165	-56	-194	1,364	1,170	1,114	317
1960	7,113	8,264	-1,151	102	-184	-82	-69	1,201	1,132	1,050	101
1961	7,784	8,898	-1,114	104	-176	-72	-255	1,241	986	914	200
1962	8,514	9,664	-1,151	124	-175	-51	-442	1,770	1,328	1,278	-127
1963	9,342	10,249	-907	151	-185	-34	-625	1,488	863	829	79
1964	10,895	11,384	-490	169	-201	-33	-1,359	1,731	372	339	151
1965	11,629	13,416	-1,787	216	-211	5	59	1,941	2,000	2,004	-218
1966	13,583	15,285	-1,702	268	-198	70	-478	2,300	1,822	1,892	-190
1967	15,171	16,552	-1,381	329	-213	116	-1,196	2,919	1,723	1,840	-459
1968	17,363	18,422	-1,058	370	-209	161	-2,042	3,688	1,646	1,807	-748
1969	19,372	21,467	-2,095	366	-204	162	-3,720	5,855	2,135	2,297	-202
1970	22,436	21,942	494	389	-199	190	-4,449	3,944	-504	-314	-180
1971	23,167	24,214	-1,046	432	-185	248	-1,888	3,993	2,105	2,352	-1,306
1972	25,428	27,813	-2,385	443	-162	281	-2,216	5,769	3,553	3,834	-1,449
1973	32,999	35,054	-2,055	521	-176	345	-5,988	8,448	2,460	2,805	-750
1974	42,098	46,573	-4,475	701	-163	538	-3,209	8,016	4,808	5,346	-871
1975	43,038	51,357	-8,319	665	-170	495	-1,954	10,354	8,400	8,895	-575
1976	48,067	55,611	-7,544	727	-204	522	-6,303	16,311	10,008	10,531	-2,987
1977	56,058	63,465	-7,407	690	-235	456	-4,356	12,841	8,485	8,941	-1,534
1978	66,872	76,222	-9,350	616	-484	132	-10,021	21,603	11,582	11,714	-2,365
1979	84,918	94,750	-9,832	799	-255	544	-12,064	22,697	10,633	11,177	-1,345
1980	98,419	105,540	-7,120	646	-150	496	-21,411	27,894	6,483	6,979	142
1981	108,933	123,927	-14,994	789	-157	632	-22,459	41,250	18,791	19,423	-4,429
1982	112,362	110,060	2,302	1,737	-179	1,559	-9,656	8,070	-1,586	-28	-2,274
1983	115,409	118,541	-3,132	1,529	-191	1,338	-9,973	15,141	5,168	6,506	-3,373
1984	143,435	145,109	-1,673	1,566	-194	1,373	-12,633	20,228	7,594	8,967	-7,294
1985	151,338	159,166	-7,828	1,759	-304	1,455	-7,352	19,556	12,204	13,659	-5,831
1986	155,323	170,836	-15,514	2,153	-331	1,822	-20,153	35,746	15,593	17,416	-1,902
1987	162,736	180,542	-17,806	4,078	-361	3,717	-17,716	34,868	17,152	20,869	-3,063
1988	181,791	200,120	-18,328	5,311	-491	4,820	-17,602	30,599	12,997	17,817	511
1989	186,279	212,091	-25,812	6,033	-552	5,481	-19,745	41,882	22,137	27,617	-1,806
1990	194,972	218,107	-23,135	7,229	-1,026	6,203	-19,699	38,664	18,965	25,167	-2,032
1991	188,719	214,348	-25,629	6,951	-541	6,410	-15,128	34,509	19,381	25,791	-162
1992	205,455	230,815	-25,360	9,013	-439	8,574	-14,411	27,727	13,316	21,890	3,470
1993	235,576	263,670	-28,093	11,498	-794	10,704	-26,943	50,706	23,763	34,467	-6,374
1994	285,601	303,331	-17,730	10,758	-516	10,241	-49,029	56,550	7,520	17,762	-32
1995	330,978	337,078	-6,099	7,766	-982	6,784	-38,394	32,905	-5,489	1,294	4,805
1996	350,700	346,170	4,530	8,542	-569	7,973	-72,988	53,223	-19,765	-11,792	7,262
1997	378,789	393,054	-14,264	8,107	-566	7,541	-60,334	70,884	10,550	18,091	-3,827
1998	403,629	420,014	-16,385	5,617	-641	4,976	-51,077	60,537	9,460	14,436	1,948
1999	446,424	450,763	-4,339	5,774	-683	5,091	-39,901	26,590	-13,310	-8,220	12,559

Table 2
International Investment Position with All Countries

	Assets										
	Canadian direct investment abroad[1]	Portfolio investment			Other investment						Total
		Foreign bonds	Foreign stocks	Total	Loans and Allowances		Deposits[3]	Official international reserves	Other assets[4]	Total	
Year					Loans[2]	Allowances					
D no.	65201	65202	65203	58096	65206	65210	65207	65205	65209	58097	65200
	millions of dollars										
1926	397	242	251	493	36	-	370	-	-	406	1,296
1930	443	311	478	789	31	-	180	-	-	211	1,443
1933	467	300	534	834	31	-	91	-	-	122	1,423
1939	671	208	511	719	31	-	-	459	-	490	1,880
1945	720	167	454	621	707	-31	149	1,695	155	2,675	4,016
1946	767	159	392	551	1,362	-31	126	1,262	199	2,918	4,236
1947	822	153	426	579	1,816	-31	127	594	246	2,752	4,153
1948	788	156	449	605	1,884	-31	128	1,086	275	3,342	4,735
1949	926	161	477	638	2,019	-31	132	1,317	301	3,738	5,302
1950	1,043	150	448	598	2,000	-31	131	1,955	304	4,359	6,000
1951	1,228	142	467	609	1,932	-89	136	1,923	290	4,193	6,030
1952	1,333	161	669	830	1,876	-89	322	1,881	343	4,334	6,497
1953	1,556	179	690	869	1,788	-89	392	1,852	327	4,270	6,696
1954	1,706	203	723	926	1,717	-89	464	1,960	351	4,404	7,036
1955	1,835	224	767	991	1,646	-89	443	1,983	396	4,380	7,206
1956	1,992	221	785	1,006	1,609	-89	620	1,952	491	4,583	7,582
1957	2,184	257	811	1,068	1,570	-89	916	1,895	452	4,745	7,997
1958	2,264	250	868	1,118	1,544	-89	954	1,965	562	4,937	8,319
1959	2,409	249	934	1,183	1,551	-89	1,048	1,932	560	5,002	8,594
1960	2,600	265	1,050	1,315	1,521	-89	1,166	1,982	590	5,171	9,086
1961	2,735	276	1,167	1,443	1,563	-89	1,070	2,392	666	5,602	9,780
1962	2,933	273	1,370	1,643	1,460	-95	1,010	2,610	720	5,705	10,282
1963	3,247	266	1,426	1,692	1,948	-95	349	2,761	1,187	6,150	11,089
1964	3,447	275	1,504	1,779	2,364	-95	3,485	3,103	1,398	10,256	15,483
1965	3,655	280	1,617	1,897	2,413	-95	2,934	3,265	1,638	10,155	15,707
1966	3,910	372	1,866	2,238	2,496	-95	3,239	2,928	1,804	10,373	16,520
1967	4,246	472	2,094	2,566	2,344	-95	3,843	2,936	1,856	10,884	17,696
1968	4,865	475	2,410	2,885	2,407	-95	4,627	3,268	2,101	12,309	20,059
1969	5,490	459	2,517	2,976	2,519	-95	7,680	3,332	2,221	15,657	24,124
1970	6,520	474	2,345	2,819	2,777	-95	8,520	4,732	2,567	18,501	27,839
1971	6,889	520	2,490	3,010	3,415	-95	8,210	5,582	3,126	20,239	30,138
1972	7,075	545	2,810	3,355	3,998	-95	9,458	6,020	3,450	22,831	33,262
1973	8,255	601	3,040	3,641	4,580	-80	13,218	5,745	4,523	27,986	39,882
1974	9,704	620	3,225	3,845	5,967	-80	12,510	5,770	5,963	30,130	43,679
1975	11,091	680	3,570	4,250	7,224	-79	12,325	5,410	6,452	31,332	46,672
1976	12,107	648	3,970	4,618	8,213	-56	15,039	5,894	7,459	36,550	53,275
1977	14,233	742	4,570	5,312	9,827	-56	17,418	5,040	9,632	41,862	61,407
1978	17,303	873	5,535	6,408	11,474	-56	23,138	5,415	11,965	51,936	75,647
1979	21,595	834	7,383	8,217	13,634	-3,385	26,267	4,534	14,366	55,417	85,228
1980	28,413	932	8,558	9,490	17,677	-3,919	36,780	4,810	17,054	72,403	110,306
1981	35,662	973	8,997	9,970	21,255	-4,484	45,062	5,182	18,118	85,134	130,766
1982	37,464	1,334	9,312	10,646	20,938	-5,026	52,679	4,661	18,886	92,137	140,248
1983	44,587	1,996	10,735	12,731	20,744	-7,115	56,193	5,232	13,798	88,852	146,170
1984	52,778	3,723	12,109	15,832	23,350	-9,219	63,484	4,206	14,568	96,388	164,998
1985	60,292	5,146	14,048	19,194	23,784	-10,424	63,263	4,580	20,667	101,871	181,357
1986	64,794	5,841	16,444	22,285	21,092	-11,443	77,806	5,654	21,605	114,715	201,794
1987	74,137	7,612	19,164	26,776	23,756	-15,032	69,691	10,658	22,877	111,950	212,863
1988	79,763	7,665	23,246	30,911	26,664	-13,926	54,065	19,317	23,479	109,598	220,272
1989	89,851	9,982	26,063	36,045	27,142	-14,446	55,502	19,456	24,446	112,099	237,995
1990	98,402	10,177	30,017	40,194	25,865	-12,857	60,101	21,551	30,666	125,326	263,922
1991	109,068	11,270	39,314	50,584	25,621	-11,630	54,073	19,530	34,656	122,249	281,902
1992	111,691	12,934	44,748	57,682	28,364	-11,878	57,033	15,135	40,494	129,147	298,521
1993	122,427	17,501	52,936	70,437	30,211	-12,162	49,112	16,882	49,361	133,403	326,268
1994	146,315	18,317	62,182	80,499	30,840	-11,963	73,133	17,488	58,037	167,534	394,348
1995	161,237	18,822	65,405	84,227	43,221	-11,782	80,558	20,769	58,995	191,761	437,224
1996	180,616	21,263	79,100	100,363	49,087	-11,362	99,046	28,204	55,212	220,186	501,165
1997	209,678	27,823	90,429	118,252	71,289	-10,327	102,024	25,705	63,346	252,036	579,966
1998	246,313	34,835	109,178	144,013	60,645	-10,802	118,167	35,921	65,766	269,696	660,023
1999	257,408	36,408	127,276	163,683	56,080	-10,763	99,967	41,463	55,834	242,582	663,673

See footnotes at end Appendix 2

Table 2
International Investment Position with All Countries
- Concluded

	Liabilities										Net international investment position
	Foreign direct investment in Canada[5]	Portfolio investment				Other investment				Total	
Year		Canadian bonds[6]	Canadian stocks	Canadian money market	Total	Loans[7]	Deposits[8]	Other liabilities[9]	Total		
D no.	65212	65213	65214	65216	58098	65215	65217	65218	58099	65211	65219
	millions of dollars										
1926	1,782	2,980	976	-	3,956	5	660	-	665	6,403	-5,107
1930	2,427	3,574	1,313	-	4,887	5	695	-	700	8,014	-6,571
1933	2,352	3,577	1,161	-	4,738	5	570	-	575	7,665	-6,242
1939	2,414	3,133	1,277	-	4,410	11	553	-	564	7,388	-5,508
1945	2,831	2,739	1,451	-	4,190	22	580	444	1,046	8,067	-4,051
1946	2,960	2,692	1,494	-	4,186	22	649	471	1,142	8,288	-4,052
1947	3,126	2,525	1,515	-	4,040	25	631	500	1,156	8,322	-4,169
1948	3,399	2,591	1,504	-	4,095	20	618	506	1,144	8,638	-3,903
1949	3,710	2,681	1,561	9	4,251	18	655	480	1,153	9,114	-3,812
1950	4,098	2,915	1,639	6	4,560	70	908	603	1,581	10,239	-4,239
1951	4,642	3,071	1,822	8	4,901	80	726	658	1,464	11,007	-4,976
1952	5,358	3,036	1,935	9	4,980	97	332	1,087	1,516	11,854	-5,357
1953	6,177	3,170	2,152	7	5,329	129	310	1,095	1,534	13,040	-6,344
1954	6,960	3,170	2,440	15	5,625	148	337	1,303	1,788	14,373	-7,337
1955	8,010	2,879	2,590	44	5,513	150	397	1,461	2,008	15,531	-8,325
1956	9,314	3,318	2,884	47	6,249	151	367	1,818	2,336	17,899	-10,317
1957	10,538	3,662	3,145	29	6,836	173	352	1,872	2,397	19,771	-11,774
1958	11,371	4,119	3,303	50	7,472	195	391	2,083	2,669	21,512	-13,193
1959	12,464	4,635	3,346	64	8,045	241	401	2,348	2,990	23,499	-14,905
1960	13,583	4,852	3,319	120	8,291	289	480	2,544	3,313	25,187	-16,101
1961	14,391	4,991	3,473	62	8,526	394	513	2,962	3,869	26,786	-17,006
1962	15,380	5,315	3,409	66	8,790	511	503	3,267	4,281	28,451	-18,170
1963	16,276	5,942	3,246	39	9,227	555	526	3,495	4,576	30,079	-18,989
1964	16,473	6,685	3,508	518	10,711	872	3,356	3,751	7,979	35,163	-19,680
1965	17,864	7,358	3,566	378	11,302	1,073	3,156	4,199	8,428	37,595	-21,888
1966	19,550	7,989	3,591	366	11,946	1,268	2,930	4,538	8,736	40,232	-23,712
1967	21,287	8,743	3,701	318	12,762	1,339	3,181	4,762	9,282	43,331	-25,636
1968	23,234	9,839	3,939	286	14,064	1,476	3,637	5,080	10,193	47,491	-27,432
1969	25,241	11,158	4,332	422	15,912	1,802	5,398	5,146	12,346	53,499	-29,375
1970	27,374	11,533	4,530	623	16,686	1,749	6,353	5,731	13,833	57,894	-30,054
1971	28,989	11,950	4,510	774	17,234	1,979	7,181	7,020	16,180	62,402	-32,264
1972	30,563	13,545	4,686	617	18,848	2,136	9,123	7,500	18,759	68,170	-34,908
1973	33,977	14,268	5,169	733	20,170	2,603	12,656	8,141	23,400	77,547	-37,666
1974	37,557	16,029	5,422	892	22,343	3,150	13,388	9,430	25,967	85,867	-42,188
1975	38,728	21,825	6,219	1,283	29,327	4,257	14,593	10,200	29,050	97,105	-50,433
1976	41,623	30,340	6,389	2,242	38,971	5,337	17,084	11,566	33,987	114,582	-61,307
1977	45,132	35,299	7,295	2,728	45,322	5,866	20,979	12,763	39,608	130,063	-68,656
1978	50,089	49,204	7,957	2,760	59,921	10,765	30,264	12,711	53,740	163,751	-88,104
1979	56,785	52,360	10,303	3,339	66,002	10,199	38,931	16,466	65,596	188,382	-103,154
1980	64,708	56,524	13,437	4,362	74,323	11,677	52,957	16,917	81,552	220,583	-110,277
1981	70,327	67,185	13,841	4,321	85,347	14,957	75,513	20,359	110,829	266,503	-135,738
1982	72,814	81,506	13,159	2,619	97,285	17,042	73,442	16,265	106,750	276,849	-136,601
1983	79,669	86,925	12,325	4,381	103,632	19,270	78,746	9,171	107,187	290,487	-144,317
1984	85,984	97,922	13,041	5,982	116,945	21,173	85,913	9,388	116,474	319,402	-154,405
1985	90,358	117,668	15,134	5,543	138,346	25,001	95,002	10,482	130,486	359,190	-177,833
1986	96,054	143,362	16,249	7,931	167,542	24,409	100,205	10,400	135,014	398,610	-196,816
1987	105,937	152,055	18,198	10,421	180,674	28,342	99,077	11,406	138,825	425,436	-212,572
1988	114,175	156,114	18,110	19,417	193,641	28,380	86,791	13,192	128,362	436,178	-215,905
1989	122,664	169,943	20,598	20,611	211,153	35,555	86,994	13,691	136,239	470,056	-232,061
1990	130,932	188,135	20,660	26,402	235,198	40,063	96,099	14,136	150,298	516,428	-252,506
1991	135,234	215,555	17,644	30,534	263,733	42,375	93,035	14,933	150,342	549,310	-267,408
1992	137,918	244,176	17,901	36,104	298,181	48,321	96,504	15,711	160,537	596,636	-298,114
1993	141,493	284,140	23,415	45,901	353,456	47,588	91,379	16,091	155,058	650,007	-323,739
1994	154,594	316,871	30,863	47,529	395,262	44,654	117,878	17,592	180,124	729,981	-335,633
1995	168,167	341,041	37,092	46,519	424,651	48,812	109,308	18,266	176,386	769,204	-331,980
1996	180,418	355,675	47,272	40,558	443,505	51,305	126,836	17,328	195,469	819,392	-318,227
1997	197,884	367,428	51,410	42,580	461,417	50,654	165,361	18,697	234,712	894,013	-314,048
1998	219,220	406,813	63,465	45,098	515,376	53,333	180,689	17,683	251,705	986,301	-326,278
1999	239,972	392,954	72,247	30,315	495,516	57,528	149,714	21,292	228,534	964,022	-300,348

See footnotes at end of Appendix 2

Table 3
Foreign Exchange Rates (expressed in Canadian Currency), Annual

Year	U.S. dollar		British Pound	French Franc	Deutsche Mark	Swiss Franc	Japanese Yen
	Close	Noon Average	Noon Average				
B no.	3414	3400	3412	3404	3405	3411	3407
1926	1.0007	0.9998	4.8550	..	..	..	..
1927	1.0009	1.0000	4.8573	..	..	..	..
1928	1.0027	1.0002	4.8652	..	..	..	..
1929	1.0078	1.0076	4.8883	..	..	..	..
1930	1.0023	1.0015	4.8656	..	..	..	..
1931	1.2105	1.0432	4.6886	..	..	..	..
1932	1.1544	1.1358	3.9793	..	..	..	..
1933	0.9954	1.0916	4.5855	..	..	..	..
1934	0.9878	0.9902	4.9926	..	..	..	..
1935	1.0093	1.0054	4.9293	..	..	..	..
1936	0.9993	1.0006	4.9749	..	..	..	..
1937	1.0004	0.9999	4.9437	..	..	..	..
1938	1.0090	..	..	..	..	..	..
1939	1.1000	..	..	..	..	..	..
1945	1.1000	..	..	..	..	..	..
1946	1.0000	1.0025	4.0300	..	..	..	..
1947	1.0000	..	..	..	..	..	..
1948	1.0000	..	..	..	..	..	..
1949	1.0000	..	..	..	..	..	..
1950	1.0594	1.0134	2.9723	0.0030	0.2497	0.2416	..
1951	1.0119	1.0527	2.9471	0.0030	0.2507	0.2429	..
1952	0.9703	0.9790	2.7341	0.0028	0.2331	0.2266	0.002720
1953	0.9737	0.9834	2.7666	0.0028	0.2342	0.2293	0.002730
1954	0.9659	0.9733	2.7342	0.0028	0.2317	0.2270	0.002700
1955	0.9991	0.9863	2.7536	0.0028	0.2343	0.2301	0.002740
1956	0.9597	0.9841	2.5183	0.0028	0.2342	0.2297	0.002730
1957	0.9841	0.9589	2.6789	0.0026	0.2282	0.2237	0.002660
1958	0.9644	0.9706	2.7277	0.0023	0.2316	0.2265	0.002700
1959	0.9522	0.9590	2.6939	0.0020	0.2295	0.2220	0.002660
1960	0.9966	0.9697	2.7228	0.1978	0.2325	0.2245	0.002690
1961	1.0434	1.0132	2.8395	0.2065	0.2522	0.2345	0.002810
1962	1.0772	1.0689	3.0015	0.2181	0.2674	0.2472	0.002970
1963	1.0806	1.0785	3.0201	0.2201	0.2706	0.2496	0.003000
1964	1.0737	1.0786	3.0118	0.2201	0.2714	0.2497	0.003000
1965	1.0750	1.0780	3.0143	0.2200	0.2699	0.2491	0.003000
1966	1.0837	1.0773	3.0090	0.2193	0.2694	0.2490	0.002980
1967	1.0806	1.0787	2.9658	0.2193	0.2706	0.2493	0.002980
1968	1.0728	1.0775	2.5794	0.2176	0.2699	0.2496	0.002990
1969	1.0728	1.0768	2.5739	0.2078	0.2746	0.2497	0.003010
1970	1.0112	1.0440	2.5016	0.1889	0.2863	0.2422	0.002920
1971	1.0022	1.0098	2.4687	0.1833	0.2900	0.2456	0.002910
1972	0.9950	0.9950	2.4797	0.1965	0.3108	0.2494	0.003270
1973	0.9960	1.0001	2.4533	0.2257	0.3782	0.3175	0.003700
1974	0.9906	0.9780	2.2884	0.2035	0.3785	0.3295	0.003350
1975	1.0160	1.0173	2.2594	0.2377	0.4144	0.3942	0.003430
1976	1.0088	0.9861	1.7811	0.2067	0.3920	0.3947	0.003330
1977	1.0940	1.0635	1.8571	0.2165	0.4586	0.4444	0.003980
1978	1.1858	1.1402	2.1890	0.2535	0.5691	0.6432	0.005480
1979	1.1666	1.1715	2.4855	0.2754	0.6394	0.7046	0.005380
1980	1.1938	1.1690	2.7196	0.2771	0.6444	0.6986	0.005180
1981	1.1855	1.1990	2.4287	0.2307	0.5318	0.6122	0.005450
1982	1.2288	1.2341	2.1579	0.1885	0.5086	0.6091	0.004970
1983	1.2444	1.2324	1.8683	0.1624	0.4834	0.5873	0.005190
1984	1.3217	1.2948	1.7300	0.1487	0.4564	0.5527	0.005460
1985	1.3983	1.3652	1.7701	0.1533	0.4677	0.5615	0.005770
1986	1.3805	1.3894	2.0388	0.2010	0.6425	0.7769	0.008300
1987	1.2993	1.3260	2.1725	0.2208	0.7384	0.8905	0.009190
1988	1.1925	1.2309	2.1929	0.2072	0.7028	0.8443	0.009610
1989	1.1585	1.1842	1.9415	0.1858	0.6304	0.7246	0.008610
1990	1.1599	1.1668	2.0808	0.2147	0.7234	0.8430	0.008090
1991	1.1555	1.1458	2.0275	0.2039	0.6934	0.8027	0.008520
1992	1.2709	1.2083	2.1302	0.2288	0.7757	0.8687	0.009549
1993	1.3217	1.2898	1.9372	0.2279	0.7804	0.8734	0.011650
1994	1.4018	1.3659	2.0929	0.2469	0.8444	1.0024	0.013390
1995	1.3640	1.3726	2.1671	0.2754	0.9591	1.1633	0.014700
1996	1.3706	1.3636	2.1283	0.2667	0.9068	1.1051	0.012550
1997	1.4305	1.3844	2.2682	0.2375	0.7994	0.9548	0.011450
1998	1.5333	1.4831	2.4587	0.2520	0.8450	1.0258	0.011390
1999	1.4433	1.4858	2.4038	0.2416	0.8102	0.9901	0.013110

NOTES

TABLE 2

1. Canadian direct investment abroad

- Excludes prior to 1983 short-term inter-company accounts which are included in Other assets and Other liabilities.
- Excludes prior to 1983 Canadian banks' equity in foreign subsidiaries and associates which is included in Deposits assets.
- Excludes prior to 1979 investments held abroad, for tax or administrative reasons, by wholly-owned Canadian subsidiaries of foreign corporations.

2. Loans

- Exclude prior to 1964 the foreign currency loan assets of banks which are included in Deposits assets.
- Include from 1964 to 1970 the medium term non marketable United States government securities held under the Columbia River Treaty arrangements.
- Include from 1995 onward, the asset position for Repurchase Agreements on Canadian and foreign securities (REPO's). Prior to 1995, Repurchase Agreements on Canadian bonds are included in Canadian bonds.

3. Deposits

- Include prior to 1964 the foreign currency loan and security assets of banks. From 1964 onward, these loans are included in Loans assets and these securities in Other assets.
- Include prior to 1963 Canadian banks' net foreign currency positions with both residents and non-residents and their holdings of gold and, for the Canadian non-bank sector, all their foreign currency deposits whether held in or outside Canada as well as their holdings of foreign treasury bills (except those in the official monetary reserves). The classification was based on a convention that treated Canadian banks as non-residents of Canada insofar as their foreign currency activities were concerned. From 1964 onward, Canadian banks' equity in foreign subsidiaries and affiliates are included in Direct investment assets, loans in Loans assets and securities in Other assets; and, for the Canadian non-bank sector, deposits held in Canada are excluded from all series.

4. Other assets

- Include prior to 1983 the short-term inter-company accounts. From 1983 onward, these short-term inter- company accounts are included in Direct investment assets.
- Exclude prior to 1964 the foreign security assets of banks, which are included in Deposits assets.
- Include from 1972 onward, the net foreign assets left abroad by immigrants.

Symbols

The following standard symbols are used in this Statistics Canada publication:

.. figures not available or not appropriate.

- zero or too small to be expressed.

Note

As figures are individually rounded in the tables of this document, totals do not necessarily equal the sum of their component parts.

Appendix 3
Chronology of events affecting the external sector of the Canadian economy since 1944

1944 A fixed exchange rate system based on gold and the U.S. dollar (gold exchange standard) is created at Bretton Woods in July. The International Monetary Fund (IMF) and the World Bank are also created in July.

1946 The United Nations (UN) Statistical Commission establishes the UN Statistical System.

1947 The International Monetary Fund (IMF) begins operations in March.

1950 The floating rate for the Canadian dollar is introduced in the fall.

1951 Exchange controls in Canada are terminated.

1958 The Common Market, or European Economic Community, is created in June. European countries restore the convertibility of their currencies into dollars and gold for non-residents.

1959 A rush on gold causes the creation of the London gold pool by major central banks to hold the price of gold down.

1960 Canadian Participation Provisions (CPP) are introduced, pursuant to the *Territorial Lands Act* and the *Public Lands Grants Act.*

The Canada Oil and Gas Regulations are amended so that oil and gas leases for the Yukon and Northwest Territories are to be granted only to Canadian citizens over 21 years of age, and to Canadian corporations provided that at least 50% of the issued shares of the company are beneficially owned by Canadian citizens, or that shares are listed on a recognized Canadian stock exchange so that Canadians have an opportunity to participate in the ownership of the corporation.

The Canadian Mining Regulations are amended so that mining leases for the Northwest Territories are to be granted only to Canadian citizens over 18 years of age, and to Canadian corporations provided that at least 50% of the issued shares of the company are beneficially owned by Canadian citizens, or that shares are listed on a recognized Canadian stock exchange so that Canadians have an opportunity to participate in the ownership of the corporation.

The Air Regulations provide that, pursuant to the *Aeronautics Act*, to be a registered owner of a Canadian air carrier, at least two-thirds of a corporation’s directors must be Canadian citizens.

1962 The *Corporations and Labour Unions Returns Act* (CALURA) empowers the government to collect financial and other information on the affairs of corporations and labour unions carrying on activities in Canada.

Fixed exchange rates are re-established in the Canadian dollar.

1963 Walter Gordon's first budget of the new Liberal government includes the strongest measures ever directed toward foreign ownership of Canadian business corporations. A 30% tax is to be levied on the value of shares of Canadian firms listed on stock exchanges sold to non-resident corporations. To further encourage Canadian ownership, the 15% withholding tax on dividends paid to non-residents is to be reduced to 10% for companies whose shares were at least one-quarter Canadian owned, and increased to 20% for firms with a lower proportion of domestic ownership. Gordon also proposes a faster rate of depreciation to companies with the requisite 25% Canadian ownership. A few days later, after strong pressure from the financial community has been brought to bear on him, Gordon announces the withdrawal of the takeover tax and the second portion of the withholding tax change, but the other provisions are enacted.

The United States levies the interest equalization tax on foreign borrowing in the United States.

1965 The *Canadian and British Insurance Companies Act, Trust Companies Act* and *Loan Companies Act* are amended for life insurance companies, trust companies and loan companies, respectively, so that no more than 25% of the shares in each company may be owned by non-residents and no non-resident may own more than 10% of the shares in such a company.

The *Income Tax Act* is amended to regulate the establishment of new foreign-controlled newspapers and periodicals and the foreign takeover of existing newspapers and periodicals under Canadian control. In computing taxable income, no deduction can be made for the cost of advertising directed primarily at the Canadian market in an issue of a non-Canadian newspaper or periodical. Exemptions are made for *Time* and *Reader's Digest.*

The *Agreement Concerning Automotive Products Between the Government of the United States of America and the Governent of Canada* is implemented in 1965, retroactive to January of that year. Manufacturers can import U.S.-made vehicles into Canada duty-free if they maintain certain minimum production levels in Canada as well as specified North American content requirements.

Some Guiding Principles of Good Corporate Behaviour for Subsidiaries in Canada of ForeignCompanies is published in March. Part of a letter sent to all foreign-owned companies by Robert Winters, Minister of Trade and Commerce, these guidelines urge companies to consider the best interests of Canada in their business practices. The letter also advises these companies that information will be collected from them periodically regarding their operations and financing.

1967 An amendment to the *Bank Act* provides that at least three-fourths of the directors of banks must be Canadian citizens; the proportion of shares held by non-residents is limited to 25%; no one person is to hold more than 10% of the shares and no foreigners are allowed to start up a new bank. Growth limits are placed on banks presently having more than 25% foreign ownership, a provision specifically applying to the Mercantile Bank, 100% of which is owned by the First National City Bank of New York. In 1971, Mercantile and the Canadian government agree to a plan for sale of new stock to Canadians, to result in 75% Canadian ownership by 1980.

A world monetary crisis follows the devaluation of the British pound.

1968 *Foreign Ownership and the Structure of Canadian Industry* (Watkins Report) is released in January by the Task Force on the Structure of Canadian Industry, a group of professors appointed by a cabinet committee headed by Walter Gordon. Its recommendations include

1) establishing a special agency to co-ordinate policies concerning the multinational enterprise; this agency will report to a minister;
2) establishing a government export trade agency to ensure that export orders are filled when they conform with Canadian law and Canadian foreign policy; where an American subsidiary operating in Canada refuses to fill a bona fide order placed with it, the agency will assist in having the order placed with a Canadian-owned firm or a firm owned overseas; and
3) creating a Canada Development Corporation to act as a large holding company with entrepreneurial and management functions to assume a leadership role in Canada's business and financial community.

An amendment to the *Broadcasting Act* in April provides that the Canadian broadcasting system must be owned and controlled by Canadians in order to "safeguard, enrich and strengthen the cultural, political, social and economic fabric of Canada." Regulations are soon passed to dictate that licences are to be issued and renewals granted only to Canadian citizens or eligible Canadian corporations.

A crisis arises over the Canadian exchange rate.

A new run on gold forces governments to adopt a two-tier gold market in March. Central banks trade at the official price, but a market is established for other investors where the price fluctuates freely. The United States imposes mandatory control on direct foreign investment.

1969 The Deutsche mark floats for a few weeks and then is revalued in the fall.

1970 Special Drawing Rights (SDR) are created at the IMF to supplement gold and the dollar as international reserves.

Eleventh Report of the Standing Committee on External Affairs and National Defence Respecting Canada–U.S. Relations (Wahn Report) supports and furthers many of the recommendations of the Watkins Report from 1968—for example, the establishment of a Canadian Ownership and Control Bureau, an agency that would monitor foreign ownership in Canada as well as examine and propose guidelines. The Wahn report also recommends that, as a general rule, at least 51% of the voting shares of Canadian companies should be owned by Canadians.

The *Loans Companies Act* provides that

1) at least 75% of the directors must be Canadian citizens;
2) shares held by non-residents are restricted to 25%; and
3) voting rights of non-residents by nominees or by proxy are prohibited.

The Canadian dollar floats in June.

1971 The *Investment Companies Act* in April limits foreign ownership of federally incorporated sales finance firms to 25%, and states that no individual non-resident may own more than 10%.

On August 15, the convertibility of the U.S. dollar into gold is suspended and the dollar floats. On December 17, a new international monetary system is prepared at the Smithsonian Institute. The Smithsonian agreement provides for re-alignment of industrial country currencies and an increase in the price of gold. The IMF establishes a temporary regime of central rates and wider margins. The dollar is devalued and new central rates are set with a wide fluctuation margin (2.25%) on either side. Dollar convertibility into gold is not re-instated. Par value and convertibility of the dollar—two main features of Bretton Woods system—cease to exist.

1972 Shortly after joining the European Monetary Union along with the Common Market countries, the United Kingdom and Denmark leave the system.

Foreign Direct Investment in Canada (Gray Report) discusses the merits of three broad strategies for dealing with foreign investments:

1) screening by a government agency to block investment that does not make a net contribution to the Canadian economy;
2) delineation of further ‘key sectors’ in which foreign ownership would be regulated; and
3) introduction of across-the-board ownership rules (for example, 51% Canadian ownership of all firms) and other structural changes relating to the use of Canadian managers and directors.

The *Foreign Takeovers Review* Bill is proposed, but not enacted, to make all acquisitions by foreign investors of Canadian firms with assets of more than $250,000 or gross revenues of more than $3 million subject to review by the Minister.

1973 International monetary pressures are high and remain so until 1975. Many currencies float while the dollar drops. 'Generalized floating' begins as European Community countries jointly float their currencies against the U.S. dollar in March.

1974 The IMF establishes a new method of SDR valuation based on a basket of 16 currencies in July.

The first phase of the *Foreign Investment Review Act* is proclaimed into force on April 9, 1974, and the second phase in October 1975. The Act provides for a governmental review of certain forms of foreign investment in Canada, namely:

1) certain acquisitions of control of Canadian business enterprises;
2) investments to establish new businesses in Canada by persons who do not already have an existing business in Canada; and
3) diversifications of existing foreign-controlled firms into unrelated businesses.

The first phase covers provisions on takeovers of Canadian businesses and the second phase relates to reviewable investments to establish new businesses.

1976 A new international monetary system is agreed on in Jamaica in January. Currencies are allowed to float and reference to the price of gold is abandoned.

1979 A new European Monetary System is created in March where parities between European currencies are maintained with narrow margins. The European Snake is allowed to float against all other currencies, particularly the U.S. dollar. A new allocation of SDR is made.

1980 A new allocation of SDR is made in January.

Amendments to the *Bank Act* maintain the regime of widely held ownership for existing banks, now called Schedule I banks. Foreign banks are allowed to establish subsidiaries in Canada, albeit with restrictions on the total size of their business in Canada. Schedule II banks that are subsidiaries of foreign banks are permitted to be closely held indefinitely.

The National Energy Program is launched.

1981 With a new allocation of SDR in January, the IMF begins to use a simplified basket of five currencies to determine daily valuation of SDR: the U.S. dollar, the Deutsche mark, the French franc, the Japanese yen and the pound sterling.

1982 In response to Mexico's problems in servicing its foreign debt, the IMF supports major adjustment programs in countries facing debt crisis.

1985 In June, the *Investment Canada Act* legislation, recognizing the benefits that flow from international direct investment, reflects Canada's policy of welcoming international investment.

1987 An amendment to the *Bank Act* eliminates restrictions keeping banks out of much of the securities business, partly from the fear that Canadians would see their securities business handled by foreign financial institutions. Limits on investment in securities firms by Canadian financial institutions are eliminated, while non-residents are permitted to own up to 50% of an existing securities firm from June 30, 1987 and up to 100% from June 30, 1988.

1989 In January, the *United States–Canada Free Trade Agreement* sets in motion a series of tariff reductions and other trade liberalization measures relating to goods, services and investment between the United States and Canada over a 10-year period.

East Germany merges with West Germany and its currency is replaced by the Deutsche mark. The Soviet Union takes the first step toward full convertibility of the ruble by opening a foreign currency market. A wave of liberalization and reforms in Eastern Europe leads to the opening of the economies and financial markets of many countries of this region.

The IMF Executive Board adopts the Third Amendment of Articles of Agreement. The Executive Board also determines that requirements for quota increase under the Ninth General Review of Quotas have been met. The IMF Executive Board approves membership of many states of the former Soviet Union.

1992 An amendment to the *Bank Act* involves major changes to the legislation governing banks, trust companies and insurance companies, continuing the process of breaking down traditional barriers by allowing financial institutions to enter into previously limited or excluded territories.

1994 In January, the *North American Free Trade Agreement* links the Canadian, Mexican and U.S. markets by lowering tariffs and quotas as well as other trade and investment barriers over a 10-year period.

The IMF Executive Board approves a stand-by arrangement of SDR 12.1 billion for Mexico, the largest financial commitment by the IMF up to this time.

1995 The World Trade Organization is created in January.

The IMF Executive Board approves an SDR 6.9 billion Extended Fund Facility for Russia in March, the largest EFF in IMF history.

The *World Trade Organization Agreement Implementation Act,* Canadian legislation to implement the Uruguay round of trade talks, including the first multilateral agreement on services, comes into force.

1996 The IMF establishes the voluntary Special Data Dissemination Standard (SDDS) to guide member countries that have, or that might seek, access to international capital.

1997 The IMF establishes the voluntary General Data Dissemination Standard (GDDS) to guide countries in the provision to the public of comprehensive, timely, accessible, and reliable economic, financial, and socio-demographic data.

1999 Eleven nations replace their national currencies with the Euro under a European monetary union in January. This move originated during the final days of the Bretton Woods system in the early1970s.

Under an amendment to the *Bank Act,* foreign banks, which have been required to establish a separately capitalized subsidiary to operate in Canada, are allowed to establish branches directly in Canada subject to certain conditions. Legislation on foreign bank entry, including branching, was made public in 1998.

The IMF approves as part of the SDDS new reporting standards and guidelines for International Reserves and Foreign Currency Liquidity.

2000 In the federal budget, the permissible foreign content of investments in registered pension plans and registered retirement savings plans rises from 20% to 25% for 2000 and to 30% for 2001. The limit has been set at 20% since 1994.

The IMF adds to the SDDS a new category for external debt data to be released quarterly within one quarter of the reference period. Subscribers to the SDDS have three years to meet this new requirement.

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Appendix 4
Accessibility of Products

Availability of balance of payments and international investment statistics					
	Publication	*The Daily* and *Infomat*	CANSIM	Frequency	Timing (after reference period)
Canada's balance of international payments	67-001-XPB 67-001-XIB	Analyses and five years of quarterly data	From 1926	quarterly	60 days
Canada's international investment position	67-202-XPB 67-202-XIB	Analyses and 11 years of annual data	From 1926	annual	90 days
Canada's international transactions in securities	67-002-XPB	Analyses and two years of monthly data	From 1952	monthly	60 days
Canada's international transactions in services	67-203-XPB	Analyses and 10 years of data	From 1961	annual/ quarterly	180 days
Research papers	www.statcan.ca/english/services/				
	contact by phone (613) 951-1855 contact by fax (613) 951-9031				

Balance of Payments Division

CANSIM MATRICES:
Annual: 43 (40 actives + 3 terminated)
Quarterly: 14
Monthly: 3
Total: 60

Catalogue no.	Title	Matrices		Total matrices	Start year(s)
		Active	Terminated		
67-001-XPB	Canada's Balance of International Payments	2325 to 2328 (4) 2355 (1) 2360 to 2377 (18)	2354	23	1926
67-002-XPB	Canada's International Transactions in Securities	2328 to 2330 (3) 2378 to 2380 (3) 4195 (1)		7	1952
67-202-XPB	Canada's International Investment Positions	2325 (1) 2327 (1) 4180 to 4191 (12) 4194(1)	4192, 4193	15	1926
67-203-XPB	Canada's International Transactions in Services	3178 (1) 3180 to 3186 (7) 3188 to 3190 (3) 3192 to 3195 (4) 3197 (1)		16	1961

Note:
67-001 = 23
67-002 = 7
67-202 = 15
67-203 = 16
61 - 4 matrices that are repeated (see note in the table) = 57 + 3 terminated = **60**

CANSIM MATRICES :

Matrix No.	Title	Frequency	Source	Start years
2325	Investment Income Between Canada and All Countries – by Type of Investment and by Sector	annual	67-001-XPB 67-202-XPB 67-508-XPB	1926 and 1961
2326	Investment Income Between Canada and All Countries – by Type of Investment and by Sector	quarterly	67-001-XPB 67-508-XPB	1961
2327	Direct Investment: Canadian Abroad (CDI) / Foreign in Canada (FDI), in/by all countries, United States – by Industry Group – by Gross Inflows, Gross Outflows, Net Flow	annual; quarterly for series 805 to 820.6	67-001-XPB 67-202-XPB 67-508-XPB	1946, 1970, 1975, 1979, 1983 and 1987
2328	Portfolio Transactions: Canadian Bonds, Stocks, Money Market Paper; Foreign Bonds and Stocks – by Gross and Net Sales/Purchases – by Sector – by Currency (for Canadian new bond issues)	annual	67-001-XPB 67-002-XPB 67-508-XPB	1952, 1970, 1978 and 1995
2329	Portfolio Transactions: Canadian Bonds, Stocks, Money Market Paper; Foreign Bonds and Stocks – by Gross and Net Sales/Purchases – by Sector – by Currency (for Canadian new bond issues)	quarterly	67-001-XPB 67-002-XPB 67-508-XPB	1970 and 1995
2330	Portfolio Transactions: Canadian Bonds, Stocks, Money Market Paper; Foreign Bonds and Stocks – by Gross and Net Sales/Purchases, by Sector – by Currency (for Canadian new bond issues)	monthly	67-002-XPB	1988 and 1995
2354	Government of Canada Net Official Financing International Reserves and Foreign Currency Borrowings	annual quarterly	67-001-XPB	1927 and 1978
2355	Canadian Chartered Banks – Changes in Foreign Currency Assets and Liabilities Booked in Canada	annual quarterly	67-001-XPB	1964, 1975, 1979, 1996 and 1997
2360	Canadian Balance of International Payments – All Countries	annual	67-001-XPB	1926, 1927, 1946, 1952, 1961, 1964 and 1970
2361	Canadian Balance of International Payments – United States	annual	67-001-XPB	1946, 1952 1961, 1964 and 1970
2362	Canadian Balance of International Payments – United Kingdom	annual	67-001-XPB	1946, 1952, 1961, 1964, 1965 and 1970
2363	Canadian Balance of International Payments – Foreign Countries other than United States and United Kingdom	annual	67-001-XPB	1946, 1952, 1961, 1964 and 1970

Matrix No.	Title	Frequency	Source	Start years
2364	Canadian Balance of International Payments – Other European Union	annual	67-001-XPB	1961, 1970, 1971 and 1973
2365	Canadian Balance of International Payments – Japan	annual	67-001-XPB	1961, 1970, 1971 and 1973
2366	Canadian Balance of International Payments – Other OECD	annual	67-001-XPB	1961, 1970, 1971 and 1973
2367	Canadian Balance of International Payments – All Other Countries	annual	67-001-XPB	1961, 1970, 1971 and 1973
2368	Canadian Balance of International Payments – Goods	quarterly and annual	67-001-XPB	1946, 1961 and 1971
2369	Canadian Balance of International Payments – All Countries, seasonally adjusted	quarterly	67-001-XPB	1946, 1961 and 1971
2370	Canadian Balance of International Payments – All Countries, raw	quarterly	67-001-XPB	1946, 1950, 1952, 1961, 1964 and 1970
2371	Canadian Balance of International Payments – United States	quarterly	67-001-XPB	1946, 1950, 1952, 1961, 1964 and 1970
2372	Canadian Balance of International Payments – United Kingdom	quarterly	67-001-XPB	1946, 1950, 1952, 1961, 1964, 1965 and 1970
2373	Canadian Balance of International Payments – Foreign Countries Other Than United States and United Kingdom	quarterly	67-001-XPB	1946, 1950, 1952, 1961, 1964, 1965 and 1970
2374	Canadian Balance of International Payments – Other European Union	quarterly	67-001-XPB	1961, 1970, 1971 and 1973
2375	Canadian Balance of International Payments – Japan	quarterly	67-001-XPB	1961, 1970, 1971 and 1973
2376	Canadian Balance of International Payments – Other OECD	quarterly	67-001-XPB	1961, 1970, 1971 and 1973
2377	Canadian Balance of International Payments – All Other Countries	quarterly	67-001-XPB	1961, 1970, 1971 and 1973

Matrix No.	Title	Frequency	Source	Start years
2378	Portfolio Transactions: Canadian Bonds, Stocks and Money Market; Foreign Bonds and Stocks – by Geographical Region and Type of Transaction	annual	67-002-XPB	1985
2379	Portfolio Transactions: Canadian Bonds, Stocks and Money Market; Foreign Bonds and Stocks – by Geographical Region and Type of Transaction	quarterly	67-002-XPB	1985
2380	Portfolio Transactions: Canadian Bonds, Stocks and Money Market; Foreign Bonds and Stocks – by Geographical Region and Type of Transaction	monthly	67-002-XPB	1988
3178	Commercial Services by Selected Countries and Regions	annual	67-203-XPB	1990
3180	Travel by Category – by Geographical Area	annual	67-203-XPB	1961, 1972 and 1990
3181	Transportation by Category	annual	67-203-XPB	1961 and 1988
3182	Commercial Services by Category	annual	67-203-XPB	1969, 1977, 1981, 1986, 1990 and 1995
3183	International Transactions in Services by Category	quarterly	67-203-XPB	1995
3184	Commercial Services by Category, by Area and Affiliation – United States	annual	67-203-XPB	1961, 1988, 1990 and 1995
3185	Commercial Services by Category, by Area and Affiliation – EU	annual	67-203-XPB	1990 and 1995
3186	Commercial Services by Category, by Area and Affiliation – Other Countries	annual	67-203-XPB	1990 and 1995
3188	Commercial Services by Category, Enterprises Controlled in Canada	annual	67-203-XPB	1990 and 1995
3189	Commercial Services by Category, Enterprises Controlled in United States	annual	67-203-XPB	1990 and 1995

Matrix No.	Title	Frequency	Source	Start years
3190	Commercial Services by Category, Enterprises Controlled in Other Countries	annual	67-203-XPB	1990 and 1995
3192	Commercial Services by Category, Country of Control and Affiliation – Canada	annual	67-203-XPB	1990 and 1995
3193	Commercial Services by Category, Country of Control and Affiliation – United States	annual	67-203-XPB	1990 and 1995
3194	Commercial Services by Category, Country of Control and Affiliation – Other Countries	annual	67-203-XPB	1990 and 1995
3195	Commercial Services by Category, Country of Control and Affiliation – All Countries	annual	67-203-XPB	1990 and 1995
3197	Commercial Services by Category – by Industry	annual	67-203-XPB	1990 and 1995
4180	Canada's International Investment Position – Year-ends – All Foreign Countries	annual	67-202-XPB	1920, 1926, 1945, 1946, 1952, 1966 and 1970
4181	Canada's International Investment Position – Year-ends – United States	annual	67-202-XPB	1920 and 1926
4182	Canada's International Investment Position – Year-ends – United Kingdom	annual	67-202-XPB	1920 and 1926
4183	Canada's International Investment Position – Year-ends – Foreign Countries Other Than United States and United Kingdom	annual	67-202-XPB	1920 and 1926
4184	Canada's International Investment Position – Year-ends – EC Countries (except United Kingdom)	annual	67-202-XPB	1958, 1970, 1973 and 1983
4185	Canada's International Investment Position – Year-ends – Japan	annual	67-202-XPB	1920, 1961, 1970 and 1983
4186	Canada's International Investment Position – Year-ends – Other OECD Countries	annual	67-202-XPB	1961, 1970, 1973 and 1983

Matrix No.	Title	Frequency	Source	Start years
4187	Canada's International Investment Position – Year-ends – Other Countries	annual	67-202-XPB	1920, 1926, 1946, 1970, 1973 and 1983
4188	Canada's International Investment Position – Year-ends – Canada's Direct Investment Abroad – All Countries, United States, United Kingdom, Other EC, Japan, and Other OECD, All Other Countries – by Old Industrial Classification and 1980 SICC – Changes in Book Value	annual	67-202-XPB	1927, 1961 and 1983
4189	Canada's International Investment Position – Year-ends – Foreign Direct Investment in Canada: All Countries, United States, United Kingdom, Other EC, Japan, Other OECD, All Other Countries – by Old Industrial Classification and 1980 SICC – Changes in Book Values	annual	67-202-XPB	1927, 1961 and 1983
4190	Canada's International Investment Position – Year-ends – Portfolio Transactions Only – Canadian Investment in U.S. Stocks – Foreign Investment in Canadian Bonds – Foreign Investment in Canadian Corporations and Government Enterprises - Foreign Investment in Canadian Money Market Paper	annual	67-202-XPB	1955, 1978 and 1985
4192	Canada's International Investment Position – Year-ends— Capital Abroad Controlled from Canada – by Location of Investment – by Old Industrial Classification and 1980 SICC	annual	67-202-XPB	1979 and 1983
4193	Canada's International Investment Position – Year-ends – Capital Employed in Non-financial Industries in Canada, Ownership and Control – by Old Industrial Classification and 1980 SICC	annual	67-202-XPB	1926, 1953, 1954, 1960 and 1988
4194	Canada's International Investment Position - All Countries – Foreign Portfolio and Other Investment in Canada – Market Values of Canadian Bonds	annual	67-202-XPB	1926, 1980, 1985, 1989 and 1990
4195	Canada's International Position – Quarter Ends – Portfolio Transactions – Canadian Bonds and Canadian Money Market - by Sector – by Geographical Region	quarterly	67-002-XPB	1985 and 1991

Glossary

Accrual accounting	Revenues and expenses are reflected in the accounts in the period in which they are considered to have been earned or expensed and not necessarily when cash receipts or disbursements occur (cash accounting). Accrual accounting is used to compile the balance of payments.
Associate	Business entity which is owned between 10 and 50% by another business entity.
Balance of payments	Statistical statement that systematically summarizes, for a specific time period, the economic transactions of an economy with the rest of the world.
Balance of payments adjustments	Adjustments applied to data on exports and imports of goods compiled on a customs basis to meet balance of payments requirements. Adjustments comprise coverage, timing, valuation on inland freight as well as other valuation and residency adjustments.
Bonds	Debt securities issued by a borrower that obligates the issuer to make specified payments to the holder over a specific period. Bonds can be treated as direct or portfolio investment in the balance of payments/international investment position depending upon the direct or portfolio relationship of the issuer and the holder.
Book value	Valuation of assets and liabilities based on the value recorded in the books of the enterprise where the investment is made (debtor principle). Book value is used to value the Canadian financial assets and Canadian financial liabilities of the international investment position.
BP (BOP questionnaires)	Prefix meaning “balance of payments” used to identify the questionnaires conducted for balance of payments and international investment purposes by the Balance of Payments Division of Statistics Canada.
Branch	Business entity that is unincorporated and is owned by another business entity.
CALURA	Corporations and Labour Unions Returns Act (CALURA). Records related to financial data, ownership, control (including foreign control) and concentration of the corporate sector financial statements. Topics: Statistics, country of control, assets, sales, profits and taxable income, corporate concentration and directory of intercorporate ownership.
Canadian financial assets	Regrouping of all Canadian financial claims on non-residents in the financial account of the balance of payments (transactions) and in the international investment position (position). Financial assets comprise direct, portfolio and other investment.
Canadian financial liabilities	Regrouping of all Canadian financial liabilities (including equity) to non-residents in the financial account of the balance of payments (transactions) and the international investment position (position). Financial liabilities comprise direct, portfolio and other investment.
CANSIM	The Canadian Socio-Economic Information Management System (CANSIM. The largest of Statistics Canada’s public use data banks. It contains 700,000 statistical time series on Canada’s population and economy, as well as some key international economic statistics.

Capital account	Account of the capital and financial account which registers capital transfers and acquisition/disposal of non-produced non-financial assets.
Capital and financial account	Main account of the balance of payments which is made up of the capital account and the financial account.
Capital transfers	Account in the capital account of the balance of payments defined as the offsets to financial claims or capital assets acquired or provided without a quid pro quo in economic value.
Cash accounting	Revenues and expenses are reflected in the accounts in the period in which the cash receipts or disbursements occur and not necessarily when revenues have been earned and expenses have been expensed (accrual accounting). Accrual accounting is used to compile the balance of payments.
Centre of economic interest	An institutional unit has a center of economic interest in a country if it has already engaged in economic interest: activities and transactions on a significant scale in the country for one year or more, or if the unit intends to do so.
Change in ownership	A change in ownership occurs when an asset has been received or a service/income provided. Generally it is deemed to have occurred when the two parties (resident and non-resident) record the transaction in their respective books or accounts.
Commercial services	Account of services in the current account that comprise all services other than travel, transportation and government services and that covers the following: communications, construction, insurance, other financial, computer and information, royalties and license fees, non-financial commissions, equipment rentals, management, advertising, engineering, other technical, miscellaneous services to business and audio-visual.
Compensation of transborder employees	Comprises wages, salaries, and other benefits earned by individuals for work performed. Transborder workers in Canada's balance of payments are viewed as own account providers and their remuneration is treated as commercial services in the current account.
Credit	A credit records a revenue (for example, exports of goods or services), a decrease in assets or an increase in liabilities. A credit shows as a plus sign (+) in the balance of payments.
Current account	Main account of the balance of payments which covers all transactions (other than those in capital and financial items) that involve exchange of economic values (goods, services and investment income) and transfers of current economic value with no quid p
Current account receipts	Regouping of all current account transactions which generate revenues for Canadian residents from non-residents. They comprise exports of goods and services, investment income on Canadian claims on non-residents and receipts of current transfers.
Current account payments	Regrouping of current account transactions which generate expenditures by Canadian residents with non-residents. They comprise imports of goods and services, investment income expenses from Canadian financial liabilities to non-residents and payments of current transfers.
Current transfers	Account in the current account defined as the offsets to current economic value acquired or provided without a quid pro quo in economic value.
Debit	A debit records an expense incurred (for example, imports of goods and services), an increase in assets, or a decrease in liabilities. A debit shows as a minus sign (-) in the balance of payments.

Debt forgiveness	Account in capital transfer of the capital account that covers transactions where a government creditor entity in one economy formally agrees - via a contractual arrangement - with a debtor entity in another to forgive (extinguish) all, or part, of the obligations of the debtor to that creditor.
Debt	Financial claim that refers to lending of funds by a creditor (lender) to a debtor (borrower). Debt comprises securities (generally marketable) and other debt instruments (generally not marketable). Debt can be treated as direct, portfolio or other investment relationship of the issuer and the holder.
Debtor/creditor principle	Type of regional allocation in the balance of payments and international investment position where financial claims of the compiling economy are allocated to the country of residence of the non-resident debtor, and liabilities are allocated to the countryof residence of the non-resident creditor.
Debtor/transactor principle	Type of regional allocation in the balance of payments and international investment position where financial claims and liabilities are allocated to the country of residence of the counterpart non-resident party (the transactor).
Deposits	Financial claims which cover notes and coins in circulation and/all claims reflecting evidence of deposits. Deposits are treated as other investment in the balance of payments/international investment position.
Direct investment	Functional account in the financial account of the balance of payments (transactions) and in the international investment position (position) which refers to an investment of a resident entity in one economy obtaining a lasting interest in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the investor on the management of the enterprise.
Direct investment enterprise	An incorporated or unincorporated enterprise in which a direct investor, who is resident in another economy, owns 10 percent or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise). Direct investment enterprise is made up of related entities which can be in the form of associates, subsidiaries and branches.
Discount	Difference between the issue price and the maturity value of a security when the issue price is lower than the maturity value. This difference is treated as interest and is recorded, on an accrual basis, as investment income the balance of payments.
Dividend	Distributed earnings to equity holders of incorporated private enterprises, cooperatives and public corporations. Dividends to portfolio equity holders are treated as portfolio investment income in the balance of payments. Dividends to direct investor equity holders are treated as remittances of capital in the financial account.
Double counting	Transaction entered in a specific account in the balance of payments and already covered in another account.
Double entry accounting	Basic accounting convention whereby every recorded transaction is represented by two entries (credit and debit) with equal values. This convention is used in compiling the balance of payments statement.

Equities	Financial instruments and records acknowledging, after the claims of all creditors have been met, claims to the residual values of incorporated enterprises. Preferred participating shares, stocks, depository receipts, units of mutual funds and investment trusts are included. Equity can be treated as direct (owners' equity) or portfolio investment (stock securities) in the balance of payments/international investment position depending upon the direct or portfolio relationship of the issuer and the holder.
Exchange rate effect	Factor accounting for the change in the position of an asset or a liability from the beginning to the end of a period due to changes in the value of the currency of issue versus local currency.
Export / Import	Regrouping in the current account of sales of goods and services (exports) and purchases of goods and services (imports).
F.O.B.(free on board) valuation	Valuation method recommended in the balance of payments referring to the market value of the goods at the point of uniform valuation–the customs frontier of the economy from which the goods are exported. That is, the goods are valued free on board at the frontier.
Financial account	Account of the capital and financial account which registers transactions in direct investment, portfolio investment and other investment (including reserve assets). All financial transactions are regrouped under Canadian financial assets and Canadian financial liabilities.
Financial instruments	Debt or equity instruments that can be converted into cash or into an other financial instrument. Financial instruments encompass securities (generally marketable) and other financial instruments (generally non marketable). Financial instruments can be treated as direct, portfolio or other investment in the balance of payments/international investment position depending upon the debt instrument and the direct, portfolio or other investment relationship of the issuer and the holder.
Financial derivatives	Financial instruments that represent securities providing payoffs that depend on or are contingent on the values of other assets such as commodity prices, bond and stock prices, or market index values. Examples are futures, forwards, options and swaps. Financial derivatives are treated as other investment (other assets/other liabilities) in the balance of payments/international investment position.
Geographical area	In Canada's balance of payments and international investment position, foreign countries are grouped by six regions: United States, United Kingdom, Other EU, Japan, Other OECD, Other Countries (inclusive of international institutions).
Goods	Account of the current account which refers to commodities on which ownership rights can be established and transferred. They include general merchandise, goods for processing, repairs on goods, financial lease of capital equipment, satellites, ships and postal parcels (inclusive of newspaper and periodicals).
Goods in transit	Goods which transit through the compiling economy without changing ownership. They are not recorded in the balance of payments.
Government services	Account of services account in the current account that covers all services by governments or international and regional organizations for official representation, military activities and commercial activities not covered in other balance of payments accounts.

HS (Harmonized System)	Classification system established to secure the highest degree of harmony and uniformity in the customs systems. This system is used to classify Canadian trade in goods.
Interest	Income generated by a debt financial instrument for a given period of time. Interest is accrued and can be treated as investment income on direct, portfolio or other investment in the balance of payments depending upon the type of debt and upon the direct, portfolio or other investment relationship of the issuer and the holder.
International investment position	Statistical statement of the value and composition of the stock of an economy's claims on the rest of the world, and the value and composition of the stock of an economy's liabilities to the rest of the world.
Investment income	Account of the current account that covers income on equity and on debt. The equity income comprises profits on direct investment and dividends on portfolio stocks and the debt refers to interest from direct, portfolio and other investment.
Issue price	The issue price represents the proceeds received by the issuer when issuing a security.
Issuing sector	Issuing sector of a financial instrument refers to the nature of the underlying sector of the issuer of a security. In Canada's balance of payments/international investment position, Canadian issuers are classified as federal direct, provincial direct, municipal enterprises and corporations and foreign issuers as governments and other.
Loans	Financial claims that refer to direct lending of funds by creditors (lenders) to debtors (borrowers) through arrangements in which the lenders may or not receive a negotiable document or instrument. Loans are treated as other investment in the balance of payments/international investment position.
Market value	Amount of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between two independent parties and on the basis of commercial considerations only. The market value of selected portfolio investments is presented as supplementary information in the international investment position.
Maturity date	Date at which a security (such as a bond) is redeemable.
Maturity value	The maturity value of a security is the amount the issuer will pay the holder of a security at the date of redemption of the security. It is often referred to as par, face, principal and redemption value.
Migrant's transfers	Account in capital transfers of the capital account that represents contra-entries to changes in financial items that arise from the migration (change of residence for at least a year) of individuals from the one economy to another.
Monetary gold	Reserved asset item in other investment that refers to gold owned by the monetary authorities and held as a reserve asset. Transactions in monetary gold occur only between monetary authorities and their counterparts in other economies or between monetary authorities and international monetary organizations.
Monetization / demonatization of gold	Monetization refers to the acquisition by the monetary authorities of commodity gold to increase the stock of monetary gold. Demonetization refers to the disposal by the monetary authorities of monetary gold for nonmonetary purposes to decrease the stock of monetary gold.

Money market securities	Debt securities which refer to all highly marketable instruments with an initial term to maturity of a year or less and which generally give the holder the unconditional right to receive a stated, fixed sum of money on a specific date. Included are such instruments such as treasury bills, commercial and financial paper, bankers' acceptances, negotiable certificates of deposit and short term notes. Money market securities can be treated as direct or portfolio investment in the balance of payments/international investment position, depending upon the direct or portfolio relationship of the issuer and the holder.
Net international investment position	Account of the international investment position that represents the stock of external financial assets minus the stock of external liabilities. The net position shows what the economy owns in relation to what it owes to non-residents.
New issue	Transaction in securities representing the amount received by the issuer at the time of issue. In Canada's balance of payments new issues are restricted to newly issued Canadian bonds and stocks floated directly abroad that is foreign issues and the portion of global issues floated in the foreign markets.
Non-monetary gold	Refers to all gold not held as reserve assets.
Non-produced, Non-financial assets	Account in the capital account that covers transactions in tangible assets that maybe used or necessary for production of goods and services but are not actually produced and non-produced intangible assets (for example, patents, copyrights, trademarks, franchises).
Non-resident	An institutional unit not considered as a resident.
Other assets/ liabilities	Financial claims that cover marketable and non-marketable claims/liabilities other than loans and deposits. Other assets/liabilities are treated as other investment in the balance of payments/ international investment position.
Other investment	Functional account in the financial account and in the international investment position, that is not direct or portfolio investment and that covers loans, deposits, reserves (assets only) and other assets/liabilities.
Outstanding issue	Securities traded on secondary markets after having been issued.
Portfolio investment	Functional account of the financial account and the international investment position which refers to an investment of a resident entity in one economy into equity and debt securities (other than direct investment) of another economy undertaken for the sake of investment income or capital gains. Unlike direct investors, portfolio investors have no significant influence on the orientation and management of the enterprise in which they invest.
Premium	Amount of money associated to the difference between the issue price and the maturity value of a security when the issue price is greater than the maturity value. This difference is treated as negative interest and is recorded, on an accrual basis, as investment income in the balance of payments.
Profits	Profits refer to earnings of enterprises measured net of income or corporation taxes payable without penalty during the recording period. Profits are treated as investment income on direct investment in the balance of payments.

Reinvested earnngs	Shares of earnings that subsidiaries and associated enterprises do not distribute as dividends and earnings that branches and other unincorporated enterprises do not remit. If the enterprise is a direct investment enterprise, reinvested earnings are treated as direct investment in the balance of payments/international investment position.
Repurchase agreements	Transactions on securities which refer to an agreement involving two transactions: a sale of securities and a simultaneous agreement to repurchase the same securities or similar securities at a date and price specified at the time of the agreement. Repurchase agreements are treated as loans in other investment in the balance of payments/ international investment position.
Reserve assets	Claims on non-residents that are readily available to and controlled by monetary authorities. They can be used to affect the currency exchange rate and/or other purposes. Reserves are treated as other investment in the balance of payments/ international investment position.
Reserve position in the fund	Reserve asset item that refers to the sum of the reserve tranche purchases that a member may draw upon and any indebtedness of the International Monetary Fund that is readily repayable to the member.
Resident	An institutional unit is regarded as resident when it has a center of economic interest in the economic territory of a country.
Retirements	Transactions in securities that represent the amount of capital reimbursed by the issuer at the date of maturity of the securities.
Secondary market	Established security exchanges or over-the counter (OTC) market where purchases and sales of outstanding securities take place among investors.
Securities	Financial instruments that are marketable such as publicly traded stocks, bonds, money market securities and other financial instruments. Securities are treated as direct and portfolio investment in the balance of payments/international investment position depending upon the direct or portfolio relationship of the issuer and the holder.
Securitization	Pooling of non-marketable (non-liquid) assets into standardized securities backed by those assets, which can then be traded like any other security.
Services	Account of the current account which refers to products which are generally intangible and which cannot be traded separately as they are generally consumed by the time their production is completed. They comprise transportation, travel, government services and commercial services.
Special drawing rights (SDRs)	Reserve asset item created by the IMF to supplement other reserve assets that are periodically allocated to IMF members in proportion to their respective quotas. Value of SDRs is determined by a weighted basket of currencies. Transactions in SDRs are recorded in the financial account.
Statistical discrepancy	Account in the balance of payment which ensures that the sum of all accounts equal zero by virtue of the double entry system used to account for transactions. This balancing item represents the net result of errors and omissions in the compilation of the balance of payments.

Stocks	Securities which refer to the ownership of a corporation through shares which represent a piece of the corporation's assets and earnings. Stocks are treated as direct and portfolio investment in the balance of payments/international investment position depending upon the direct or portfolio relationship of the issuer and the holder.
Strip bonds	Securities which refer to the creation by a dealer acquiring a block of existing bonds and then physically separating certain individual interest coupons from the underlying residue (also called "zero coupon bond"). These two units are then sold separately at significant discount to their par value. Strip bonds are treated as bonds in the balance of payments/international investment position.
Subsidiary	Business entity which has more that 50% of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise) owned by another business entity.
Term to maturity	Fixed period of time corresponding to the lifetime of a security . The term to maturity corresponds to the period of time between the date at which the security is issued (original term to maturity) or is outstanding (remaining term to maturity) and the date at which the security is redeemable (maturity date).
The Daily	The official release of statistical data and publication produced by Statistics Canada when the data are first released. It presents analysis of newly released data with source information for more detailed facts. It also includes weekly and monthly schedules of upcoming major news releases and announces new non-print products and new services.
Transaction	Economic flow that reflects the creation, transformation, exchange, transfer, or extinction of economic value. Transactions that involve change of ownership of goods, services, investment income or financial claims are recorded in the balance of payments. Balance of payments transactions and valuation changes modify the international investment position from one period to the next.
Transaction value	Value which refers in a broad sense to the actual prices agreed upon by transactors and which is generally used to record transactions in the balance of payments. For customs purposes, transaction value has been defined according to terms specific to customs.
Transportation	Account of services in the current account that covers revenues and expenses arising from the transportation of international travellers and of goods, as well as from supporting services related to transportation.
Travel	Account of services in the current account that covers purchases of goods and services, including those related to health and education, acquired from an economy by non-resident travellers for business and personal purposes during their visits. The travel has to be for less than one year except when for health or education purposes.
Valuation	The determination of asset, liability and transaction values. Different methods of valuation exist (transaction value, market price, issue price, book value, maturity value, etc.) and they often reflect applicable accounting principles, legal restrictions, and tradition, as well as theoretical considerations.

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Figure 1

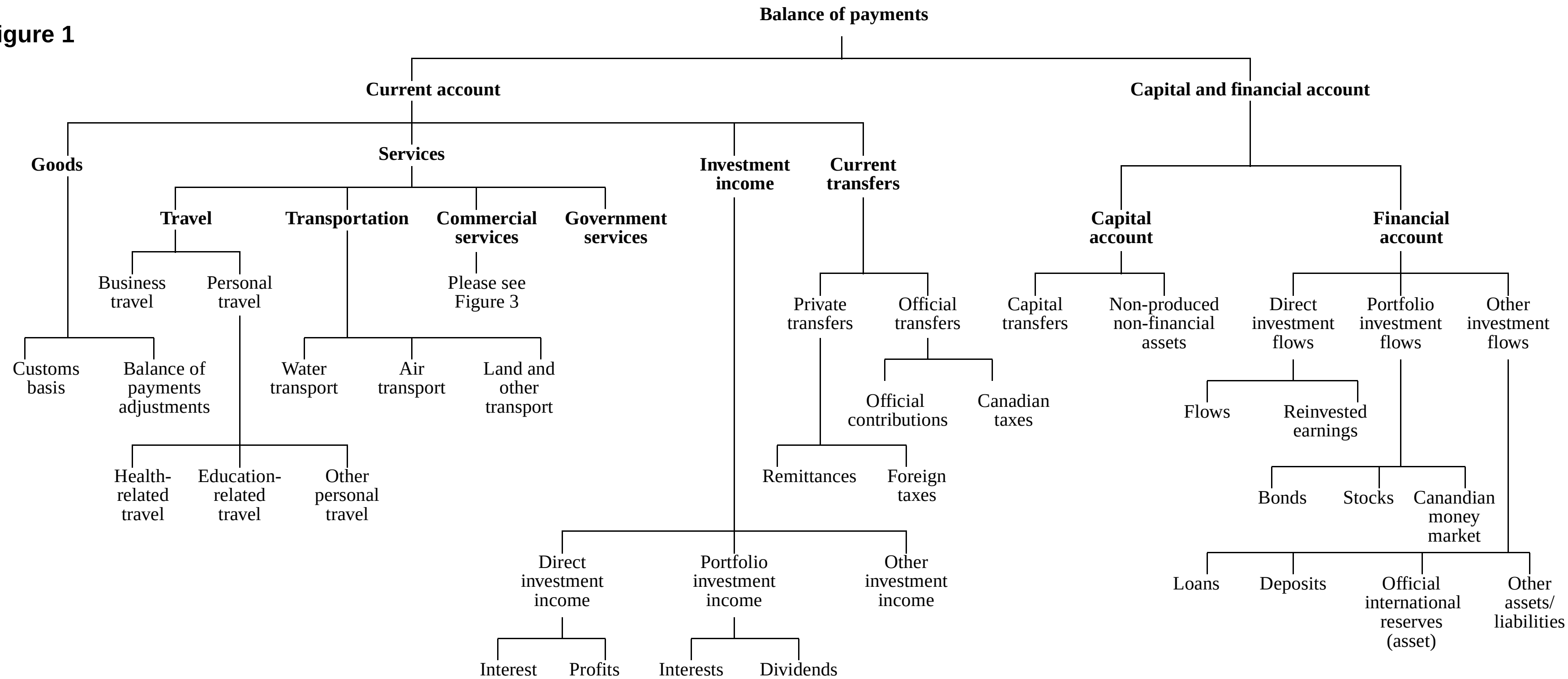


Figure 2

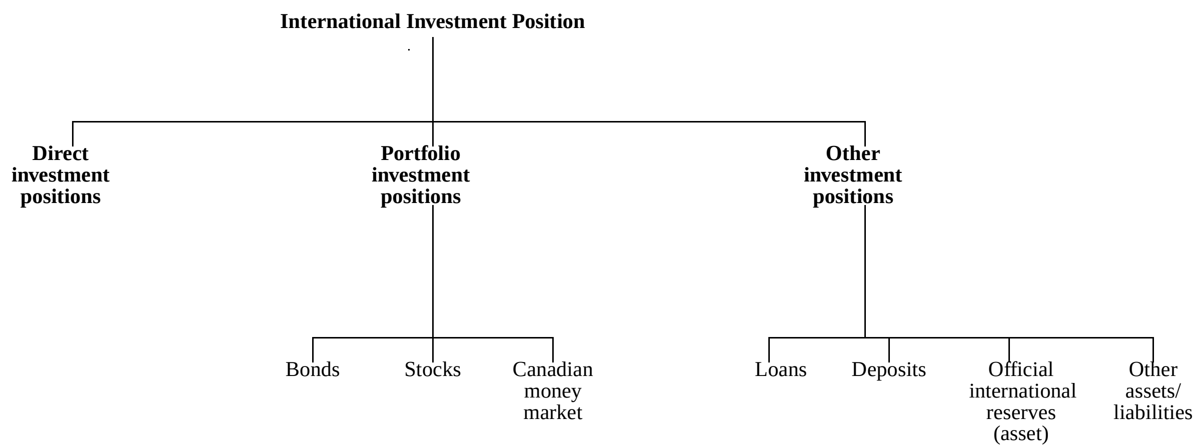
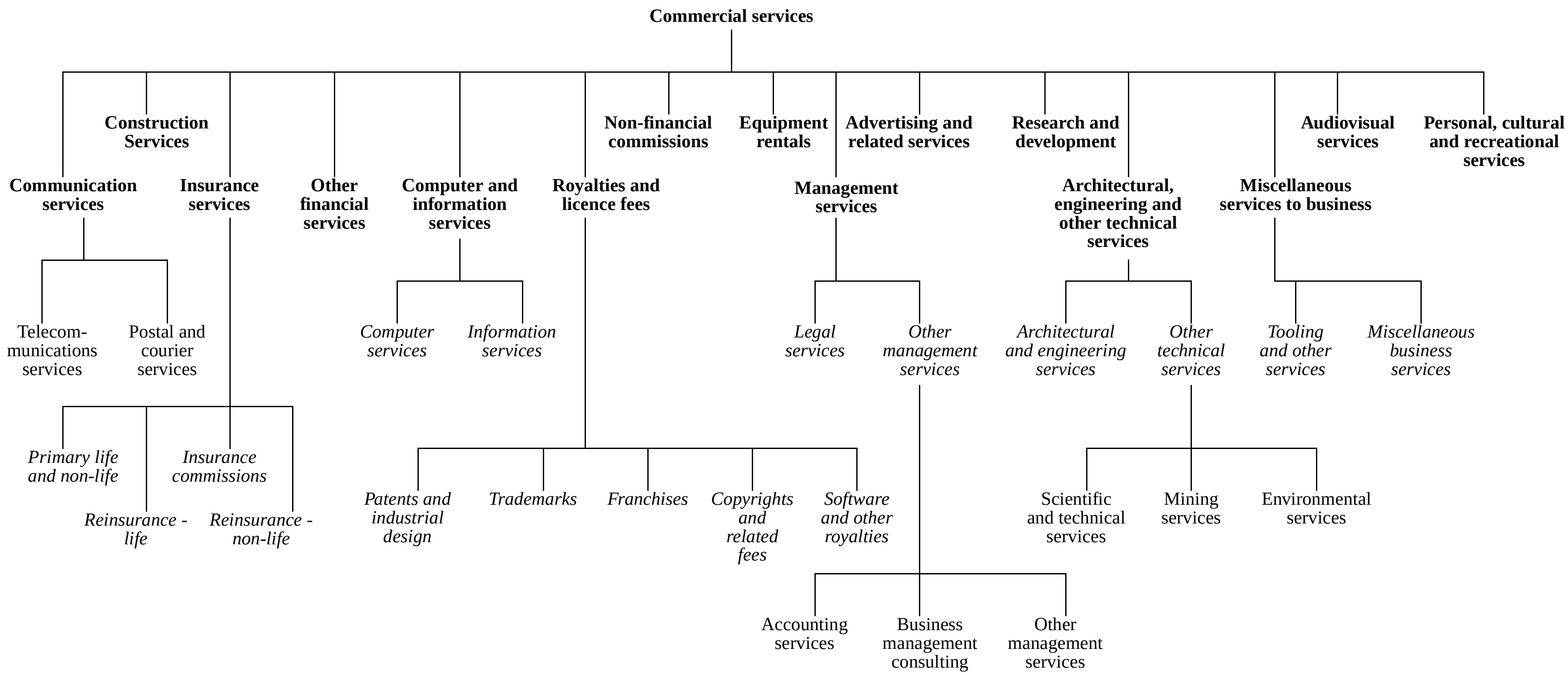


Figure 3


Commercial services
Construction Services
Non-financial commissions
Equipment rentals
Advertising and related services
Research and development
Audiovisual services
Personal, cultural and recreational services
Communication services
Insurance services
Other financial services
Computer and information services
Royalties and licence fees
Management services
Architectural, engineering and other technical services
Miscellaneous services to business
Telecom-munications services
Postal and courier services
Computer services
Information services
Legal services
Other management services
Architectural and engineering services
Other technical services
Tooling and other services
Miscellaneous business services
Primary life and non-life
Insurance commissions
Reinsurance - life
Reinsurance - non-life
Patents and industrial design
Trademarks
Franchises
Copyrights and related fees
Software and other royalties
Scientific and technical services
Mining services
Environmental services
Accounting services
Business management consulting
Other management services

Index

Notes:

‘n’ indicates a footnote
(g) indicates a definition of the term is in the Glossary
(*) indicates the main accounts, each of which is described in terms of concepts (definition, international standards and composition), sources, methods, and products (accuracy and accessibility)

A

B

C

D

E

G

H

I

L

M

N

O

T

U

V

W

Z