Balance of Payments and International Investment Position, Australia

Concepts, Sources and Methods

1998

W. McLennan
Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

EMBARGO: 11.30 AM (CANBERRA TIME) TUES 22 SEPT 1998

ABS Catalogue no. 5331.0
ISBN 0 642 25670 5

Produced by the Australian Bureau of Statistics

INQUIRIES

- For information about other ABS statistics and services, please refer to the back of this publication.
- For further information please contact the Director, International Investment Section on Canberra 02 6252 5601 or the Director, Balance of Payments Section on Canberra 02 6252 6688.

CONTENTS

PREFACE

This publication describes the conceptual framework of Australia's balance of payments and international investment position statistics, and the data sources and methods used to compile them. Its purpose is to help users to understand the statistics. It explains what the statistics measure, how they may be interpreted, how they relate to other economic series, how they are produced, where they are published and why they are subject to varying degrees of accuracy and reliability.

This is the third edition of this publication, the second of which (published in 1990) has become dated. With the growing interest in the level of foreign investment and debt, more emphasis is placed on Australia's international investment position, which is now seen as an integral part of the balance of payments framework. This latest edition also reflects the impact on the statistics of Australia's adoption of the fifth edition of the International Monetary Fund's *Balance of Payments Manual (BPM5)* and the third edition of the *System of National Accounts (SNA93)*. These are international standards which are harmonised with each other, facilitating the relatability of these two bodies of statistics. Also, since 1990 there have been substantial changes to the presentation of the statistics, data sources and estimation methods, which are reflected in this edition.

The main Australian Bureau of Statistics (ABS) publications presenting balance of payments and international investment position statistics are the annual and quarterly publications (Cat. nos 5363.0 and 5302.0 respectively), both of which are titled *Balance of Payments and International Investment Position, Australia.* Descriptions contained in this publication are consistent with statistics released in these publications as published for March quarter 1998.

From time to time, particular concepts, sources or methods used in compiling balance of payments and international investment position statistics are changed or modified in the light of reviews or other developments. The practice of advising users of these changes in the appropriate issues of publications (Cat. nos 5302.0 and 5363.0) will continue.

The ABS invites comments on the usefulness of this publication as a guide to Australian balance of payments and international investment position statistics. Such feedback will help in planning the content of future issues of this publication, and the descriptive material included in the regular statistical publications. Comments should be directed to Balance of Payments, Australian Bureau of Statistics, PO Box 10, Belconnen ACT 2616.

W. McLennan
Australian Statistician
September 1998

ABBREVIATIONS AND OTHER USAGES

ABS	Australian Bureau of Statistics
ANZSCC	Australian and New Zealand Standard Commodity Classification
ANZSIC	Australian and New Zealand Standard Industrial Classification
BEC	(Classification by) Broad Economic Categories
BOP	Balance of Payments
BPM5	Balance of Payments Manual (Fifth Edition, IMF, Washington D.C. 1993)
Cat. no.	Catalogue number of an ABS publication
c.i.f.	cost, insurance and freight
CPC	United Nations Central Product Classification
Eurostat	Statistical Office of the European Communities
f.o.b.	free on board
HS	Harmonised Commodity Description and Coding System (or Harmonised System), used for merchandise trade
IIP	Internation Investment Position
IMF	International Monetary Fund
ISIC, Rev.3	International Standard Industrial Classification of All Economic Activities, Revision 3
n.i.e.	not included elsewhere
OECD	Organisation for Economic Co-operation and Development
PC Ausstats	The ABS's on-line time series service
SISCA	Standard Institutional Sector Classification of Australia
SITC Rev3	Standard International Trade Classification, Revision 3
SNA93	A System of National Accounts (Revision 4, UN/IMF/OECD/EUROSTAT/World Bank, New York, 1993)
Tickets System	International Transactions Reporting System

ABS PUBLICATIONS REFERRED TO IN THIS PUBLICATION

Information Paper: A Guide to Smoothing Time Series—Estimates of Trend (Cat. no. 1316.0)—irregular

Information Paper: Time Series Decomposition—an Overview (Cat. no. 1317.0)—irregular

Measuring Australia's Economy (Cat. no. 1360.0)—biennial

Statistical Concepts Reference Library, 1997 (Cat. no. 1361.0.30.001) —annual on CD-ROM

Overseas Arrivals and Departures, Australia (Cat. no. 3401.0) —monthly

Overseas Arrivals and Departures, Australia (Cat. no. 3402.0)—quarterly

Overseas Arrivals and Departures, Australia (Cat. no. 3404.0)—annual

Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5204.0)—annual

Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5206.0)—quarterly

Australian National Accounts: Concepts, Sources and Methods (Cat. no. 5216.0)—irregular

Australian National Accounts: Financial Accounts (Cat. no. 5232.0) —quarterly

Australian National Accounts: National Balance Sheet (Cat. no. 5241.0) —discontinued

Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts (Cat. no. 5248.0)—irregular

Information Paper Implementation of Revised International Standards in the Australian National Accounts, 1997 (Cat. no. 5251.0) —discontinued

Balance of Payments and International Investment Position, Australia (Cat. no. 5302.0)—quarterly

Balance of Payments, Australia, Concepts, Sources and Methods, 1981 and *1990* (Cat. no. 5331.0)—irregular

Balance of Payments, Australia, Summary of Concepts, Sources and Methods, 1996 (Cat. no. 5351.0)—discontinued

Foreign Investment, Australia, Summary of Concepts, Sources and Methods, 1991 (Cat. no. 5355.0)—discontinued

Balance of Payments, Australia (Cat. no. 5301.0)—discontinued

Information Paper: Quality of Australian Balance of Payments Statistics, 1996 (Cat. no. 5342.0)—irregular

Guide to Australian Balance of Payments (Cat. no. 5362.0)—irregular

Balance of Payments and International Investment Position, Australia (Cat. no. 5363.0)—annual

Information Paper: Implementing New International Statistical Standards in ABS International Accounts Statistics, 1997 (Cat. no. 5364.0)—irregular

Information Paper: Do We Need Monthly Balance of Payments Statistics? (Cat. no. 5366.0)—discontinued

Information Paper: The Future of Monthly Balance of Payments Statistics (Cat. no. 5367.0)—discontinued

International Trade in Goods and Services, Australia (Cat. no. 5368.0) —monthly

International Merchandise Trade (Cat. no. 5422.0)—quarterly

International Merchandise Imports (Cat. no. 5439.0)—monthly

Award Rates of Pay Indexes, Australia (Cat. no. 6312.0)—monthly

Wage Cost Index (Cat. no. 6345.0)—quarterly

Consumer Price Index, Australia (Cat. no. 6401.0)—quarterly

Export Price Index, Australia (Cat. no. 6405.0)—quarterly

Price Indexes of Articles Produced by Manufacturing Industry, Australia (Cat. no. 6412.0)—quarterly

Import Price Index, Australia (Cat. no. 6414.0)—quarterly

Inbound Tour Operators, Australia (Cat. no. 8690.0)—irregular

CHAPTER 1 INTRODUCTION

PURPOSE OF THIS PUBLICATION

1.1 The balance of payments is one of Australia's key economic statistics. Put simply, the balance of payments measures the economic transactions between Australian residents and the rest of the world. It also draws a series of balances between inward and outward transactions, provides an overall net flow of transactions between Australian residents and the rest of the world and reports how that flow is funded. Economic transactions include:

(i) exports and imports of goods, such as agricultural products, minerals, other raw materials, machinery and transport equipment, computers, white goods and clothing;

(ii) exports and imports of services such as international transport, travel and business services;

(iii) income flows, such as dividends and interest earned by foreigners on investments in Australia and by Australians investing abroad;

(iv) financial flows, such as investment in shares, debt securities and loans; and

(v) transfers, which are offsetting entries to any one-sided transactions listed above, such as foreign aid and funds brought by migrants to Australia.

1.2 In more recent years, with the growing interest in the level of foreign investment and debt, more emphasis is being placed on Australia's international investment position. These statistics measure the level (or stock) of foreign investment in Australia and Australian investment abroad at the end of a period. The difference between foreign investment in Australia and Australian investment abroad is referred to as Australia's net international investment position. International investment position statistics may be split to show, separately, Australia's foreign debt and equity investment. The latter provides a measure of the foreign ownership of Australian enterprises (through share holdings) and of Australian ownership of foreign enterprises. Viewed more broadly, the international investment position statistics provide a reconciliation of the stock of investment at two points in time.

PURPOSE OF THIS PUBLICATION *continued*

1.3 This publication aims to provide, for Australia's balance of payments and international investment position statistics, a comprehensive understanding of their:

(i) underlying conceptual framework;

(ii) classification of data items;

(iii) presentation and publication;

(iv) data sources and methods;

(v) data quality; and

(vi) relationship to broader economic statistics as defined in the system of national accounts.

USERS AND USES OF STATISTICS

1.4 A wide spectrum of audiences requires information about balance of payments and international investment position concepts, sources and methods. This ranges from users with broad, general needs for information about the main aggregates to those with highly specialised needs relating to particular data items. The main categories of users, starting from those with the broadest interest, and their likely needs and uses, are set out in box 1.1.

1.5 For students and others who only need a broad understanding of the balance of payments and international investment position statistics, the ABS publications *Measuring Australia's Economy* (Cat. no. 1360.0) and *Statistical Concepts Reference Library* (Cat. no. 1361.0.30.001), provide a brief overview of the concepts, structure and classifications of these and the other major economic statistics published by the ABS. The present concepts, sources and methods document should prove a useful extension, but for the most part it may be too detailed for this audience. These users should read Chapters 2 to 5, 15 and 16, but may avoid the more detailed material. Some years ago the ABS published the *Guide to Australian Balance of Payments* (Cat. no. 5362.0), aimed at the more general user. That document is still relevant and helpful, but needs to be updated because there have been changes to some of the key concepts, classifications and presentations of the statistics. The ABS plans to update the publication at a later date.

1.1 USERS AND USES OF BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATISTICS

(i) Students at upper high school level or undergraduate level at university—the need is for a broad understanding of the conceptual framework, how the numbers are put together, and the main outputs (publication tables, written and graphic analysis, and explanatory notes) to gain an appreciation of Australia's economic relationships with the rest of the world;

(ii) financial journalists—the need is for a broad understanding of the conceptual framework, how the numbers are put together, and the main outputs, to support media comment on Australia's economic relationships with the rest of the world. These users may need to delve deeper on particular aspects;

(iii) teachers/teaching academics—a broad understanding of the conceptual framework, how the numbers are put together, and the main outputs, to support teaching about Australia's economy and its relationship with the rest of the world. These users may also need to delve deeper on particular aspects;

(iv) financial sector economists, national and international investors, public sector economists in other countries, and international rating agencies—a reasonably detailed understanding of the conceptual framework, the sources and how the numbers are put together, to support their interpretation of the statistics and advice to their organisations and clients;

(v) international agencies such as the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the World Bank and the United Nations Statistics Division —while uses vary by agency, generally these agencies require a reasonably detailed understanding of all aspects of the statistics and their uses encompass monitoring the extent of country adherence to international standards and practices, the compilation of country groupings and world economic statistics, and modelling work to support the preparation of country reports;

(vi) academic researchers—a reasonably detailed understanding of the conceptual framework, the sources, and how the numbers are put together, with more detail on particular accounts/items to support research and modelling;

(vii) balance of payments compilers in other countries—a reasonably detailed understanding of Australian sources and methods, with more detail on particular accounts/items, to compare with their own practices;

(viii) the Commonwealth Treasury, the Reserve Bank of Australia and other public sector economists—similar to the previous category, but needing more detail in some areas, to support their interpretation of the numbers and forecasting of the external sector and other national accounting aggregates; and

(ix) balance of payments and national accounts compilers in the ABS—a detailed understanding of concepts, sources and methods, supported by considerable detail on current and historical practice regarding particular accounts and data items, and areas of possible future change.

USERS AND USES OF STATISTICS *continued*

1.6 The present document is aimed mainly at the more detailed user of balance of payments and international investment position statistics. However, it is not a complete description of the ABS balance of payments and international investment position methodology. That task would require a much larger publication. Also, given the constantly changing economic environment and the need for frequent evaluation of and changes at the margin to data sources and methods, this publication would quickly become out of date. Rather, this publication aims to provide a substantial guide to what the ABS does to compile balance of payments and international investment position statistics. Even so, the publication will become out of date over time, and users should keep abreast of changes to data sources and methods which are announced from time to time in the quarterly and annual balance of payments and international investment position publications (Cat. nos 5302.0 and 5363.0). It is intended to update the present publication periodically.

INTERNATIONAL STATISTICAL STANDARDS

1.7 The ABS has always attempted to follow, wherever possible, the international standards relating to balance of payments and international investment position statistics. The reasons for this are several. First, domestic and foreign analysts will be assured that Australia's official balance of payments and international investment position statistics comply with objective, coherent international standards that reflect current, global analytic needs. Second, Australia is a member of the international community and international users need comparable data for comparison between countries. Third, Australia, as a formal member of organisations such as the IMF and OECD, needs to submit its various economic statistics in conformity with standards set by those organisations. Fourth, a method of data validation is for Australia to compare and reconcile its data with those of other countries. For this purpose statistics need to be as comparable as possible.

1.8 To facilitate such consistency and to provide guidelines for its members, the IMF has issued the *Balance of Payments Manual*, the first edition of which appeared in 1948 and the most recent (fifth) edition in 1993. The conceptual framework of the Australian balance of payments corresponds to that underlying the fifth edition of the IMF Manual, hereafter referred to as *BPM5*. *BPM5* was implemented in Australia's balance of payments accounts and international investment position statistics from the September quarter 1997.[1]

---

1 The ABS Information Paper *Implementing New International Statistical Standards in ABS International Accounts Statistics, 1997* (Cat. no. 5364.0), explains changes in Australia's balance of payments statistics that occurred with the switchover to the BPM5 basis. A series of tables in the information paper show the classifications used in previous balance of payments and international investment position statistics, along with those currently used.

INTERNATIONAL STATISTICAL STANDARDS *continued*

1.9 A process of reviewing the existing international standards started in the mid 1980s with the specific objective of harmonising, to the maximum extent possible, the statistical concepts, definitions, statistical units, classifications and terminology. Release of the revised standards started in 1993 with *BPM5* and the third edition of the *System of National Accounts (SNA93)*. *BPM5* was prepared by the IMF in close cooperation with national compilers and with the Statistical Office of the European Communities, the OECD, the United Nations and the World Bank. Those five organisations jointly published *SNA93.* The IMF is working on a *Manual on Monetary and Financial Statistics* and is redeveloping its *Manual on Government Finance Statistics.* Both of these international standards are expected to be harmonised, to the maximum extent possible, with SNA93. In addition, common key concepts and definitions embodied in SNA93 align with those used in the International Standard Industrial Classification and with those used by the International Labour Organisation for population and related measures.

STRUCTURE OF THIS PUBLICATION

1.10 *Chapter 2* explains the concepts and terms used in balance of payments and international investment position statistics. It also explains the double entry accounting system that underscores the statistics, concepts of territory and resident, economic transactions, the valuation and time of recording of transactions, the reconciliation of balance of payments and international investment position statistics, and other important conceptual issues.

1.11 Statistics need to be arranged in a coherent structure to support their use for a wide variety of purposes. The balance of payments statement provides a classification of economic transactions, and similarly the international investment position statistics are broken down by various levels of classification. *Chapter 3* explains the nature of these classifications and describes the more important ones. Some of the lesser classifications are left to later chapters.

1.12 *Chapter 4* outlines the ABS publication strategy for balance of payments and international investment position statistics. It also explains the presentation of the statistics, commencing with the summary balance of payments and international investment position statistics, and moving to more detailed statistics and the use of analytic measures such as seasonal adjustment, trend and chain volume measures.

1.13 *Chapter 5* provides an overview of the balance of payments and international investment position compilation process, indicates the ABS strategy for the collection of data, and describes the use of estimation and data models to compile these statistics. It provides a summary of the data sources and data models used.

STRUCTURE OF THIS PUBLICATION *continued*

1.14 *Chapters 6 to 10* describe in some detail the concepts, additional classifications, sources and methods applicable to the major components of the current and capital accounts of the balance of payments. A table is shown at the end of each chapter summarising the data sources and estimation methods applicable. *Chapter 6* describes the goods component of the current account; *Chapter 7* describes services; *Chapter 8* income; *Chapter 9* current transfers; and *Chapter 10* describes the capital account.

1.15 *Chapter 11* elaborates, in more detail than in *Chapter 2*, on the balance of payments financial account and its close relationship to the international investment position. It provides a background for the next three chapters, which explain direct investment (*Chapter 12*), portfolio investment (*Chapter 13*), and other investment and reserve assets (*Chapter 14*).

1.16 *Chapter 15* examines the quality of balance of payments and international investment position statistics. It provides an analysis of the accuracy and reliability of the statistics and the factors influencing quality.

1.17 *Chapter 16* explains the relationship between the balance of payments and international investment position statistics and broader economic statistics which are articulated in the system of national accounts. This is an important chapter for those wishing to have a better understanding of the linkages between the external sector and other sectors of the economy.

1.18 While the balance of payments and international investment position statistics measure economic transactions and the stock of assets and liabilities between Australian residents and non-residents, they can also measure transactions and stocks of investment between Australian residents and the residents of a single other country. In other words, transactions and the stock of investment may be classified by partner country or groupings of partner countries. *Chapter 17* examines the issues involved in compiling and classifying the balance of payments and international investment position by partner country.

1.19 *Chapter 18* describes some emerging issues in Australia's international statistics. These include possible developments in data sources, new challenges such as globalisation and internet commerce, and issues associated with international statistical cooperation.

1.20 The appendixes detail the data sources used in the compilation of the components of the balance of payments and international investment position (*Appendix 1*), and list selected data models used in the compilation of these components (*Appendix 2*).

EARLIER CONCEPTS, SOURCES AND METHODS PUBLICATIONS

1.21 The first comprehensive concepts, sources and methods publication for the balance of payments was published by the ABS in 1981 under the title *Balance of Payments, Australia, Concepts, Sources and Methods* (Cat. no. 5331.0); a second edition was published in 1990. A summary publication *Balance of Payments, Australia, Summary of Concepts, Sources and Methods* (Cat. no. 5351.0) was published in 1988 and again in 1996. A related publication *Foreign Investment, Australia, Summary of Concepts, Sources and Methods* (Cat. no. 5355.0) was published in 1991. Each of these publications still serves as a useful reference to the history of balance of payments and international investment position (previously foreign investment) statistics in Australia. The present publication revises and updates these previous publications.

CHAPTER 2 CONCEPTUAL FRAMEWORK

DEFINITIONS

Balance of payments

2.1 Broadly speaking, the Australian balance of payments[1] is a statistical statement designed to provide a systematic record of Australia's economic transactions with the rest of the world. It may be described as a system of consolidated accounts in which the accounting entity is the Australian economy and the entries refer to economic transactions between residents of Australia and residents of the rest of the world (non-residents).

2.2 Balance of payments statements cover a wide range of economic transactions which include:

(i) goods, services, income and current transfers; and

(ii) capital transactions, such as capital transfers, and financial transactions involving Australian claims on, and liabilities to, non-residents.

Category (i) is shown in the current account and category (ii) in the capital and financial account.

International investment position

2.3 Australia's international investment position is a closely related set of statistics. It can be viewed as the balance sheet recording Australia's stock (or level) of foreign financial assets and liabilities at a particular date. The net international investment position is the difference between the stock of foreign financial assets and foreign liabilities at a particular date.

---

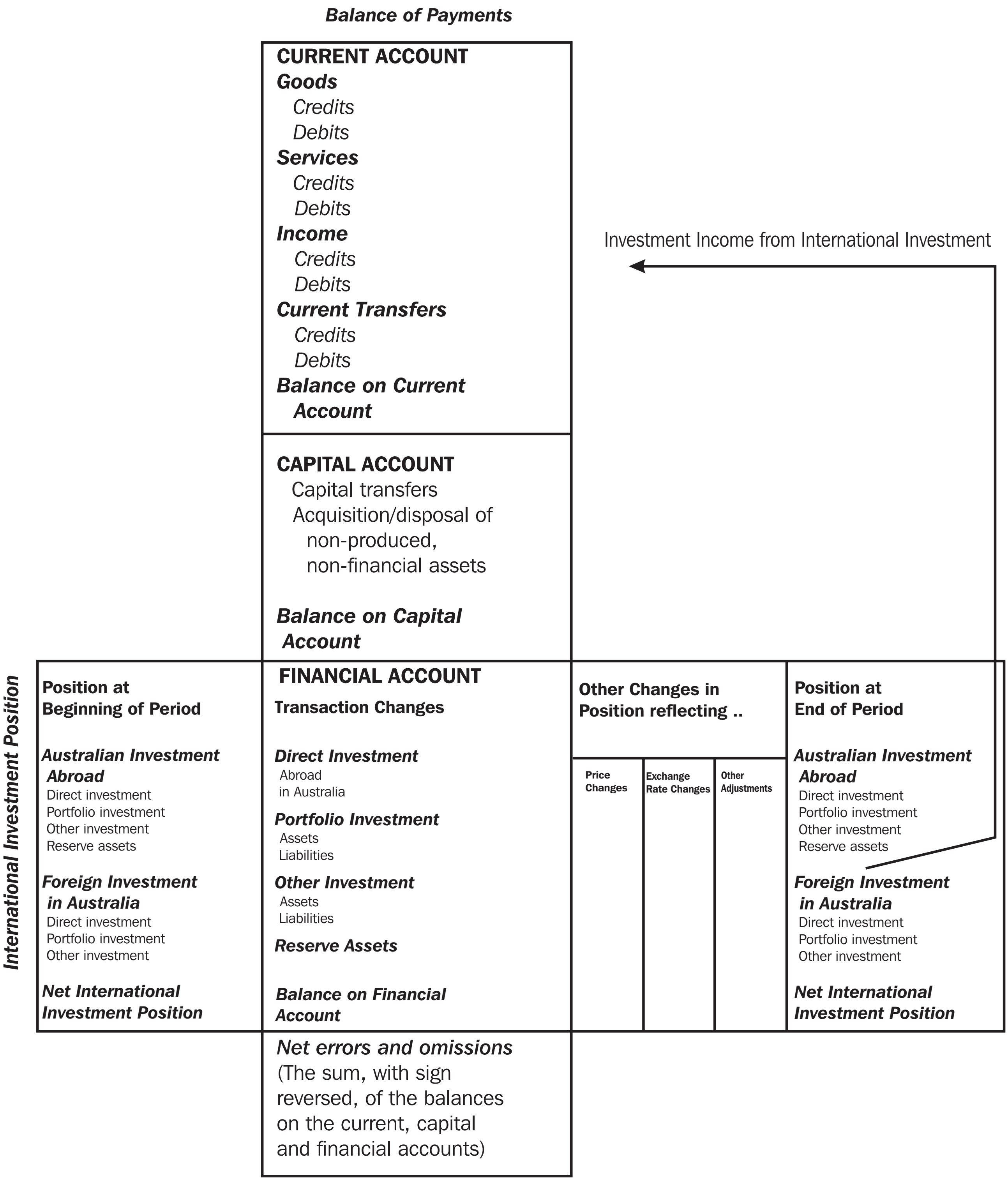
1 Although the terminology is now too deeply embedded in international and local usage to be changed, the term balance of payments is a misnomer in two major senses. First, it suggests that the accounts are concerned only with payments. In fact their scope is a good deal broader, and they include economic transactions during a period that give rise to a payment in an earlier or later period, e.g. goods may change ownership in one period, but payment may be made in an earlier period (pre-payment) or in a later period (trade credit). They also include transactions for which there may never be a payment, e.g. goods shipped under foreign aid or goods shipped between related enterprises. Second, the term implies a single balance. In reality the balance of payments is a system of accounts in which many balances can be derived, such as the balance of goods and services, the balance on current account, and the balance on capital and financial account.

International investment position *continued*

2.4 Viewed more broadly, the international investment position reconciles the stock of investment at two different points in time by showing financial transactions and other changes (non-transaction changes) such as price changes, exchange rate variations and other adjustments that occurred during the period. This is also referred to as a reconciliation statement. Financial transactions which are included in the reconciliation statement are equivalent to the transactions measured in the financial account of the balance of payments. This is illustrated in diagram 2.1 which shows the relationship between the balance of payments and international investment position statements. The column of the diagram shows the accounts of the balance of payments, while the row shows the international investment position. Common to both row and column is the financial account of the balance of payments (called simply 'transactions' when presented in an international investment position format). This financial account shows, for the relevant accounting period, the financial transactions which arise from or are the counterparts to the transactions in the current and capital accounts. Correspondingly, it also reflects the change in Australia's international investment position over the reference period due to those financial transactions.

2.5 Classifications such as assets and liabilities, type of investment (direct, portfolio and other investment and reserve assets), and instrument of investment, are used consistently in both the balance of payments and the international investment position.

2.1 RELATIONSHIP BETWEEN THE BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION



DOUBLE-ENTRY SYSTEM

2.6 Conceptually, an economic transaction has two sides: something of economic value is provided and something of equal value is received. The double-entry recording system in the balance of payments reflects this. When an economic value is provided (e.g. a shipment of wheat) a credit entry is made, and when an economic value is received (e.g. a payment for the wheat) a debit entry is made. For example, when an exporter sells (provides) goods to a non-resident, the exporter may receive cash (a financial asset) or another type of financial asset (e.g. a trade credit claim) in return. The export is represented by a credit entry and the financial asset acquired is represented by an offset debit entry. An understanding of the double-entry recording system is necessary for a complete understanding of balance of payments statistics.

2.7 Under the double-entry system, by definition credit entries must equal debit entries. Credit entries are required for exports of goods and services, income receivable, and increases in liabilities or reductions in assets. Likewise, debit entries are required for imports of goods and services, income payable, and increases in assets or reductions in liabilities. Where something of economic value is provided without something of economic value in exchange (i.e. without a quid pro quo) the double entry system requires an offset to be imputed (a transfer entry) of equivalent value. For example, food exported as aid requires a credit entry for the goods provided and a debit transfer as the aid offset. The examples in table 2.2 illustrate how the double entry system is applied. Table 2.3 sets out the rules for the system.

2.2 EXAMPLES OF DOUBLE ENTRY RECORDING

		Credit	*Debit*
1	Sale of goods (value 100) to non-residents for foreign exchange (i.e. goods provided and bank payment (a bank deposit) received)		
	Goods	100	
	Bank deposits, foreign currency assets		100
2	Purchase of goods (value 120) from a non-resident using trade credit (i.e. goods received and a claim on a resident (trade credit liability) provided)		
	Goods		120
	Trade credit liabilities	120	
3	Food aid (value 5) provided to non-residents (i.e. goods provided and transfer imputed)		
	Goods	5	
	Current transfers		5
4	Repayment of a loan (value 25) by a resident company to a non-resident (i.e. liability to a non-resident reduced and a reduction in bank deposits)		
	Loan repayment		25
	Bank deposits, foreign currency, assets	25	

2.3 RULES FOR THE DOUBLE ENTRY SYSTEM

Credit entries, all economic resources provided by the compiling economy, including:	**Debit entries**, all economic resources received by the compiling economy, including:
Exports of goods and services.	Imports of goods and services.
Income accruing to residents from non-residents.	Income accruing to non-residents from residents.
Claims on residents provided to non-residents; and resident claims on the rest of the world returned to the rest of the world.	Claims on residents returned from the rest of the world; and claims on the rest of the world provided to residents.
Transfers, which are offsets to debit entries.	Transfers, which are offsets to credit entries.

Sign convention in balance of payments statistics

2.8 The sign convention used in presenting balance of payments statistics is to give no sign (an implied positive sign) to credit entries and a minus sign to debit entries. Similarly, balances or items which are net credits have no sign, while balances or items which are net debits have a negative sign. This is illustrated in box 2.4.

2.4 SIGN CONVENTION USED IN BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION PRESENTATION

A positive value (indicated by no sign) is used for credit entries and a negative sign is used for debit entries. This sign convention applies not only to gross entries but also to net entries and to balances. When balances are net credits they are shown as positive (no sign) entries, and when they are net debits they are shown as negative entries.

In the following example for services, the gross credit entry has no sign and the gross debit entry a negative sign. Further, the net services balance is positive (without sign) in Year 1 (credit value exceeds the debit value) and negative in Year 2 (debit value exceeds the credit value).

	Year 1	*Year 2*
Net services (balance)	2	–4
Credit	100	102
Debit	–98	–106

The following example for financial transactions involves Australian companies extending long term trade credit abroad by 2 (the net of new credit less repayments of existing credit) and receiving additional trade credit of 3.

	Assets	*Liabilities*
Long term trade credit (net)	–2	3
Drawings	–25	29
Repayments	23	–26

In this example, there is new lending by Australian businesses to non-residents of 25 and net lending of 2 abroad (drawings less repayments by non-residents). As both represent increases in assets (residents are provided with a claim on non-residents), items are shown with a negative sign; as repayments reduce assets these are shown without sign. The reverse treatment is adopted for liabilities, i.e. increases in gross and net liabilities (non-residents are provided with a claim on residents) are shown without sign and reductions in liabilities are shown with a negative sign.

Errors and omissions

2.9 It follows that, in principle, under a double-entry accounting system, the sum of credit and debit entries must be zero (treating credits as positive and debits as negative). In practice, some transactions are not measured accurately (i.e. errors) and some are not measured at all (i.e. omissions). Data sources used to compile the accounts often measure the credit and debit sides from different data sources and may not always do so consistently. For example, non-resident purchases of shares in Australian enterprises from the resident holders or issuers of those shares (credit entries) are largely estimated from data reported by nominees in the Survey of International Investment, while the payments (e.g. foreign currency bank deposits) acquired (debit entries) are reported by the issuers or banks in the same survey. There could be many reasons why these sources may not measure the acquisition side of the share transaction and the corresponding payments, either in the same accounting period or at the same value. To restore the equality of credit and debit entries, a net errors and omissions item is included in the balance of payments accounts.

CONCEPTS OF TERRITORY AND RESIDENCE

2.10 In compiling the Australian balance of payments and international investment position, the Australian economy is conceived as comprising the economic entities that have a closer association with the territory of Australia than with any other territory. Each such economic entity is described as a resident of Australia. Any economic entity which is not regarded as a resident of Australia is described as a non-resident. Australia's territory is defined to include the territories lying within its political frontiers and territorial seas, and in the international waters over which it has exclusive jurisdiction. It also includes its territorial enclaves abroad holding embassies, consulates, military bases, scientific stations, information or immigration offices, aid agencies etc., whether owned or rented by Australian governments with the formal agreement of the countries where they are located. Similar foreign enclaves located in Australia are excluded from Australia's economic territory. In Australia's economic statistics the external territories of Christmas Island, Cocos (Keeling) Islands and the Australian Antarctic Territory are regarded as part of the Australian economy, but Norfolk Island is not.

2.11 The residents of Australia comprise:

(i) Resident general government institutions which comprise Australian Commonwealth, State and local government authorities and statutory bodies, but exclude government-owned or controlled (public) financial and trading enterprises. Australian embassies, consulates, military establishments, etc. physically located abroad are included in Australia's economic territory and are therefore residents; similar entities of other countries physically located within Australia are outside Australia's economic territory and are therefore non-residents.

(ii) Resident financial and trading enterprises which include all enterprises engaged in the production of goods and services on a commercial or equivalent basis within the territory of Australia. Enterprises may be incorporated or unincorporated; privately or government owned and/or controlled; and locally or foreign owned and/or controlled. The definition of an enterprise in terms of the territory in which it is located often makes it necessary to divide a single legal entity into a head office operating in one economy and a branch operating in another economy. Resident enterprises include Australian branches of foreign companies and exclude foreign branches of Australian companies.

(iii) Resident non-profit bodies which are those in which individuals and/or enterprises combine, as owners, to produce goods and services within the territory of Australia for purposes other than to provide a financial return for themselves. Examples are churches, charitable organisations and representative business organisations such as Chambers of Commerce.

CONCEPTS OF TERRITORY AND RESIDENCE *continued*

(iv) Resident households and individuals which broadly encompass all persons residing in the territory of Australia for one year or more, whose general centre of interest is considered be Australia. Even though Australia's official diplomatic and consular representatives, Australia's armed forces, other Australian government personnel stationed abroad and their dependants, and Australian students studying abroad, may all be abroad for one year or more, they are also treated as Australian residents since their centre of interest is considered to be Australia. Generally, the centre of interest of persons visiting Australia for less than one year is considered to be outside Australia and they are therefore regarded as non-residents but if they stay for one year or more they are considered to be residents for balance of payments purposes. Irrespective of their length of stay, non-residents also include foreign diplomatic, consular, military and other government personnel, their dependants, and foreign students studying in Australia. Box 2.5 discusses the treatment of certain special cases of residency.

2.5 SPECIAL CASES OF RESIDENCY

Mobile equipment

International transactions associated with the use of mobile equipment (such as ships, aircraft, satellites, and oil and gas drilling rigs) call for special consideration in the context of residence. Mobile equipment differs from most other equipment only in that it may be used to provide services in the territory of several countries or may operate primarily in international waters or air space. It is not the location of the mobile equipment that is crucial, but rather the residence of the enterprise which operates the equipment. When mobile equipment is operated in international waters or air space, its operation is assigned to the economy of the operator. When the mobile equipment is located on a long-term basis in one economy, different from that of the head office, consideration is given to splitting the head office and its branch (see conditions in paragraph 2.32). This has particular application for Australia when considering the activity in the Timor Sea Economic Cooperation Zone.

International bodies and their employees

International bodies (whose members are governments) which have a presence in Australia, are treated as non-residents provided their activities do not qualify as trading or financial enterprise activities; however, their employees (other than those with diplomatic status) are treated as residents.

Agents

When an agent enters into a transaction on behalf of a principal in another country, the transaction is attributed to the country of the principal and not to that of the agent. However, the services rendered by the agent to the principal are attributed to the country of which the agent is a resident. For example, an Australian travel office which sells tickets to Australian residents on behalf of a foreign airline is treated as an agent in the sale of those tickets, even if it is legally owned by or otherwise related to the foreign airline. That is, the transaction is deemed to be the purchase of an airline ticket by a resident from a non-resident airline.

VALUATION

2.12 To be useful in analysis, and to provide meaningful indicators of cross-border economic activity, it is important that the balance of payments and international investment position statistics carry values that have economic meaning. It is also important, given the double-entry accounting system used, that a uniform valuation is adopted. This means that the credit and debit entries of each transaction—which in practice may be derived from independent sources—should be valued at the same price. In addition, a uniform valuation is essential to sum different types of transactions on a consistent and comparable basis. The use of a uniform valuation principle aids understanding by users. Moreover, statistics for different countries will not be comparable unless both parties to a transaction adopt the same valuation principle. It is also important to use a principle which is consistent with national accounting principles. For all these reasons, market price is used in Australian economic statistics for valuing transactions.

2.13 Market price is the amount of money that a willing buyer pays to acquire something from a willing seller, when such an exchange is between independent parties and involves only commercial considerations. In practice, one or more of the conditions needed to establish a market price may be absent and other valuations may be used.

2.14 For the most part, the price at which a transaction is recorded in the accounts of the transactors or in the administrative records used as data sources will be the market price or a very close approximation of it. This valuation is known as the transactions price and is the practical valuation basis used in the balance of payments, both because it aids consistent recording of credits and debits and because of its usual proximity to the ideal market valuation. Box 2.6 discusses a special case of transactions where market prices may not apply, namely transfer pricing between affiliated enterprises in different countries.

2.6 TRANSFER PRICING

Where transactions are between affiliated enterprises in different countries, the prices adopted in their books for recording transactions in goods and services and any associated indebtedness and interest—referred to as transfer prices—may not correspond to prices that would be charged to independent parties. To the extent that transfer prices are different from those charged to enterprises outside the group, there will be some departure from the market price principle. However, there are practical difficulties in identifying and suitably adjusting individual cases. Further, because transfer pricing to avoid tax is illegal in Australia the distortions in the international accounts caused by transfer pricing are not considered widespread. For both reasons, adjustments to account for transfer pricing are rarely made in practice.

Assets and liabilities

2.15 As with all international investment position statistics, foreign financial assets and liabilities should, in principle, be valued at their current market price at the reference date. In practice this is not always possible and valuation guidelines are adopted in order to approximate market valuation, particularly for those financial assets and liabilities that are only rarely transacted. For example, in measuring the value of direct investment in equity capital, much of which is never traded or is traded infrequently, market value is approximated by one of the following methods: a recent transaction price; directors' value; or net asset value.

Unit of account and conversion

2.16 Transactions and stock positions originally denominated in foreign currencies need to be converted to Australian dollars using market rates of exchange prevailing at the time of the transaction (balance of payments) or at the reference date (international investment position). Transactions should be converted at the mid-point of the buying and selling exchange rates applying at the time of transaction. Stocks should be converted at the mid-point of the buying and selling exchange rates applying at the beginning or end of the period. In practice, the actual rate used varies according to the source of the transaction or stock data.

TIME OF RECORDING

Transactions

2.17 The time of recording of transactions in balance of payments and international investment statistics is, in principle, the time of change of ownership (either actual or imputed). Under the double-entry system, both sides of a transaction should be recorded in the same period. This is consistent with the principle of accrual accounting, which requires that transactions be recorded when economic value is created, transformed, exchanged, transferred or extinguished.

2.18 Change of ownership is considered to occur when legal ownership of goods changes, when services are rendered and when income accrues. In the case of transfers, those which are imposed by one party on another, such as taxes and fines, should ideally be recorded at the moment at which the underlying transactions or other flows occur which give rise to the liability to pay; other transfers should be recorded when the goods, services etc. change ownership.

2.19 For financial transactions, the time of change of ownership is taken to be the time when transactions are entered in the books of the transactors. That is taken to be the time when a foreign financial asset or liability is acquired, relinquished by agreement, sold or repaid. The commitment or pledging of an asset does not constitute an economic transaction, and no entry should be shown unless a change of ownership actually occurs in the period covered. Likewise, the entries for loan drawings should be based on actual disbursements and not on commitments or authorisations. Entries for loan repayments should be recorded at the time they are due rather than on the actual payment date.

Transactions *continued*

2.20 While both sides of a transaction should be recorded in the same period, in practice the time of recording of transactions in the balance of payments and international investment position statistics will reflect the practices in data sources, and may diverge from the principle of time of change of ownership. For Australia, transactions in goods credits (exported goods) are mainly recorded at the time when goods are shipped as this is assessed to be a generally good practical approximation of the time when ownership changes. Goods debits (imported goods) are recorded when customs records relating to the movement of the goods across the frontier are processed, again in the expectation that this is the best practical approximation to change of ownership that can be generally achieved. In both cases, however, timing adjustments are made for certain very high value goods to record them in the time period in which change of ownership occurs. For the remainder of the current account, the time of the recording of transactions generally complies with the time of change of ownership. Exceptions occur mainly because the record-keeping practices of some data providers may not be on this basis. Financial account transactions usually are recorded appropriately, that is, when the parties record transactions in their books. However, some transactions may be derived from information supplied by intermediaries that are not party to the transactions and may not be aware of the time of change of ownership. Also, some enterprises may adopt accounting practices that lead to inconsistent time of recording; a simple example is that different enterprises may close off their accounts at different times of day.

Stock

2.21 The time of recognising the stock of a foreign financial asset or liability follows naturally from the time of recording of a transaction in that asset or liability. For example, if a transaction is undertaken to acquire a foreign financial asset, there will also be a consequential increase in the stock of foreign financial assets at the end of that period. Of course, if the asset is disposed of before the end of the period, it will not contribute to the stocks statistics to be recorded for the period, but the disposal will have given rise to another transaction to be recorded for the period.

TYPES OF TRANSACTIONS IN THE BALANCE OF PAYMENTS

2.22 An economic transaction occurs when something of economic value is provided by one party to another. Transactions that are considered to have economic value comprise those in goods, services, income and financial assets and liabilities. The transactions recorded in a balance of payments statement stem from dealings between two parties, one usually being a resident and the other a non-resident. The types of transactions included in the balance of payments are exchanges, one-sided transactions and imputed transactions.

Exchanges

2.23 Exchanges are the most important and numerous type of transaction. They include transactions in which one transactor provides something of economic value to another transactor and receives in return something of equal value.

One-sided transactions

2.24 One-sided transactions refer to gifts, grants, taxes etc. where one transactor provides something of economic value to another, but does not receive a quid pro quo to which an economic value can be assigned. To maintain the double entry system of accounting, the value provided is matched in the accounts by an offsetting entry which is referred to as a transfer. A significant example of a one-sided transaction is migrants' transfers (described in box 2.7).

2.7 MIGRANTS' TRANSFERS

A special statistical treatment is required when a person migrates, that is when the person's status changes from non-resident to resident (or vice versa). When this change occurs, the property owned by the migrant becomes the property of a resident instead of that of a non-resident (or vice versa). This change of ownership of net worth between economies is included in the balance of payments. For example, any financial assets held abroad by the migrant become claims by Australia on the rest of the world. Offset entries are made corresponding to the transfer of net worth and, by their nature, these are included as transfers in the capital account. This treatment amounts to envisaging a transfer of property from the person in their capacity as a non-resident to the person in their capacity as a resident (or vice versa). In principle, this transaction embraces all the migrant's property, whether or not it accompanies the migrant. However, the way in which Australian investment abroad is estimated will not usually capture the increased resident household investments abroad. In practice only cash flows are likely to be recorded through the banking system, whereas the source of the transfers entries made to offset the cash flows appear elsewhere in the accounts.

Special cases of imputation/estimation

2.25 A number of special cases of imputation/estimation feature in balance of payments compilation. One case involves the reinvestment of earnings in resident enterprises by their non-resident direct investors. These *reinvested earnings* are regarded as being paid out as investment income and then reinvested in the enterprises from which they originated. They are, therefore, recorded both as a component of investment income in the current account and as a component of direct investment in the financial account. It is considered analytically useful to identify these transactions separately in economic statistics because of the substantial contribution they make to the stock of direct investment finance in a country.

Special cases of imputation/estimation *continued*

2.26 Another case involves imputation for ***financial intermediation services indirectly measured (FISIM)***. These consist of services that are provided by financial intermediaries but not explicitly charged. For example, whenever a financial intermediary lends money, a service is being provided, and the interest rate on the loan includes an implicit service element. The service charge may be imputed or derived from the difference between an appropriate reference interest rate and interest rates actually applied to loans (rates paid by borrowers) and deposits (rates received by depositors). They are equivalent to reclassifying a portion of interest as financial services. Estimates for FISIM are included in financial services in the balance of payments, and the offsetting adjustments are made to investment income. In Australia's case the amounts involved are not significant. (For more details see paragraphs 7.21 and 7.22).

2.27 A further case relates to estimation for the implicit fees (financial services) associated with foreign exchange trading. Estimates of the implicit service fees being earned on foreign exchange trading with non-resident counterparties are made by splitting the total service fees reported by exchange traders into resident/non-resident shares using a number of assumptions and other published information.

Exceptions to change of ownership

2.28 In economic statistics, transactions are considered to occur when the goods and financial assets change ownership between transactors, when services are provided by one transactor to another, or when income is earned by one transactor from another. However, there are certain situations in which no change of ownership legally occurs, but where transactions are nonetheless considered to have occurred for balance of payments purposes. The situations include financial leases, goods imported into or exported from Australia for processing and return, and transactions between a head office in one country and a branch in another.

Financial leases

2.29 A financial lease is regarded as a method of obtaining all the rights, risks and rewards of ownership of real resources without holding legal ownership. Although legal ownership remains with the lessor during the term of the lease, all the risks and responsibilities apply to the lessee. In these cases, the basic nature of the transaction is given precedence over its legal form by imputing a change of ownership of the resource to the lessee. As a result of this imputation, a financial liability is recognised and lease payments are classified as partly loan repayments in the financial account and partly interest in the current account, rather than as services in the current account.

Goods for processing

2.30 In economic statistics, the value of goods entering or leaving Australia for processing and returning to the country of origin after processing should be recorded on a gross basis, i.e. recording the goods both when they enter (as imports) and when they leave (as exports), even though there is no legal change of ownership of those goods. Thus a good entering Australia to be processed and returned to the country of origin is recorded as an import at the appropriate value and subsequently as an export—recorded by the customs system at the original value plus the added value of the processing. A symmetrical treatment should be applied to Australian goods exported for processing and return. The basis for this treatment is that such goods lose their identity during processing by being transformed or incorporated into different goods. On the other hand, for goods undergoing repairs only the value of the repair, not the gross value of the goods, is included in the goods credits or debits.

Branches

2.31 In economic statistics, it is usually necessary to split the activities of a legal entity and recognise two units, a head office in one country and a branch in another. Flows of goods, services, income and finance between the branch and its head office are therefore treated as transactions, even though they are legally part of the same unit. For example, goods and services sent from the head office to its branch are to be treated as exports of goods and services by the head office.

2.32 There are two cases where such splitting becomes necessary. The first occurs when production of goods and services is undertaken by the personnel, plant and equipment of the legal entity in an economic territory outside the economic territory of the head office, provided certain conditions apply. These conditions include: the intention to operate in the separate economy indefinitely or over a long period (12 months is used as a rule of thumb); keeping a set of accounts of the branch's activity (i.e. income statement, balance sheet, transactions with the parent entity); eligibility to pay income tax in the host country; having a substantial physical presence; and receiving funds for the branch's work which are paid into its own bank account.

2.33 The second case occurs when a person or legal entity resident in one economy owns land and buildings located in another economy. Ownership of immovable assets is always attributed in balance of payments and international investment statistics to residents of the economy in which the assets are located. Thus land in the domestic territory, which is in fact owned by a non-resident, is treated as being owned by a notional resident entity which in turn has a foreign liability to the real owner. It should also be recalled that the territorial enclaves associated with embassies, military bases etc. are regarded as part of the economic territory of the economy they represent. When these institutions buy and sell the land in these enclaves they are effectively adding to and subtracting from the economic territory of their government. Such transactions in land owned by foreign embassies are recorded in the capital account as the acquisition/disposal of non-produced, non-financial assets.

OTHER CHANGES IN THE INTERNATIONAL INVESTMENT POSITION

2.34 In addition to the financial transactions included in the balance of payments, the international investment position reconciliation statement includes the other changes which contribute to differences between opening and closing positions for a period.

2.35 *Other changes in position* may occur through price changes, exchange rate changes and other adjustments. Price changes are valuation changes that occur because of changes in the market price of a financial instrument, such as a change in the price of a share or debt security or through revaluing a company's net worth.

2.36 Exchange rate changes are due to fluctuations in the value of the Australian dollar, in which the accounts are compiled, relative to the currencies in which foreign assets and liabilities are denominated.

2.37 Other adjustments can arise from a number of causes such as write-off of bad debts, classification changes, monetisation/demonetisation of gold, and the allocation/cancellation of Special Drawing Rights. A reclassification would occur where a foreign investor's equity investment in an enterprise increased during the reporting period and the increase was sufficient to change the classification of the investor's total equity holding at the end of the period from portfolio investment to direct investment. Monetisation of gold occurs when the Reserve Bank monetises commodity stocks of gold and adds these to its monetary gold holdings as part of Australia's official reserve assets. (Monetisation/demonetisation of gold is discussed in more detail in paragraph 6.8). Special Drawing Rights in the IMF are also included in Australia's official reserve assets. Allocations and cancellations of these instruments are included as other adjustments.

2.38 Other adjustments can also arise from changes in the treatment of an item, from a change in data sources or from the application of certain methodologies, such as sampling and the revisions policy. In these instances, the opening position for one period may not equal the closing position for the previous period, and the discrepancy is taken up in the other adjustments item. Similarly, reporting and processing errors may give rise to discrepancies between opening and closing positions, and these are also taken up in this item until resolved.

GROSS AND NET RECORDING

2.39 Entries for current and capital account items are generally treated so that credits for each component are recorded separately from debits. Current and capital account transactions, in this context, are described as being recorded *gross.*

GROSS AND NET RECORDING *continued*

2.40 Gross recording contrasts to the recording of transactions in the financial account, which is mainly on a net basis, although for long-term trade credits and loans, gross drawings and repayments are included in the financial account. The net recording of other financial account items means that, for each item, credit transactions are combined with debit transactions to arrive at a single result—either a credit or debit—reflecting the net effect of all increases and decreases in holdings of that type of asset or liability during the recording period. There are several types of netting in the financial account, e.g. the netting of purchases and sales within an instrument in an asset position, and netting of assets and liabilities as in the case of direct investment.

CHAPTER 3 CLASSIFICATIONS

INTRODUCTION

3.1 Balance of payments and international investment position statistics need to be arranged in a coherent structure to facilitate their use and adaptation for purposes such as policy formulation, analytical studies, projections, bilateral comparisons, and regional and global aggregations. *BPM5* contains a *standard classification* and list of *standard components* of the balance of payments and international investment position. These standards were developed taking into account the views of national compilers and analysts, and the requirement to harmonise concepts and definitions with related international statistical standards and classifications. The classification also reflects the separation of categories that may exhibit different economic behaviour, may be important in a number of countries, are readily collectable, and are needed for harmonising with other bodies of statistics. The ABS, as part of its commitment to international standards and after consulting extensively with users, has adopted the *BPM5* classification.

3.2 This chapter describes the standard balance of payments and international investment position classification. It also describes a number of subsidiary classifications prescribed by the *BPM5*. The standard components and subsidiary classifications are described in more detail in subsequent chapters, such as *Chapter 6* (goods) and *Chapter 7* (services).

STANDARD BALANCE OF PAYMENTS CLASSIFICATION

3.3 The standard balance of payments classification comprises two main groups of accounts—the *current account* and the *capital and financial account*. Transactions classified to the *current account* include goods and services, income and current transfers. Within the capital and financial account, the *capital account* includes capital transfers and the net acquisition or disposal of non-produced, non-financial assets. The *financial account* includes transactions in financial assets and liabilities. Transactions in *current account* and *capital account* items are generally shown on a gross basis (gross debits and credits separately). Transactions in *financial account* items are mainly recorded on a net basis.

Current account

3.4 Table 3.1 shows the standard classification of the *current account*. Each of the broad categories is described briefly below, while individual component items are described in detail in subsequent chapters.

Goods and services

3.5 *Goods and services* are divided into separate accounts for *goods* and *services*. *Goods* comprise most movable goods that change ownership between Australian residents and non-residents. Separate entries are shown for general merchandise, goods for processing, repairs on goods, goods procured in ports by carriers, and non-monetary gold. In Australian balance of payments statistics, general merchandise is further classified by commodity.

Goods and services continued

3.6 *Services* comprise services provided between Australian residents and non-residents, together with some transactions in goods where, by international agreement, it is not practical to separate the goods and services components (e.g. goods purchased by travellers are classified to services).

Income

3.7 *Income* refers to income earned by Australian residents from non-residents and vice versa. Income covers compensation of employees and investment income. *Compensation of employees* comprises wages, salaries and other benefits earned by individuals from economies other than those in which they are residents, as well as earnings from extraterritorial bodies such as foreign embassies, which often employ staff from the economy in which they are located. *Investment income* comprises income earned from the provision of financial capital and is classified by direct, portfolio and other investment income.

3.1 CURRENT ACCOUNT: STANDARD COMPONENTS

	Credit	*Debit*
Goods and services		
Goods		
General merchandise		
Goods for processing		
Repairs on goods		
Goods procured in ports by carriers		
Non-monetary gold		
Services		
Transportation		
Travel		
Communication services		
Construction services		
Insurance services		
Financial services		
Computer and information services		
Royalties and licence fees		
Other business services		
Personal, cultural and recreational services		
Government services, n.i.e.		
Income		
Compensation of employees		
Investment income		
Direct investment		
Portfolio investment		
Other		
Current transfers		
General government		
Other sectors		

Current transfers

3.8 *Transfers* represent offsets to the provision of resources between residents and non-residents with no quid pro quo in economic value (for example, the provision of food aid). *Current transfers* are distinguished from *capital transfers,* which are included in the *capital account. Current transfers* represent the offset to the provision of resources that are normally consumed within a short period (less than twelve months) after the transfer is made. In the example of food aid, the food is presumed to be consumed within twelve months of it being received. The classification of current transfers is by general government and other sectors.

Capital and financial account

3.9 The *capital and financial account* of Australia's balance of payments is divided into the *capital account* and the *financial account.* Table 3.2 outlines the standard classification of this account.

3.2 CAPITAL AND FINANCIAL ACCOUNT: STANDARD COMPONENTS

	Credit	*Debit*
Capital account		
Capital transfers		
Acquisition/disposal of non-produced, non financial assets		
Financial account		
Direct investment		
Abroad		
Equity capital		
Reinvested earnings		
Other capital		
In Australia		
Equity capital		
Reinvested earnings		
Other capital		
Portfolio investment		
Assets		
Equity securities		
Debt securities		
Liabilities		
Equity securities		
Debt securities		
Other investment		
Assets		
Trade credits		
Loans		
Currency and deposits		
Other assets		
Liabilities		
Trade credits		
Loans		
Currency and deposits		
Other liabilities		
Reserve assets		
Monetary gold		
Special Drawing Rights		
Reserve position in the IMF		
Foreign exchange		

Capital account

3.10 The *capital account* comprises both capital transfers and the acquisition and disposal of non-produced, non-financial assets (such as copyrights). The latter includes land purchases and sales associated with embassies and other extraterritorial bodies. Capital transfers entries are required where there is no quid pro quo to offset the transfer of ownership of fixed assets, or the transfer of funds linked to fixed assets (e.g. aid to finance capital works), or the forgiveness of debt. It also includes the counterpart to the transfer of net wealth by migrants, referred to as migrants' transfers.

Financial account

3.11 The *financial account* comprises transactions associated with changes of ownership of Australia's foreign financial assets and liabilities. The main classifications used in the financial account are discussed in conjunction with the international investment position classification in paragraphs 3.15 onwards.

STANDARD INTERNATIONAL INVESTMENT POSITION CLASSIFICATION

3.12 The *international investment position* measures Australia's stock of external financial assets and liabilities, whereas the *balance of payments financial account* measures transactions in these assets and liabilities. Hence the classifications used in the *financial account* and *international investment position* need to be essentially the same.

3.13 Table 3.3 outlines the standard classification of the international investment position statement. While this statement may sometimes only refer to the stock of financial assets and liabilities at the end of any period, it is more useful to show the complete reconciliation statement which shows the opening and closing positions and the change in position due to financial transactions and other changes. This has been done in table 3.3, which follows the *BPM5* presentation.

3.14 The components of changes in position in table 3.3 include financial transactions (recorded in the financial account of the balance of payments), price changes, exchange rate changes and other adjustments.

MAJOR CLASSIFICATIONS OF THE FINANCIAL ACCOUNT AND INTERNATIONAL INVESTMENT POSITION

3.15 Items in the financial account and international investment position statement are classified on a number of bases. The main ones are *type of investment, assets and liabilities, instrument of investment, sector,* and *original contractual maturity of financial instruments.*

3.16 A comparison of the international investment position statement and the balance of payments financial account shows two minor differences. First, in the financial account the primary classification is by type of investment (direct, portfolio, other investment, and reserve assets), whereas in the international investment position the asset and liability classification takes precedence. Second, in the category of direct investment in the financial account, reinvested earnings are shown separately whereas, in the international investment position statement, where no separate market price valuation of reinvested earnings can exist, the reinvested earnings are grouped into a composite category for equity and reinvested earnings.

3.3 INTERNATIONAL INVESTMENT POSITION: STANDARD COMPONENTS

		Changes in Position reflecting				
	Position at beginning of period	*Transactions*	*Price changes*	*Exchange rate changes*	*Other adjust-ments*	*Position at end of period*
Australian Investment Abroad—Net Assets						
Direct investment abroad						
Equity capital and reinvested earnings						
Other capital						
Portfolio Investment						
Equity securities						
Debt securities						
Other investment						
Trade credits						
Loans						
Currency and deposits						
Other assets						
Reserve assets						
Monetary gold						
Special Drawing Rights						
Reserve position in the IMF						
Foreign exchange						
Foreign Investment in Australia—Net Liabilities						
Direct investment in Australia						
Equity capital and reinvested earnings						
Other capital						
Portfolio investment						
Equity securities						
Debt securities						
Other investment						
Trade credits						
Loans						
Currency and deposits						
Other liabilities						

Type of investment

3.17 The type of investment used in Australia's balance of payments and international investment position consists of four broad categories:

(i) *Direct investment capital* refers to capital provided to or received from an enterprise by an investor in another country (i.e. an individual, enterprise or group of related individuals or enterprises) who is in a direct investment relationship with that enterprise. A *direct investment* relationship exists if the investor has an equity interest in an enterprise, resident in another country, of 10 per cent or more of the ordinary shares or voting stock. The *direct investment* relationship extends to branches, subsidiaries and to other businesses where the enterprise has significant shareholding. *Chapter 12* sets out the direct investment definition in detail.

(ii) *Portfolio investment* refers to transactions in equity and debt securities (apart from direct investment and reserve assets). Debt securities comprise bonds and notes, money market instruments and financial derivatives. In comparison with direct investment, it indicates investment where the investor is not assumed to have any appreciable say in the operation of the enterprise.

(iii) *Other investment* is a residual category that captures transactions not classified to direct investment, portfolio investment or reserve assets of the compiling economy. *Other investment* covers trade credits, loans (including financial leases), currency and deposits, and a residual category for any other assets and liabilities.

(iv) *Reserve assets* refer to those foreign financial assets that are available to, and controlled by, the monetary authorities such as the Reserve Bank of Australia for financing or regulating payments imbalances. Reserve assets comprise: monetary gold, Special Drawing Rights, reserve position in the IMF, and foreign exchange held by the Reserve Bank.

Assets and liabilities

3.18 A financial *asset* is generally in the form of a financial claim on the rest of the world that is either represented by a contractual obligation (such as a loan) or is evidenced by a security (such as a share certificate). Two financial assets—monetary gold and Special Drawing Rights in the IMF—are not claims on the rest of the world. They are, however, included in international investment assets because they are readily available for payment of international obligations. A *liability* represents a financial claim of the rest of the world on Australia. Assets and liabilities in the international investment position statement are components of the balance sheet of an economy with the rest of the world. In the financial account the asset and liability classifications in essence reflect, respectively, transactions in claims on non-residents (assets) and in claims by non-residents (liabilities).

3.19 In the international investment position, the difference between assets and liabilities is the *net international investment position,* also referred to as the *net liability position* in Australia's case.

Assets and liabilities *continued*

3.20 For *direct investment*, in both the financial account and international investment position the main classification is by direction of investment, i.e. *direct investment abroad* and *direct investment in Australia*. *Direct investment abroad* is derived by netting liabilities of the Australian *direct investors* to their *direct investment enterprises* against claims on their direct investment enterprises abroad. Similarly, *direct investment in Australia* is derived after netting claims of the Australian direct investment enterprises against their liabilities to those direct investors abroad.

Instrument of investment

3.21 Several instruments of investment are also identified. Some of these are only applicable to one type of capital. For example, the instrument *reinvested earnings* is only applicable to direct investment, while *monetary gold* and *Special Drawing Rights* are only used for reserve assets.

3.22 The major instruments and grouping of instruments identified in balance of payments and international investment statistics include:

(i) monetary gold;

(ii) Special Drawing Rights;

(iii) foreign exchange;

(iv) reserve position in IMF;

(v) equity;

(vi) reinvested earnings;

(vii) debt securities;

(viii) trade credit;

(ix) loans; and

(x) other assets/liabilities.

Each of these categories is described in box 11.3.

Instrument of investment *continued*

3.23 To make statistical presentations less cluttered, similar instruments may be combined into groups or combined with certain types of investment. For example:

(i) trade credit, loans, deposits, and other forms of finance including all debt securities, but excluding equity capital and reinvested earnings, between non-financial enterprises in a direct investment relationship, are combined and shown only as *other direct capital*. Similar aggregation applies to finance between a financial enterprise and a non-financial enterprise and between financial enterprises only in case of permanent debt;

(ii) bonds, bills, notes, money market instruments and financial derivatives within portfolio investment are shown separately but under a heading of *debt securities*; and

(iii) a number of financial assets held by the Reserve Bank, and available for use as reserve assets (currency and deposits, bills, bonds, notes and money market instruments), are grouped under the category *foreign exchange*.

Table 3.4 shows the instrument classification used within each of the types of investment.

3.4 LIST OF INSTRUMENTS WITHIN EACH TYPE OF INVESTMENT

Direct investment
Equity capital
Reinvested earnings
Other direct capital(a)
Portfolio investment
Equity securities
Debt securities
bonds and notes
money
financial derivatives
Other investment
Trade credits
Loans
Currency and deposits
Other assets/liabilities
Reserve assets
Monetary gold
Special drawing rights
Reserve position in the IMF
Foreign exchange
currency and deposits
securities

(a) Includes trade credit, loans, and other assets and liabilities.

Foreign equity and debt

3.24 At a broader level, instruments may be combined to show foreign equity and foreign debt. Foreign equity includes equity capital, reinvested earnings and equity securities. Foreign debt is a residual item containing all other instruments. They may be compiled on a gross basis (e.g. foreign debt/assets and liabilities) or on a net basis (e.g. net foreign debt).

Sectorisation

3.25 Transactor units within an economy may be grouped together into *institutional sectors*. Units within the same *institutional sector* may be expected to behave similarly in their financial and other dealings and in response to differing economic and political stimuli. The principle of classification by sector, or sectorisation, in the financial account and international investment position is to identify the sector of the domestic creditor for assets and the sector of the domestic debtor for liabilities.

3.26 Four sectors are distinguished in the standard components of the ABS balance of payments and international investment statistics: *general government; Reserve Bank; depository corporations;* and *other*. These sectors are explained in box 11.2. Within the financial account and international investment position, *sectorisation* is applied to *portfolio investment* and *other investment* only. The classification is excluded from *direct investment*, as the domestic sector of the direct investor/investee is not considered important for explaining the behaviour of direct investment.

3.27 Within the current and capital accounts, sectorisation is also applied to current and capital transfers, where a split between *general government* and *other* is used.

Other financial classifications

3.28 Other classifications in the financial account and international investment position include the domicile of liabilities issued by residents, drawings and repayments for long-term liabilities in the form of both trade credits and loans, the residual maturity structure of financial claims and liabilities, and the currency of assets and liabilities.

COUNTRY CLASSIFICATION

3.29 The general principles applying to the compilation of a global balance of payments statement for Australia can be applied to the preparation of a statement for Australia's transactions with an individual country or a group of countries. The partner country classification adopted in these statistics is described in *Chapter 17*.

INDUSTRY CLASSIFICATION

3.30 For foreign investment in Australia and Australian direct investment abroad, data relating to transactions, investment income and levels of investment are classified by industry. The industry categories used (23 broad categories) are based on the 1993 edition of ANZSIC and relate to the predominant activity of the enterprise receiving the investment funds. A more detailed description of the industry data available for foreign investment in Australia and Australian direct investment abroad is provided in paragraphs 11.19 and 11.20.

CHAPTER 4 PUBLICATION

PUBLICATION STRATEGY

Objectives

4.1 In relation to balance of payments and international investment position statistics, the ABS has the following objectives for its dissemination strategy:

(i) to publish quite detailed quarterly current account statistics and broad financial account and international investment position statistics two months after the reference quarter, and more detailed international investment position statistics within five months;

(ii) to publish original, seasonally adjusted and trend quarterly data for the current account, including current price and volume measures for goods and services, before the publication of the quarterly *Australian National Accounts* (Cat. no. 5206.0);

(iii) to publish summary monthly goods and services estimates, in original, seasonally adjusted and trend terms, one month after the reference month;

(iv) to publish more detailed annual balance of payments and international investment position statistics within twelve months of the end of the financial year;

(v) to provide a good standard of analysis and explanation of these statistics;

(vi) to release the longer term time series of all published series on electronic media, simultaneously with their release in hard copy form; and

(vii) to provide more detailed data services, with unpublished information as required, in both hard copy and electronic forms.

4.2 The ABS policy is to balance the requirements of timeliness with those of accuracy, in order to provide good quality statistics appropriate to the information need as soon as they are available. The ABS considers that the quality of the underlying data sources and methods permits it to publish monthly goods and services data about 21 working days after the end of the reference month, quarterly current and capital account data and summary financial account and international investment position data about 43 working days after the reference quarter, more detailed financial account and international investment position information within five months of the reference quarter, and comprehensive and detailed annual data within twelve months of the end of the reference year. Some financial account and international investment position information is included in the Financial Account three months after the end of the reference quarter. The issue of the timing of source data becoming available is discussed further in paragraphs 4.6 to 4.10.

Publications

4.3 *International Trade in Goods and Services, Australia* (Cat. no. 5368.0), provides summary data on the main goods and services aggregates, and original, seasonally adjusted and trend series. It also provides limited commodity breakdowns of monthly exports and imports of goods and services, and statistics on exchange rates. The publication provides annual time series for the latest three financial years and monthly series for the latest fifteen months. It also contains detailed quarterly trade in services statistics. Like all balance of payments and international investment position publications, it contains a comprehensive analysis of and comments on key aggregates, explains the nature and causes of revisions to previously published statistics and provides explanatory notes.[1]

4.4 The quarterly publication *Balance of Payments and International Investment Position, Australia* (Cat. no. 5302.0), is published about two months after the reference quarter. It provides both summary and detailed balance of payments, international investment position and related statistics. Generally data are presented in the form of time series for the latest six quarters and three financial years. For the current account, original, seasonally adjusted and trend estimates are provided and, for goods and services, both current price data and volume measures are provided. For the financial account and international investment position, results for the current quarter are at a summary level, with full details provided up to the quarter before the reference quarter. The publication also includes explanatory notes, graphs, analysis of the estimates, data on revisions to previously published figures, and occasional articles.

4.5 The annual publication *Balance of Payments and International Investment Position, Australia* (Cat. no. 5363.0), is released within twelve months of the end of the reference year and contains annual financial year data consistent with those in Cat. no. 5302.0. This publication contains data by partner country. It contains explanatory notes, graphs, analysis of the estimates and occasional articles.

Timing of availability of source data

4.6 Details of the data sources and methods used to compile balance of payments and international investment position statistics are given in the next chapter. However, the following is a brief summary of the availability of the key data sources and their impact on the timing of release of these statistics.

1 This publication, which started with the January 1997 issue, replaced the monthly *Balance of Payments, Australia* (Cat. no. 5301.0). The decision to replace the latter was announced by the Australian Statistician in the *Information Paper: The Future of Monthly Balance of Payments Statistics* (Cat. no. 5367.0), released on 31 January 1997. This followed the release, on 6 January 1997, of the *Information Paper: Do We Need Monthly Balance of Payments Statistics?* (Cat. no. 5366.0), which reviewed the future of monthly balance of payments statistics.

Timing of availability of source data *continued*

4.7 More than 80 per cent of the monthly value of trade in goods and services is derived from monthly sources. International trade statistics are monthly and are available in time for inclusion in the monthly goods and services publication (Cat. no. 5368.0); imports of goods are first released in the monthly imports publication, *International Merchandise Imports, Australia* (Cat. no. 5439.0), twelve working days after the reference period.

4.8 Two thirds of the data on services come from the Survey of International Trade in Services, the results of which are generally available within three months of the end of the reference quarter. Monthly data are available for about 25 per cent of services trade. For a further 55 per cent of services trade, the quarterly data are allocated to months using a variety of indicators. The remaining 20 per cent of quarterly information is evenly allocated to months. However, even where some data come from monthly sources, such as a monthly split of the earnings from foreign airline passenger services, the information is only reported once a quarter, and results for the latest month or two need to be extrapolated. Therefore, in monthly and quarterly publications, much of the services data is extrapolated for most recent periods.

4.9 Investment income data are available for inclusion in the quarterly publication (Cat. no. 5302.0). However, survey information on the equity related components (about half of total investment income) is preliminary for the most recent quarter. Data on compensation of employees are generally not available for the more recent quarters and are estimated using indicator series. Data on general government transfers are available for the latest quarter, but the transfer components for other sectors are not, and are extrapolated.

4.10 The only detailed financial account and international investment position data available for the reference quarter in time for inclusion in the quarterly publication (Cat. no. 5302.0), relate to international reserves. Summary data for the rest of the financial account and international investment position are compiled from the Survey of International Investment, in time for inclusion in Cat. no. 5302.0. These include direct investment abroad, direct investment in Australia, net portfolio investment and net other investment, together with net equity and net debt transactions and levels. More complete survey results for the reference quarter are reconciled with ABS financial statistics, and published a few weeks later in *Australian National Accounts: Financial Accounts* (Cat. no. 5232.0). The detailed financial account and international investment position statistics are included in Cat. no. 5302.0, with a one quarter lag (that is, about five months after the reference quarter).

Analysis

4.11 The ABS has increasingly enhanced its analysis of and commentary on statistics over the years. Analysis and comments are included in ABS publications to:

(i) highlight the main features of the statistics, especially for the current period compared with past periods;

(ii) help users to understand the presentation of the statistics included in the publication;

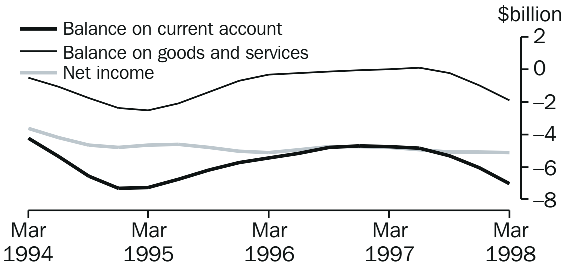
(iii) present information which may help users to understand and interpret the quality of the data and the economic factors that may be impacting on particular aspects of the data; and

(iv) provide information on technical issues and particular treatments that may have been adopted.

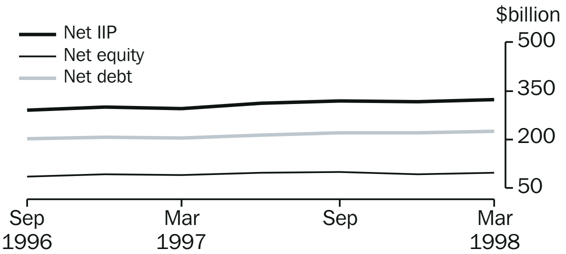
The monthly goods and services publication (Cat. no. 5368.0), and the quarterly and annual balance of payments and international investment position publications (Cat. nos 5302.0 and 5363.0), contain extensive analysis, including the use of graphs. Table 4.1 shows the graphs of the key balance of payments and international investment position aggregates and balances included in the quarterly publication (Cat. no. 5302.0).

4.1 SELECTED GRAPHS FROM QUARTERLY *BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION, AUSTRALIA* (Cat. no. 5302.0), MARCH QUARTER 1998

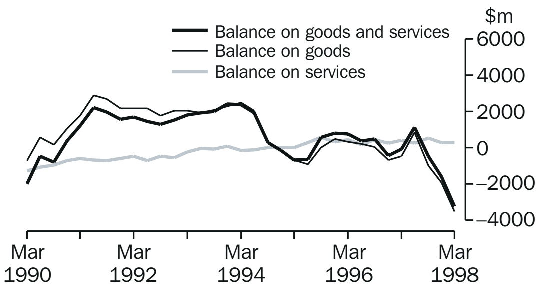
4.1A CURRENT ACCOUNT, Main aggregates-— Trend estimates at current prices



4.1B INTERNATIONAL INVESTMENT, Levels at end of period

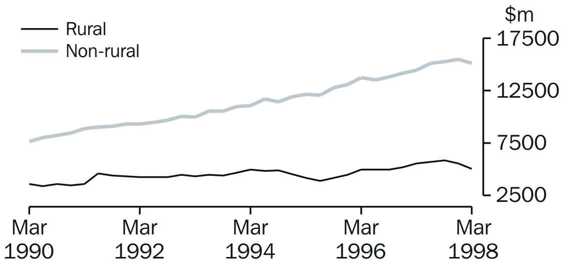


4.1C GOODS AND SERVICES (a)



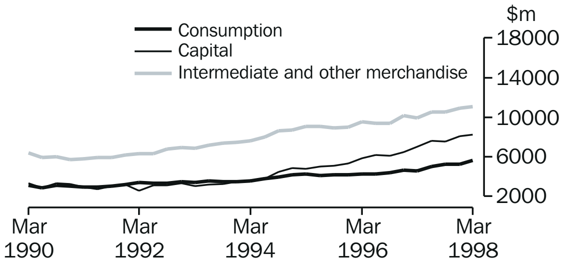
(a) At constant prices, seasonally adjusted

4.1D GENERAL MERCHANDISE CREDITS (a)



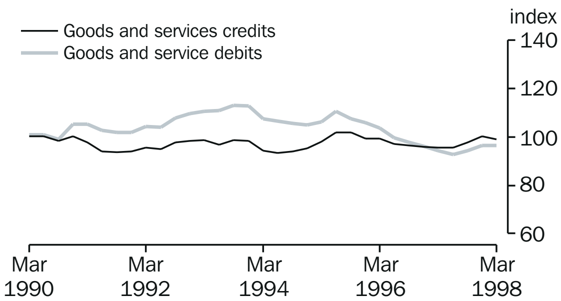
(a) At constant prices, seasonally adjusted

4.1E GENERAL MERCHANDISE DEBITS (a)

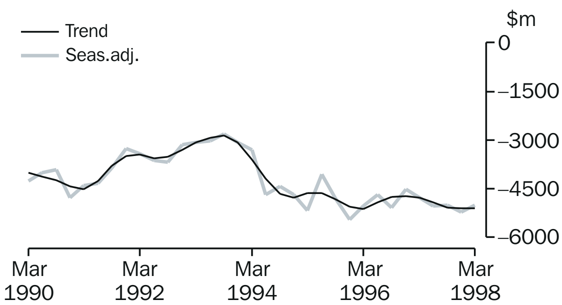


(a) At constant prices, seasonally adjusted

4.1F IMPLICIT PRICE DEFLATOR



4.1G NET INCOME



Note: Graphs 4.1A and 4.1B are from the front page of Cat. no. 5302.0, and are shown for a shorter time period than the remaining graphs.

Revisions

4.12 The general policy adopted for the Australian balance of payments and international investment position statistics is to take every practical opportunity to incorporate more accurate information into the estimates for every period. However, in the monthly goods and services publication (Cat. no. 5368.0), revisions to prior months are generally not made in the first month of a quarter, in order to minimise disruption to historical statistical series, to meet the compilation timetable requirements for the national accounts and to maintain consistency between monthly and quarterly series. More generally, revisions to periods prior to the previous financial year are only made twice a year. These revisions are made in the December and June quarter issues of the quarterly publication (Cat. no. 5302.0), and in the December and June issues of the monthly goods and services publication (Cat. no. 5368.0). Exceptions are made to this practice where significant revisions are identified; these are incorporated into the next available issue.

Special Data Dissemination Standard

4.13 The *Special Data Dissemination Standard* has been established by the IMF to set dissemination standards for official statistics as required for international monitoring of an economy. Over 40 countries, including Australia, have subscribed so far. These standards set out the types of statistics, especially economic statistics, which subscribing countries should publish, their periodicity and timeliness. In addition, they set out conditions about access to the public, the integrity of the statistics and the quality of the data. For balance of payments and international investment position statistics, the standards require, inter alia, that the statistics be based on *BPM5*, that balance of payments statistics be published quarterly within three months of the reference period, and that annual international investment position statistics (quarterly statistics encouraged) be published within six months of the reference year (three months encouraged). The standards also require that release dates be announced in advance, that data on sources and methods be published to ensure transparency, and that certain information be supplied to the IMF for inclusion on its Special Data Dissemination Standard bulletin board, available on the internet at www.imf.org. Australia easily meets these standards for its balance of payments and international investment position statistics.

BALANCE OF PAYMENTS SUMMARY STATEMENT

4.14 In presenting balance of payments statistics, ABS publications start with a summary table followed by more detailed tables. Table 4.2 shows the summary table from the quarterly publication (Cat. no. 5302.0). The table illustrates the following points:

(i) the classifications shown reflect the higher level standard components;

(ii) current and capital account items are shown *gross*, whereas financial account items are shown *net*;

(iii) gross and net credit entries are shown without sign, while gross and net debit entries are shown with a negative sign;

BALANCE OF PAYMENTS SUMMARY STATEMENT *continued*

(iv) various key balances are recorded, such as the current account balance and the capital and financial account balance, as well as various lower level balances such as the goods and services balance;

(v) the sum of the current account balance, the capital and financial account balance, and the net errors and omissions item add to zero; and

(vi) data are presented in the form of time series (three years and six quarters).

The concept of a 'balance'

4.15 In a complete balance of payments statement (including the net errors and omission item), the sum of all credit entries and the sum of all debit entries are necessarily equal, i.e. the sum of credits and debits is zero. The sum of all credit and debit entries may also be referred to as a *balance*. For any intermediate balance drawn from a selection of items it is possible for credit entries to exceed debit entries, and vice versa. It is common to speak of a balance as a *surplus* if it is a credit and as a *deficit* if it is a debit.

4.16 The main balances used in the Australian balance of payments are the balance on current account and the balance on capital and financial account. These balances, and their composition in terms of subsidiary balances and other items, are shown in table 4.3.

4.2 AUSTRALIA'S BALANCE OF PAYMENTS—SUMMARY

	1994–95	*1995–96*	*1996–97*	*Dec Qtr 1996*	*Mar Qtr 1997*	*June Qtr 1997*	*Sep Qtr 1997*	*Dec Qtr 1997*	*Mar Qtr 1998*
	$m	*$m*	*$m*	*$m*	*$m*	*$m*	*$m*	*$m*	*$m*
CURRENT ACCOUNT	**–28 867**	**–21 824**	**–17 531**	**–4 918**	**–3 163**	**–2 985**	**–5 841**	**–5 599**	**–6 291**
Goods & Services	*–9 916*	*–1 891*	*1 777*	*–299*	*1 444*	*2 120*	*–950*	*–247*	*–1 396*
Credits	87 509	99 004	105 318	25 906	26 042	28 643	28 487	29 273	27 321
Debits	–97 425	–100 895	–103 541	–26 205	–24 598	–26 523	–29 437	–29 520	–28 717
Goods	*–8 216*	*–1 583*	*1 496*	*–367*	*246*	*2 618*	*–511*	*–32*	*–2 112*
Credits	67 101	76 146	80 934	19 836	19 111	22 964	22 162	23 151	20 414
Debits	–75 317	–77 729	–79 438	–20 203	–18 865	–20 346	–22 673	–23 183	–22 526
Services	*–1 700*	*–308*	*281*	*68*	*1 198*	*–498*	*–439*	*–215*	*716*
Credits	20 408	22 858	24 384	6 070	6 931	5 679	6 325	6 122	6 907
Debits	–22 108	–23 166	–24 103	–6 002	–5 733	–6 177	–6 764	–6 337	–6 191
Income	*–18 423*	*–19 907*	*–19 434*	*–4 704*	*–4 593*	*–5 070*	*–4 874*	*–5 402*	*–4 876*
Credits	6 954	7 162	8 319	2 233	2 071	2 099	2 250	2 331	2 545
Debits	–25 377	–27 069	–27 753	–6 937	–6 664	–7 169	–7 124	–7 733	–7 421
Current transfers	*–528*	*–26*	*126*	*85*	*–14*	*–35*	*–17*	*50*	*–19*
Credits	3 026	3 212	3 377	835	823	855	886	879	895
Debits	–3 554	–3 238	–3 251	–750	–837	–890	–903	–829	–914
CAPITAL & FINANCIAL ACCOUNT	**28 610**	**21 914**	**18 769**	**5 145**	**3 825**	**3 190**	**5 219**	**6 424**	**5 774**
Capital account	*572*	*1 074*	*1 318*	*324*	*385*	*218*	*338*	*275*	*283*
Capital transfers	*540*	*1 049*	*1 323*	*325*	*377*	*219*	*340*	*268*	*277*
Credits	1 383	1 956	2 200	544	597	485	541	513	523
Debits	–843	–907	–877	–219	–220	–266	–201	–245	–246
Net acquisition/disposal of non-produced, non-financial assets	32	25	–5	–1	8	–1	–2	7	6
Financial account	*28 038*	*20 840*	*17 451*	*4 821*	*3 440*	*2 972*	*4 881*	*6 149*	*5 491*
Direct Investment	*4 080*	*5 067*	*5 375*	*1 352*	*–115*	*2 297*	*2 017*	*895*	*–480*
Abroad	–3 429	–7 935	–5 908	–2 008	–1 189	–1 502	–4 294	–895	–1 835
in Australia	7 509	13 002	11 283	3 360	1 074	3 799	6 311	1 790	1 355
Portfolio investment	*18 378*	*25 661*	*13 378*	*5 856*	*6 665*	*–4 584*	*7 578*	*7 024*	*4 679*
Other investment	*3 609*	*–9 071*	*3 922*	*–2 106*	*–2 519*	*6 645*	*–3 252*	*–441*	*–1 914*
Reserve assets	*1 971*	*–817*	*–5 224*	*–281*	*–591*	*–1 386*	*–1 462*	*–1 329*	*3 206*
NET ERRORS AND OMMISSIONS	**257**	**–90**	**–1 238**	**–227**	**–662**	**–205**	**622**	**–825**	**517**

Source: Table 1 from Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

4.3 KEY BALANCES USED IN BALANCE OF PAYMENTS ANALYSIS

Current account balance	= Goods and services balance	= Goods balance	= Goods credits + Goods debits
		+ Services balance	= Services credits + Services debits
	+ Income balance	= Income credits + Income debits	
	+ Current transfers balance	= Current transfers credits + Current transfers debits	
Capital and financial account balance	= Capital account balance	= Capital transfers balance	= Capital transfers credits + Capital transfers debits
		+ Net acquisition/disposal of non-produced, non-financial assets	= credits (disposal) + debits (acquisition)
	+ Financial account balance	= Direct investment balance	= Direct investment abroad + Direct investment in Australia
		+ Portfolio investment balance	= Portfolio investment assets + Portfolio investment liabilities
		+ Other investment balance	= Other investment assets + Other investment liabilities
		+ Reserve assets	

Net errors and omissions item

4.17 The net errors and omissions item is a balancing item, reflecting the underlying double entry accounting system. It is the sum, with sign reversed, of the balance on current account and the balance on capital and financial account. In other words, the sum of the current account balance, the capital and financial account balance and the net errors and omissions item is zero.

INTERNATIONAL INVESTMENT POSITION SUMMARY STATEMENT

4.18 The international investment position is a statistical statement which shows Australia's foreign assets (claims on non-residents), foreign liabilities (liabilities to non-residents) and net international investment position (foreign assets less foreign liabilities). While an international investment position statement strictly measures a financial position at a point in time, statisticians also view international investment position data in the form of a reconciliation statement. This shows the position at the beginning of the period, the components of change in position (such as financial transactions, price changes, exchange rate changes and other adjustments), and the resulting position at the end of the period. This presentation enables the analyst to see immediately the relationship between the international investment position and the balance of payments financial account.

INTERNATIONAL INVESTMENT POSITION SUMMARY STATEMENT *continued*

4.19 As with the balance of payments statistics, ABS publications show the summary international investment position statement before providing the more detailed classifications. Table 4.4 is the summary of the international investment position table from the quarterly publication (Cat. no. 5302.0). This table illustrates the following important points:

(i) separate data are presented on the positions at beginning and end of period, transactions, price changes, exchange rate changes and other adjustments;

(ii) separate data are shown on net equity and net debt, and the international investment position;

(iii) transactions are equivalent to those shown in the financial account in table 4.2;

(iv) the sign convention used is consistent with that used in table 4.2; and

(v) data are presented in the form of time series.

4.4 AUSTRALIA'S INTERNATIONAL INVESTMENT POSITION, SUMMARY BY NET FOREIGN EQUITY AND NET FOREIGN DEBT

		Changes in the position reflecting				
	Position at beginning of period	Transactions	Price changes	Exchange rate changes	Other adjustments	Position at end of period
Period	$m	$m	$m	$m	$m	$m
NET INTERNATIONAL INVESTMENT POSITION						
1994–95	242 355	28 038	–4 366	–2 400	–429	263 198
1995–96	263 198	20 840	297	369	3 216	287 921
1996–97	287 921	17 451	15 243	–2 145	–6 827	311 642
1996–97						
Dec	290 327	4 821	7 679	–909	–324	301 592
Mar	301 592	3 440	–7 826	398	–2 786	294 818
June	294 818	2 972	13 576	–1 169	1 445	311 642
1997–98						
Sept	311 642	4 881	1 649	85	2 029	320 286
Dec	320 286	6 149	–7 688	–2 116	–591	316 040
Mar	316 040	5 491	1 908	1 672	–2 135	322 977
NET FOREIGN EQUITY						
1994–95	74 436	9 514	–2 378	–4 476	–211	76 885
1995–96	76 885	9 889	–3 573	8 660	1 328	93 190
1996–97	93 190	3 371	9 796	–3 226	–4 967	98 163
1996–97						
Dec	87 012	2 470	5 280	–515	–819	93 428
Mar	93 428	1 684	–4 560	385	–1 230	89 707
June	89 707	181	9 526	–3 205	1 954	98 163
1997–98						
Sept	98 163	1 855	148	–1 232	743	99 678
Dec	99 678	8 113	–7 753	–6 271	99	93 865
Mar	93 865	3 359	1 034	1 487	–1 282	98 462
NET FOREIGN DEBT						
1994–95	167 919	18 523	–1 988	2 076	–218	186 313
1995–96	186 313	10 951	3 870	–8 291	1 889	194 731
1996–97	194 731	14 080	5 448	1 081	–1 860	213 479
1996–97						
Dec	203 315	2 350	2 398	–394	495	208 164
Mar	208 164	1 756	–3 266	13	–1 556	205 111
June	205 111	2 791	4 050	2 036	–509	213 479
1997–98						
Sep	213 479	3 026	1 502	1 316	1 285	220 608
Dec	220 608	–1 965	65	4 156	–689	222 175
Mar	222 175	2 133	874	185	–852	224 515

Source: Table 2 from Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. No. 5302.0).

PRESENTATION OF TIME SERIES

4.20 The ABS has long recognised the importance of presenting economic statistics in time series form. In the main summary tables and supplementary tables of the quarterly publication (Cat. no. 5302.0), data are presented for the latest three financial years and the latest six quarters. Longer time series are presented in summary form in the historical tables (tables 41 to 43) of that publication. However, standard ABS electronic dissemination services (the on-line database *PC Ausstats*, and subscription time series services) provide the most detailed published series for as far back as the data are compiled. The monthly goods and services estimates are compiled back to July 1971, the quarterly balance of payments estimates back to September quarter 1959, the annual balance of payments estimates back to 1945–46 and the quarterly and annual international investment position estimates back to 1981–82 and 1975–76 respectively. These long run, detailed time series are also available as a special data request, while the broader-level annual time series are also available from Cat. no. 5363.0.

DETAILED AND SUPPLEMENTARY TABLES

4.21 The summary tables provide the key analysis of balance of payments and international investment position statistics. The more detailed and supplementary tables to be found in the quarterly publication (Cat. no. 5302.0), are set out in box 4.5. Descriptions and explanations of these data are shown below or in later chapters.

4.5 DETAILED AND SUPPLEMENTARY TABLES IN CAT. NO. 5302.0

(i) Detailed balance of payments standard components (in original, current price terms)—goods (tables 8 and 9), services (tables 18 and 19), income (tables 22 and 23), current transfers (table 24), capital account transactions (table 25), and the financial account (tables 26 and 27);

(ii) further disaggregated international investment position reconciliation statements (tables 28 and 29), the standard components for the international investment position reconciliation statement for the latest quarter for which data are available (tables 30 and 31), and the standard components for the investment position at end of the period (tables 32 and 33);

(iii) seasonally adjusted and trend estimates of the current account (tables 4 and 5);

(iv) seasonally adjusted and trend estimates of goods and services in current prices and as volume measures and the related implicit price deflators, terms of trade and fixed weighted indexes (tables 6 and 7, 10 to 17, 20 and 21);

(v) additional classification of general merchandise goods by commodity (tables 8 to 17);

(vi) foreign debt transactions (table 34), levels (table 35) and interest (table 36) by detailed resident sub-sector;

(vii) exchange rate data (table 37);

(viii) foreign investment liabilities: capital transactions, investment income and levels of investment by industry (table 38);

(ix) balance of payments and international investment position ratios (table 39);

(x) revisions to previous published data (table 40);

(xi) historical series, starting in 1980–81 for balance of payments and 1985–86 for the international investment position (tables 41 to 43); and

(xii) reconciliation of the *BPM5*-based balance of payments with the current external account of the Australian national accounts (table 44), a temporary presentation pending implementation of *SNA93* in Australia's national accounts.

Seasonally adjusted estimates

4.22 An *original* statistical time series is usually affected by three notional influences—seasonal, trend and irregular. Quarterly balance of payments current account and monthly goods and services series are presented on a seasonally adjusted basis. Seasonal adjustment removes the identifiable effects of normal seasonal variation so that the effects of other influences (both trend and irregular) are more clearly recognised. The term *seasonal* is used in a general sense to describe those influences that are observed to operate in a systematic and calendar-related manner, such as trading day patterns, holiday effects and other seasonal patterns. The production cycle of a rural commodity like wheat, in which activities such as sowing and harvesting regularly take place at the same time each year, and which therefore will be reflected in the seasonal pattern of exports of this good, is a good example of the type of influence which seasonal adjustment can remove.

4.23 Once the seasonal or calendar-related influences have been removed from the original data, only the *trend* and *irregular* components remain. The irregular element refers to changes which are attributable to irregular events such as industrial disputes that are not part of a longer trend, as well as the general lumpiness of events occurring irregularly (e.g. imports of large ships and aircraft, and variability in shipping patterns). When the seasonal element is removed, the trend and irregular elements are more readily recognised.

Trend estimates

4.24 In cases where the removal of only the seasonal element from a seasonally adjusted series may not be sufficient to allow identification of changes in its trend, a statistical technique is used to dampen the irregular element. This technique is known as *smoothing*, and the resulting smoothed series are known as *trend series*. Box 4.6 discusses seasonal adjustment and the process of smoothing in more detail.

4.6 TECHNICAL NOTE ON SEASONALLY ADJUSTED AND TREND ESTIMATES

The method used to seasonally adjust the balance of payments statistics is the SEASABS package developed by the ABS. This is based on the X–II seasonal adjustment technique developed by the US Bureau of the Census. The general seasonal adjustment method is briefly described in the ABS publication *Seasonally Adjusted Indicators* (Cat. no. 1308.0), which was last published in 1983. A short description of the concepts underlying seasonal adjustment and other aspects of time series analysis can be found in the ABS *Information Paper: Time Series Decomposition—an Overview* (Cat. no. 1317.0), published in March 1987.

In Australia's balance of payments, many current account standard components are affected to some extent by seasonal influences. Seasonally adjusted estimates are presented for goods and services in the monthly publication (Cat. no. 5368.0), and for the entire current account in the quarterly publication (Cat. no. 5302.0). While all higher level components of the current account are examined for seasonality, not all current account series are amenable to seasonal adjustment; in some instances, influences do not occur in a manner that is regular enough to be identified as seasonal (e.g. from December quarter 1995, the item non-monetary gold is not seasonally adjusted). Seasonal adjustment of the current account is also important in the wider context of the seasonally adjusted national accounts for production and income distribution. Seasonal adjustment is not attempted for any components of the capital and financial account. For the financial account the seasonal effect is likely to be swamped by the scale of the irregular influences on these series, given the types of transactions recorded in this account.

To maintain the accounting identity, broader monthly and quarterly aggregates such as the goods balance, the goods and services balance and the current account balance are derived through aggregation from the directly-adjusted components of the balances rather than by directly adjusting the aggregates themselves. However, the monthly and quarterly series are independently adjusted; as a consequence, monthly adjusted series do not add to quarterly series and, on occasion, show different movements.

Seasonally adjusted series are subject to revisions as the original series may be revised, and the seasonal factors themselves are subject to revision. The seasonal adjustment factors for the balance of payments are revised at least once a year to take account of additional original data and other information that has become available. This standard reanalysis is included in the June quarter issue of Cat. no. 5302.0 and the July issue of Cat. no. 5368.0. However, reanalyses are often undertaken at more frequent intervals when the behaviour of the series warrants.

Smoothing, to derive trend estimates, is achieved by applying moving averages to seasonally adjusted series. A number of different types of moving average may be used—for balance of payments quarterly series a seven term Henderson moving average is applied, while a 13 term Henderson moving average is applied to monthly goods and services series.

The use of Henderson moving averages invariably leads to smoother data series relative to series that have been seasonally adjusted only. The Henderson moving average is symmetric, but asymmetric forms of the average are applied as the end of a time series is approached. While the asymmetric weights enable trend estimates for recent periods to be produced, they result in revisions to the estimates when subsequent observations are available. In the monthly publication (Cat. No. 5368.0), the possible impact of the next month's observation on the provisional trend estimates of the balance on goods and services for the latest six months can be gauged from the 'What if?' analysis found at the end of that publication. Revisions may arise from four factors: the availability of subsequent data, revisions to the underlying data, especially in more recent periods; re-estimation of seasonal factors; and asymmetries in the smoothing procedure.

For a more complete explanation of the methods of seasonal adjustment and trend estimation, the reader should refer to the ABS *Information Paper*: *A Guide to Smoothing Time Series—Estimates of Trend* (Cat. no. 1316.0). Details of trend-cycle weighting patterns and seasonal adjustment methods are available on request from the ABS.

Chain volume measures

4.25 In addition to the current price balance of payments statistics relating to goods and services, the ABS produces chain volume measures. Chain volume measures, which will appear for the first time in the September quarter 1998 issue of *Balance of Payments and International Investment Position* (Cat. no. 5302.0), replace the existing constant price estimates. Current price values reflect the effect of changes in the price as well as the volume of goods and services. Chain volume measures remove the effect of price changes so that movements in the data between one period and another reflect changes in the volume of goods and services imported and exported. Chain volume measures are used to analyse changes in goods and services trade which are not directly attributable to inflationary or other pricing influences. Box 4.7 discusses chain volume measures in more detail.

4.7 TECHNICAL NOTE ON CHAIN VOLUME MEASURES

In the September 1998 issue of *Balance of Payments and International Investment Position* (Cat. no. 5302.0), the ABS will replace constant price estimates with annually reweighted Laspeyres volume measures. This follows the *SNA93* recommendation that annually reweighted chain volume measures should be compiled to aid the analysis of economic statistics. *SNA93* argues that chain volume measures provide better indicators of volume growth than constant price estimates for most economic statistics relating to expenditure and production. The ABS considered this recommendation carefully, consulted with users and undertook an empirical analysis of Australian data. The decision to adopt chain volume measures was outlined in the *Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts* (Cat. no. 5248.0). The paper describes what chain volume measures are, their advantages and disadvantages with respect to constant price estimates, and how and when they would be implemented in the Australian national accounts and associated statistics.

A current price value may be thought of as being the product of a price and a quantity. By eliminating the effect of price change from the current price value, the remaining change can be attributed to changes in volume. As a consequence, although volume measures are expressed in money terms, they vary only with changes in the quantities of the goods and services transacted.

Two basic approaches can be taken to derive volume measures. The first, referred to as *quantity revaluation*, uses the quantity for an individual commodity in each period and multiplies this by the reference year average unit price. This method can be applied if the commodity is defined narrowly enough to ensure that it is homogeneous in content and free from quality changes over time (since a change in quality is considered to be a change in quantity). This approach is used for most goods exports.

The second approach to obtaining volume measures is referred to as *price deflation*. A measure of the price component of the current price value is obtained (usually in the form of a price index) and is divided into the current price value to obtain the volume measure. Relative price movements are normally more highly correlated between commodities than are relative quantity movements. Therefore, an adequate indicator of price movement can generally be obtained with less data than are required to obtain an equally adequate indicator of quantity movement (which is required in the quantity revaluation approach).

In some instances data constraints are such that directly relevant quantity or price data are not available to revalue a current price value. In these circumstances, a proxy series comprising quantity or price movements of related commodities may be used. One type of price index which is often used as a proxy indicator of price movement is the implicit price deflator of related commodities which have already been revalued with directly relevant quantity or price data (see box 4.8 for a description of implicit price deflators).

A brief description of the methods used in deriving volume measures for exports and imports follows.

Exports of goods

For about 85 per cent, by value, of export commodities, the volume measures are obtained by quantity revaluation. The volume measures of the remainder are calculated using either price indexes or implicit price deflators obtained from quantity revaluation of other components. The price indexes used include the price index for computer equipment of the U.S. Bureau of Economic Analysis, and the ABS price indexes underlying those published in *Export Price Index, Australia* (Cat. no. 6405.0) and *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (Cat. no. 6412.0). The volume measures of the coverage and timing adjustments, made to bring exports as recorded in international merchandise trade statistics (trade basis) onto a balance of payments basis, are derived using relevant implicit price deflators (see box 4.8 for a description of implicit price deflators).

Exports of services

Volume measures are obtained mainly by deflation of the current price values, using relevant ABS price indexes underlying those published in *Consumer Price Index, Australia* (Cat. no. 6401.0), *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (Cat. no. 6412.0), *Award Rates of Pay Indexes, Australia* (Cat. no. 6312.0), up until March quarter 1998, and *Wage Cost Index* (Cat. no. 6345.0), from June quarter 1998, as well as some special purpose price indexes. Quantity revaluation is also used for some transportation services, where it is assumed that the volume of services moves in the same way as the capacity to provide the service.

Imports of goods

All volume measures are derived using detailed price indexes to deflate the corresponding current price values. Price indexes derived from price indexes underlying those published in *Import Price Index, Australia* (Cat. no. 6414.0), are used to deflate all but two components. The exceptions are computer equipment, for which a computer equipment price index from the U.S. Bureau of Economic Analysis is used, and other transport equipment, for which an overseas price index for rail and sea components is used.

Imports of services

In most cases, current price values of the components are deflated using consumer price indexes from overseas countries, adjusted for exchange rate changes. In all other cases, special purpose price indexes, implicit price deflators and ABS price indexes from *Consumer Price Index, Australia* (Cat. no. 6401.0), and *Import Price Index, Australia* (Cat. no. 6414.0), are used.

Chain volume measures *continued*

4.26 Chain volume measures, expressed in dollar terms, are presented in the quarterly and annual balance of payments publications. These publications also present chain volume measures of commodities exported and imported. The reference year is the year prior to the latest complete financial year. For example, chain volume measures published in the September quarter 1998 issue of *Balance of Payments and International Investment Position* (Cat. no. 5302.0), will be in terms of 1996–97 dollars.

Implicit price deflators

4.27 An implicit price deflator is a derived measure of price change. It is obtained by dividing a current price value by the corresponding chain volume measure. It is then multiplied by 100, and so has a value of 100 in the base year.

4.28 Implicit price deflators are derived using the composition of goods and services (exported and imported) in the current period. Therefore such indexes do not reflect a fixed basket of goods, so that changes in the implicit price deflator from one period to another may reflect changes in composition of the imports or exports rather than (or in addition to) price changes. However, with the introduction of implicit price deflators derived from annually reweighted chain Laspeyres volume measures, the effect of compositional change has been reduced. Box 4.8 discusses implicit price deflators in more detail.

4.8 TECHNICAL NOTE ON IMPLICIT PRICE DEFLATORS

Implicit price deflators (IPDs) relating to goods and services measures are presented in the quarterly and annual balance of payments publications.

An IPD is obtained by dividing a current-price value by the chain volume measure expressed in dollar terms. Thus IPDs are derived measures (hence the term implicit) and are not normally the direct measures of price change by which current price estimates are converted to volume measures.

IPDs provide a measure of the pure price change between the base period of the relevant volume measure and any other period. However, comparisons of IPDs between two periods other than the base period therefore reflect both changes in the prices between the two periods and changes in the composition of the aggregate between the two periods. Because the composition of an aggregate often changes from period to period, IPDs do not compare the price of a constant basket of goods and services between any two periods except in comparing the base period with any other period. IPDs calculated from quarterly aggregates may be particularly affected by changes in the physical composition of those aggregates. As much of the quarter-to-quarter change in the physical composition is of a seasonal nature, IPDs derived from seasonally adjusted data are normally more reliable than those calculated from unadjusted data. Even so, seasonally adjusting the series may not completely eliminate the impact of seasonal changes on the derived IPDs.

Chain Laspeyres price indexes

4.29 In addition to implicit price deflators, the ABS produces annually reweighted chain Laspeyres price indexes. The chain Laspeyres price indexes are considered superior to the implicit price deflators described above. The chain Laspeyres price indexes are formed by applying current price weights for the previous year to detailed price indexes and then aggregating them.

4.30 The detailed price indexes used to form chain Laspeyres price indexes are those used to derive chain volume measures, and are drawn from ABS producer price indexes, import and export price indexes, consumer price indexes and wage and salary rates, as well as various sources outside the ABS.

Terms of trade

4.31 The implicit price deflators (IPDs) for exports and imports are used to derive Australia's terms of trade for goods and services. They are expressed as an index, calculated by dividing the IPD for exports by the IPD for imports, with the result multiplied by 100. A rise in the index implies an improvement in a country's terms of trade, enabling it to purchase more imports from the same amount of exports. A fall in the index implies a deterioration in a country's terms of trade, requiring it to export more to purchase the same amount of imports. Movements in the terms of trade are used in assessing the changing purchasing power of exports over imports, analysing real income, and evaluating the level of consumption that can be sustained in the domestic economy.

CHAPTER 5 DATA SOURCES AND METHODS

INTRODUCTION

5.1 The compilation of balance of payments and international investment position statistics is a complex process requiring the use of a wide range of data sources and methods, many of which are statistically complex. The purpose of this chapter is to describe these data sources and methods, and to give the reader a broad understanding of the compilation process.[1]

5.2 The chapter begins by describing the main techniques used in deriving the data items. It goes on to describe some of the key data sources, and concludes by providing a broad description of selected data models. To supplement this, *Appendix 1* lists and describes the data sources used and indicates where they are used. *Appendix 2* describes some of the more complex data models and indicates the standard components in which they are used. *Chapters 6 to 10* and *12 to 14*, which focus on broad standard components of the balance of payments and international investment position, describe in tabular form the sub-components and their data sources and methods. Where appropriate, these chapters elaborate further on aspects of data sources and data models which should be taken into account when compiling a particular standard component.

COMPILATION STRATEGY

5.3 The compilation process involves taking data from various data sources and data models to create the standard data components to be published in the balance of payments and international investment statistics. The statistical issues involved include:

(i) identification of a suitable source of data for each component, which may result in the need to develop a new statistical collection, or the need to use some related data items and form a model through which the derived data items can be estimated;

(ii) assessment of the quality of the data so derived, and working over time to improve its coverage, to align definitions with the international standards, to identify reasons for misreporting and ameliorate them, and to eliminate processing and compilation errors; and

(iii) improvement to the timeliness for the source data and, in cases where they cannot be available before publication, development of extrapolation methods of high quality.

5.4 Most steps in the process may have feedback to earlier steps, and hence the process may be iterative. That is, a later stage may identify errors in earlier processes, modifications to earlier assumptions and procedures, changes to earlier judgements, etc. Users, by analysing and commenting on data, may influence many aspects of future data collection and estimation. It is important to recognise the requirement for judgement in all stages of the compilation process.

---

1 For a fuller discussion of the balance of payments compilation process, the reader is referred to the IMF *Balance of Payments Compilation Guide*, particularly Chapter 20.

COMPILATION STRATEGY *continued*

5.5 The main requirement is that statistical output be of good quality, in that the statistics provide a reasonable measure of the real world economic events to which they relate. Quality includes aspects such as: definitions consistent with the conceptual framework, accuracy, freedom from major revisions, timeliness, frequency, and level of detail provided. Often these aspects conflict (e.g. accuracy and timeliness), so that the statistician's skill is in achieving an optimal mix appropriate to meet the needs of economic analysts and policy makers for timely, reliable statistics as the basis for sound decisions. In practice, the resources available to the statistician are invariably limited, and the statistician needs to devise a data collection, estimation, compilation and dissemination strategy to produce an optimal result overall. The factors and judgments in choosing such a strategy will vary from country to country.

5.6 The choice of data sources for a standard component may depend on whether a suitable data source already exists or a specially designed data source is required. In many instances there are data sources which serve a broad statistical or administrative purpose and are also suitable, after modelling, for balance of payments and international investment position statistics. Australian examples include international trade statistics, overseas arrivals and departures, official reserves, and certain Commonwealth Government transactions. Also, the ABS is able to draw on surveys carried out by, or on behalf of, other government agencies which collect data for research and policy purposes. Examples include the International Visitor Survey and the Survey of International Students. While these administrative and external survey data sources may serve a number of purposes, the ABS takes active steps to ensure that their quality is suitable for the balance of payments and international investment position statistics. Where necessary, the ABS may make further refinements to meet its needs.

5.7 However, existing data sources do not cover all statistical requirements, and a number of specially designed collections are necessary. Two historically important collections were established in 1948. The first, the Survey of Companies with Overseas Affiliates, was introduced by the then Commonwealth Bureau of Census and Statistics to measure foreign investment in Australia. The second was the Tickets System introduced by the then Commonwealth Bank to provide measures of selected services, income, transfers and financial transactions. Surveys of international investment have been enhanced over the years and, with the lessening of the relevance and quality of the Tickets System data in a deregulated financial environment, a range of surveys collecting components of international trade in services has been progressively introduced. The resulting Survey of International Investment and Survey of International Trade in Services (both surveys of businesses) are now central to Australian balance of payments, trade in services and international investment position statistics.

COMPILATION STRATEGY *continued*

5.8 In undertaking these and other statistical surveys of businesses, the ABS considers it necessary that:

(i) the population of businesses[2] with international trade in services and international investment activity are identified and recorded—many sources of data on such businesses are examined frequently and newly identified businesses surveyed using exploratory forms;

(ii) the statistical unit[3], particularly for complex business organisations is uniquely defined to avoid omission or duplication in data reporting. In the Survey of International Investment the statistical unit is the *enterprise*, while in the Survey of International Trade in Services the statistical unit is the *management unit*. These units are defined in box 5.1;

(iii) survey forms are designed, tested and evaluated to ensure that data requirements are available from business records, and that survey forms are capable of completion and do not place an unnecessary reporting burden on business. There also has to be a regular program of review of the forms to ensure that they remain relevant;

(iv) the collection method is effective and efficient. Here the choice may lie between the use of *census, partial coverage* and *sample* survey techniques (discussed below);

(v) close contact is maintained with business to ensure that forms are completed with sufficient accuracy and on a timely basis, response rates are high (usually in the high 90 per cent range) and unusual transactions are clearly understood and appropriately recorded; and

(vi) survey results are properly tabulated, analysed, validated, disseminated and appropriately explained. This may include the estimation of some components to take account of partial coverage, non-response, reporting errors and other known factors.

5.9 Apart from business surveys, the ABS has found it necessary, in the compilation of good quality balance of payments statistics, to conduct appropriate surveys of persons, such as the occasional Survey of Returned Australian Travellers. The same underlying principles are applicable. These include properly defining and identifying returning Australian travellers, good form design and testing, appropriate sample estimation techniques, data analysis and validation, etc.

---

2 The Survey of International Investment also includes other resident entities such as the Reserve Bank, general government entities and persons (although the latter are rare) who have international investment activity.

3 The statistical unit refers to the business unit about which data are reported. It may be different from the business which actually reports the data.

5.1 STATISTICAL UNITS IN ABS SURVEYS OF BUSINESSES: DEFINITIONS

The *enterprise group* comprises one or more legal entities under common ownership and/or control. It covers all operations in Australia of legal entities which are related in terms of the current corporations law.

A *legal entity* is an entity which possesses some or all of the rights and obligations of individual persons or corporations. Examples of legal entities include companies, partnerships, trusts, sole proprietorships, government departments and statutory authorities. A legal entity is classified to an institutional sub-sector according to the kind of activity undertaken: non-financial corporations, financial corporations, general government, households, non-profit institutions serving households, and rest of the world. The financial corporations sector is split into sub-sectors which reflect the distinctly differing activities undertaken within the financial sector. These include the central bank, banks, other depository corporations, insurance corporations and pension funds, other intermediaries and financial auxiliaries. These institutional sectors are described in the *Standard Institutional Sector Classification of Australia (SISCA).*

The *enterprise* comprises all legal entities (within the enterprise group) which are classified to a single institutional sub-sector. Thus an enterprise group which contains legal entities that belong to more than one institutional sub-sector is split up into two or more mutually exclusive enterprises. The enterprise unit is used in ABS financial surveys, including the Survey of International Investment.

The *management unit* is the highest level unit within an enterprise group which controls its productive activities and for which a set of management accounts is maintained. In most cases it coincides with the legal entity owning the business. However, in the case of large diversified businesses there are often a number of management units, each coinciding with a division or line of business, which undertake different activities and for which separate and comprehensive accounts are maintained. Therefore, for large diversified businesses, the management unit may be a lower level of unit than the enterprise. The management unit is commonly used in ABS surveys to collect industry or production data, and is the unit used in the Survey of International Trade in Services.

The *establishment* is the lowest level unit within a management unit. It consists of one or more locations, within a State or Territory of Australia, which controls its productive activities and for which a specified range of detailed data is maintained. The establishment may coincide with the management unit, although in large business structures the establishment may be a lower level of unit than the management unit. While the establishment is used in some ABS collections, it is not used in collections for balance of payments purposes.

Collection methods

5.10 ABS business surveys can take the form of a census, a partial coverage collection or a sample survey:

(i) a *census* is a collection of information from all units in the population or a 'complete enumeration' of the population. Censuses are used to identify and update information on the known or expected population of businesses with balance of payments or international investment activity. These are referred to as *benchmark censuses;*

Collection methods *continued*

(ii) a *partial coverage* collection includes units with known relevant activity above certain thresholds. This is used to ensure that the collection covers the big (and volatile) units, which often account for more than 90 per cent of the total activity. Those with known activity below the thresholds are not directly surveyed, but are included in estimated results based on benchmark censuses or other regularly available indicators. A major disadvantage of partial coverage collections is that the activity of the smaller units may be changing quite differently to the activity of big units and may differ from what was recorded in a benchmark census. In the absence of alternative indicator information, benchmark censuses can help in ensuring that all or most units which meet the threshold are identified; and

(iii) a *sample* survey approaches only part of the total population. However, all population members are eligible for selection (unlike in a partial coverage collection). Statistical units are selected according to rigorous sampling procedures, and the data they supply are 'expanded' or 'weighted' to make inferences about the whole population, either as totals or as averages. As sample surveys are less expensive than censuses, they can be conducted at more frequent intervals. A disadvantage of a sample survey, compared with a census, is the presence of sample error, arising from the fact that information is not known about all units. A disadvantage of sample surveys, compared with partial coverage collections, is that limited resources which could be used to closely analyse very significant and volatile units may be spread more thinly to measure the stable activity of insignificant units.

5.11 The ABS uses occasional benchmark censuses to identify businesses with known or expected international trade in selected services or international investment activity. These censuses provide data for the design of partial coverage or sample collections and, in the case of some partial coverage collections, data for estimating the contribution of statistical units below the threshold. The choice of sample or partial coverage depends on a number of factors, including accuracy, provider load and cost. Sample surveys have been used for some components of the Survey of International Trade in Services and in some components of the Survey of International Investment.

Estimation methods

5.12 An important part of the compilation strategy is the use of estimation methods, which may be described as simple estimation procedures, extrapolation and interpolation techniques, and data models. *Simple estimation* may involve relatively simple formulae or procedures which may be used to adjust or estimate a source series. For example, international merchandise trade statistics measure the administrative registration of the physical movement of goods across Australia's customs frontier using administratively determined valuations. Because of a clear understanding of the nature of these administrative by-product statistics, and a close attention to the processes that are followed in their compilation, it is possible to program fairly simple adjustments to re-estimate the data to take account of some of the balance of payments requirements. Therefore, customs valuations become appropriate 'free on board' valuations (the appropriate point of valuation for balance of payments purposes), processing variations in the administrative source are removed to better approximate the time of change of ownership, and the coverage of international trade statistics is adjusted to capture those large transactions that do not involve physical movement across a customs frontier.

5.13 *Extrapolation* is another commonly used method, which involves projecting a particular series forward, taking account of such factors as related statistical indicators, historical developments in the series, the latest available data sources, seasonal influences, appropriate economic and social issues and any other factor that may be considered relevant. Extrapolation is a common method used in data models. For example, where a data source is only available periodically, its results may need to be extrapolated using suitable indicator series. Another common example of extrapolation is to estimate data for the latest period or two until results from a particular data source are available.

5.14 Similarly, when a data source or data model provides data on a less frequent basis than the periodicity of compilation, it is necessary to *interpolate* data between measurement periods to obtain sufficiently frequent estimates. For example, it may be necessary to interpolate annual data to quarters, and (for some business services) from quarters to months, using the most suitable method.

5.15 The most complex method of estimation is the use of *complex data models*, which involve bringing together data from two or more sources and making explicit assumptions about their relationship. The distinction between a complex data model and other forms of estimation (simple estimation, extrapolation and interpolation, all of which are data models of varying complexity) depends subjectively on the perceived complexity of the estimation process used.

Compilation process

5.16 The core of the compilation process is the extraction and transfer of data:

(i) from a data source to the appropriate standard component or data model; and

(ii) from a data model to the appropriate standard component.

Data from sources need to undergo a degree of manipulation (data modelling), either within the data source or after compilation of the source estimates, before transfer to a standard component.

CLASSIFICATION OF DATA SOURCES

5.17 Each nation compiling balance of payments and international investment position statistics has tended to develop its own unique mixture of data sources and methods. However, in more recent times, there have been attempts to classify data sources by broad category.[4] The data sources used in Australia can be classified under the following broad categories: international trade statistics, business surveys, collections from households and individuals, other official sources, and miscellaneous.

International trade statistics

5.18 International trade statistics measure the quantities and values of goods that add to or subtract from a nation's stock of goods as a result of movements, either across the national frontier or the customs frontier, depending on the system of measurement used. A *general trade system* records movements of goods across the national frontier and a *special trade system* records movements of goods across the customs frontier.

5.19 Australia's international trade statistics are presented using the general trade system as recommended by the United Nations draft guidelines, *International Merchandise Trade Statistics; Concepts and Definitions* (February 1996).

5.20 Annual international trade statistics for Australia were first collected and presented on a financial year basis for 1914–15, although information on imports and exports exists from colonial times. Monthly statistics were first presented in August 1917 and have been compiled ever since. The major developments in the collection and compilation of international trade statistics in Australia have been predominantly in terms of the commodity classifications used. Over the years there has been a move towards the use of international classifications[5] in place of classifications developed in Australia. An important development in the early 1990s was the adoption of the shipping date for measuring monthly exports rather than the date of processing for export documents.

---

4 For a classification of data sources used by balance of payments compilers worldwide, the reader should refer to the IMF *Balance of Payments Compilation Guide*, especially table 1.1. The classification of data sources used here is largely based on that.

5 There are five main internationally adopted commodity classifications for goods: the *Harmonised Commodity Description and Coding System (HS)*; the *Standard International Trade Classification, Revision* 3 (SITC Rev3); the *Central Product Classification (CPC)*; the *Classification by Broad Economic Categories (BEC)*; and the *International Standard Industrial Classification of All Economic Activities, Revision 3* (ISIC, Rev.3).

International trade statistics *continued*

5.21 The UN international trade standards recommend that the *Harmonised Commodity Description and Coding System (HS)* be used for the collection, compilation and dissemination of international merchandise trade statistics. While the ABS collects and disseminates international trade statistics on the basis of the HS classification, data are also published according to two other international commodity classifications, the *Standard International Trade Classification, Revision 3 (SITC Rev3)* and the *Classification by Broad Economic Categories (BEC)*. They are also published by industry in accordance with the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*. Data classified by HS are also available.

5.22 The international guidelines for trade statistics recommend that exports be valued on an f.o.b. (free on board) basis and that imports be valued on either an f.o.b. or a c.i.f. (cost, insurance and freight) basis. Specifying the f.o.b. and c.i.f. point is referred to as specifying the *point of valuation*. *BPM5* and *SNA93* recommend that both exports and imports of goods be measured f.o.b., and be valued at market prices. In Australian international trade statistics, exports are published on an f.o.b. basis, and the transactions values reported are assessed to be the best practical approximation to market price. Imports in international trade statistics are valued using an Australian Customs value for duty (v.f.d.), which is virtually identical to f.o.b.. However, imports valued on both an f.o.b. transactions value basis and a c.i.f. basis are also made available.

Business surveys

Survey of International Trade in Services

5.23 The Survey of International Trade in Services collects detailed product and country information across a range of selected services transactions covering transportation, travel, insurance, communications, construction, computer and information services, royalties and licence fees, other business services and personal, cultural and recreational services. It also collects information on goods procured in ports by carriers (debits only), for the change in stocks of merchanting goods held abroad, and for the capital account item acquisition/disposal of non-produced, non-financial assets.

Survey of International Trade in Services continued

5.24 The ABS began transportation services surveys in the early 1950s. To counter data quality problems which were arising in the International Transactions Reporting System (the Tickets System) the scope of services surveys was extended over time. By the early 1970s, estimates for more than 85 per cent of services trade (covering transportation, travel and insurance services) were based on sources other than Tickets. In 1987–88, the introduction of the 'miscellaneous' component of the Survey of International Trade in Services, to collect data directly from businesses, saw the end of Tickets as a source for services components.[6]

5.25 The Survey of International Trade in Services is a quarterly collection which uses a range of collection forms to measure the disparate activities involved in cross-border trade in services. Data are available about three months after the end of the quarter. The main components of the survey are:

(i) Transportation services—these are measured by several forms targeted at resident transport operators and the agents of non-resident transport operators. Agents of the smaller operators are not approached regularly, and estimates are made for their very minor activity. For example, estimates of transportation services by the small air operators are based on Air Transport Authority Statistics which provide information on the passengers and volumes of cargo uplifted and landed in Australia by each foreign carrier;

(ii) Travel services—for travel debits, a quarterly census is undertaken to cover travellers cheque and credit card use by Australians travelling abroad (the predominant modes of payment for travel), and a partial coverage quarterly survey of travel wholesalers is undertaken for prepaid package expenditure. This component of the services survey has been conducted, initially periodically, from the mid-1970s;

(iii) Selected services—these include communications services, construction services, computer and information services, insurance placed directly abroad by the insured, royalties and licence fees, other business services, personal, cultural and recreational services, and the acquisition/disposal of non-produced, non-financial assets. They are collected in a quarterly sample survey of 2,500 businesses from a population of about 5,000 businesses which have international trade in these services. Different forms are used, depending on the type of business being surveyed; and

6 The 'miscellaneous' services component of the Survey of International Trade in Services was subsequently conducted for the year 1989–90, and in both years it obtained benchmark data for use in compiling balance of payments estimates of these miscellaneous services. Limited amounts of data were also collected in the off-survey years (1988–89 and 1990–91) from the major contributors to update the benchmark data. From 1991–92 until 1995–96, the miscellaneous component was conducted on a quarterly and annual basis. The annual collection provided detailed benchmark data while the quarterly collection provided more frequent updates of the quarterly estimates benchmarked to the annual collection. From the September quarter 1996, as part of the implementation of *BPM5*, the sample size and the amount of information collected in the quarterly services survey were expanded and the annual survey ceased.

Survey of International Trade in Services continued

(iv) Insurance business placed abroad through resident brokers—this is collected from larger brokers (30 to 40 each year) to supplement data on insurance enterprises collected by the Australian Prudential Regulation Authority (formerly the Insurance and Superannuation Commission) Survey of Insurance Companies and Agents.

Survey of International Investment

5.26 The Survey of International Investment measures the investment position, financial transactions and other changes in position (price changes, exchange rate changes and other adjustments), and investment income associated with claims on and liabilities to non-residents by Australian residents. Data items and classifications used in the collection are consistent with *BPM5.*[7]

5.27 The survey consists of several elements:

(i) a quarterly partial coverage survey of about 900 resident trading and financial enterprises with foreign financial assets and/or liabilities above specified thresholds—all banks and public sector enterprises known to have foreign investment activity are included in the survey;

(ii) a periodic sample survey of enterprises, other than those in the quarterly survey;

(iii) quarterly and annual collections of nominees, in respect of their holdings on behalf of non-resident clients, of securities issued in Australia (shares and debt securities). Quarterly collections approach larger nominees for aggregate data on the face value of securities held plus income received on those securities. Annual collections approach the larger nominees, which report similar data, but on a security-by-security basis (i.e. details are collected for each security held by nominees); given the amount of data collected, this information is gathered electronically. Smaller nominees are approached annually for aggregate data on securities held and income;

(iv) a quarterly census of general government units, including the Department of the Treasury and the central borrowing authorities of the State governments, for debt securities issued abroad, loans from abroad and financial assets abroad;

---

7 The earliest published data relating to international investment statistics appeared in the 1924 edition of the *Official Yearbook of the Commonwealth of Australia* which included limited details about financial transactions. An annual collection, the Survey of Companies with Overseas Affiliations, was introduced in 1948. From 1962, the survey was expanded to include a quarterly collection. In 1971, in response to concerns about the volume of funds flowing into Australia at the time, a new quarterly Survey of Overseas Borrowings by Companies in Australia was introduced. In December 1982, a review of Australian statistics in this field was completed and, as part of the recommendations, the previously separate collections of international investment activity were merged and rationalised under the one umbrella collection, the Survey of Foreign Investment. The survey continued to expand in scope and, in the late 1980s, it had acquired much of its current form, although in the mid 1990s the survey underwent some large transformations to meet the new data requirements of *BPM5* and was renamed the *Survey of International Investment*.

Survey of International Investment *continued*

(v) a quarterly collection from the Reserve Bank of Australia. The collection provides the ABS with data on the levels of official reserve assets, comprising official holdings of gold, foreign exchange (split between securities and deposits), Special Drawing Rights and Australia's reserve position in the IMF. It also provides data about the changes in these values due to financial transactions, the allocation or cancellation of Special Drawing Rights and the monetisation or demonetisation of gold, exchange rate changes and price changes; and information on investment income earned on reserve assets. The Bank also supplies information on both its gold custody activity on behalf of non-residents and its gold loans and, where appropriate, on its other cross-border financial activities;

(vi) a quarterly census of fund managers placing funds offshore on behalf of their resident clients. Businesses which place such funds with fund managers are asked not to report them. This approach is adopted to facilitate the capture of funds being placed abroad on behalf of the household sector. In addition, as client enterprises may not always know exactly where funds are placed, data reported by fund managers are likely to be more accurate; and

(vii) a periodic census of enterprises with international investment activity, other than those covered by the quarterly and annual sample surveys, which produces information for updating the basis on which the quarterly or annual surveys are selected.[8]

5.28 Summary data on financial transactions and the investment position, as well as investment income details, are available in time for the quarterly balance of payments and international investment position publication (Cat. no. 5302.0) and more detailed instrument and sector data are available shortly after and published in *Australian National Accounts: Financial Accounts* (Cat. no. 5232.0). The quarterly publication (Cat. no. 5302.0), includes the very detailed decompositions of the financial account and the international investment position for periods up to the quarter prior to the reference quarter.

8 A census of these enterprises was conducted in 1997.

Collections from households and individuals

Overseas Arrivals and Departures

5.29 Persons arriving in or departing from Australia complete Incoming and Outgoing Passenger Cards. These cards provide information to the Department of Immigration and Multicultural Affairs for administrative purposes and serve as the source of statistics of overseas arrivals and departures[9] which are used in a number of balance of payments data models.

5.30 Overseas arrivals and departures statistics are derived from a combination of full enumeration and sampling. Information on all permanent movements and all movements with a duration of stay of one year or more are fully processed. However, while data on all movements with a duration of stay of less than one year are collected, only a sample of these movements is fully processed. The statistics exclude the movements of operational air and ships' crews and of passengers on pleasure cruises commencing and finishing in Australia (the expenditure of these people is measured elsewhere), and of transit passengers who pass through Australia but are not cleared for entry.

International Visitor Survey

5.31 The International Visitor Survey conducted by the Bureau of Tourism Research is a quarterly sample survey of about 20,000 foreign visitors leaving Australia per annum (representing 0.5 per cent of non-residents visiting Australia).[10] It is conducted in international airport departure lounges and collects data on a range of travel issues including, importantly from a balance of payments perspective, expenditure by foreign visitors to Australia (for use in estimating travel credits), earnings from employment (compensation of employees debit), and purchases of airline tickets (used to adjust passenger fare data).

Survey of Returned Australian Travellers

5.32 The Survey of Returned Australian Travellers is an ABS sample survey (conducted in 1991–92 and repeated in 1995–96) of around 7,500 Australian residents aged 15 and over travelling abroad for less than 12 months (representing 0.3 per cent of Australian travellers). Data are collected by mail from a sample of returning travellers drawn from the Incoming Passenger Cards. The survey is primarily used to supplement results from the quarterly Survey of International Trade in Services (travel services component), and to generate per capita expenditure estimates by purpose of travel, per capita estimates of traveller expenditure using cash taken abroad, earnings while abroad, and some other details about Australians travelling abroad.

---

9 Overseas Arrivals and Departures statistics have been published monthly since 1950; in the *Australian Demographic Review* until 1965 and then in the monthly publication *Overseas Arrivals and Departures, Australia* (Cat. no. 3401.0). Quarterly statistics were published in *Overseas Arrivals and Departures, Australia* (Cat. no. 3402.0), from 1965 to 1994, and annual statistics in *Overseas Arrivals and Departures, Australia* (Cat. no. 3404.0), from 1972.

10 The survey was commenced in 1971–72 and results are only available for the years 1971–72 to 1974–75 (financial year basis), 1979, 1981, 1983 to 1986, 1988 and 1989 (calendar year basis). From then on the survey has been conducted quarterly.

Survey of International Students

5.33 The Survey of International Students, conducted in 1991–92 and 1996–97 by the Department of Employment, Education, Training and Youth Affairs, is a sample survey of about 2,000 foreign students selected from enrolments at registered Australian educational institutions. Only students on education visas are covered. New Zealand citizens, and foreign students in Australia for less than three months, do not require an education visa. Students travelling on other types of visas are also excluded. The student population is stratified by type of institution, region and country of origin. The survey covers a number of education-related issues, as well as providing information on per capita estimates of weekly expenditure on goods and services and earnings while in Australia.

Other official sources

Commonwealth Government Transactions

5.34 The Department of Finance provides the ABS with a copy of the Commonwealth Government Ledgers which contain itemised monthly data on all Commonwealth Government expenditures and receipts. These data are used to identify Commonwealth Government expenditures and receipts from abroad. Entries are recorded on a cash basis, i.e. at the time a payment is made or received. In addition, various government departments provide regular details about particular international activity of relevance to balance of payments compilation.

Statistics about foreign students

5.35 The Department of Employment, Education, Training and Youth Affairs assembles annual calendar year data from a number of sources on the numbers of foreign students studying in Australia in any one year, and the fees paid by them. Data are restricted to students on education visas (i.e. all foreign students, except New Zealand citizens, studying in Australia at any institution for three months or more) and New Zealand students at higher education institutions. For student numbers, data come from the Department's survey of higher education institutions (which collects, inter alia, the number of students on foreign visas and New Zealand students) and from a Departmental database relating to students on foreign visas. Student fees are obtained from Departmental surveys of institutions which provide data, inter alia, on course type, indicative fees and numbers of students on foreign visas who are enrolled. Data are also collected on indicative fees payable by students who are New Zealand citizens. These data are used, with adjustments, for a variety of balance of payments estimation purposes.

Miscellaneous data sources

International Transactions Reporting System (Tickets)

5.36 The main balance of payments data source in many other countries is an international transactions reporting system. It is used to measure business and household transactions that pass through domestic banks, and business transactions through inter-company accounts (including non-cash transactions) and bank accounts held abroad. They can provide comprehensive and timely balance of payments statistics. Most such systems, which were formerly known as foreign exchange record systems, evolved as by-products of foreign exchange control systems.

5.37 In Australia, the system was referred to as the Tickets System.[11] The system essentially relied on bank clerks completing a record (a ticket) for each foreign exchange transaction, recording the value of the transaction (in Australian dollars), the country of non-resident transactor, and the appropriate balance of payments code.

Survey of Foreign Unrequited Transfers

5.38 The Survey of Foreign Unrequited Transfers (SOFUT) is a monthly survey of those financial institutions believed to account for the majority of private transfers transactions involving residents and non-residents.[12] It collects information used in the compilation of the migrants' transfers (credits and debits) component of capital transfers and also collects information used in the compilation of the private current transfers (credits and debits) series. The information collected includes such items as immigrants' funds transferred into Australia and emigrants' funds transferred out of Australia, gifts, donations and pensions.

Information about Foreign Embassies and Consulates

5.39 The ABS periodically collects information from the larger embassies and consulates in Australia. It was collected in 1984–85, 1987–88, 1992–93 and in 1997. The information on the numbers of diplomatic staff and locally engaged staff and the average expenditure per foreign representative and dependants, is used in the Foreign Embassy Expenditure Model, together with data from other sources, in compiling estimates of foreign embassies, and their employees, expenditure on goods and services, and wages and salaries paid to locally engaged staff.

DATA MODELS

5.40 Data models are used extensively in balance of payments and international investment compilation. *Appendix 2* provides a summary of selected models and, for each model, includes the data sources used, a broad description of the model, and a list of the standard components for which the model is used.

---

11 The Tickets System was introduced for statistical reasons in 1948. However, deregulation of the financial markets and the subsequent removal of foreign exchange controls resulted in a deterioration in the ability of the system to capture all foreign exchange transactions. From the early 1970's it was increasingly replaced as a data source by business and other surveys and was phased out in 1989.

12 The results from the SOFUT suffer from many of the same problems as the Tickets collection. A review is underway to find a more accurate source to measure this type of information. The Longitudinal Survey of Immigrants to Australia is being investigated as a possible source for the migrants' transfers credits component. See paragraphs 18.3 to 18.5.

DATA MODELS *continued*

5.41 Three models are used to compile the travel services component: Travel by Foreign Residents, Travel by Australian Residents, and Foreign Students in Australia. The first two models contribute to the measures, respectively, of travel credits and travel debits. In the case of credits, the model estimates per capita expenditure on goods and services by foreign travellers and workers from the quarterly International Visitor Survey, and applies these estimates to numbers of travellers in overseas arrivals and departures statistics, with adjustments from other sources. To measure travel debits, the quarterly Survey of International Trade in Services (travel component) is the main source for the Australian residents model. In each model, data come from a variety of sources. The Foreign Students in Australia Model measures the number of foreign students on education visas and New Zealand students studying in Australia, their expenditure on education fees and other goods and services, and wages and salaries earned. Again, data are built up from a number of different sources.

5.42 Several other models are used to measure services. They include the Insurance Model, which measures the insurance service charge and non-life insurance transfers (a fuller description of the treatment of insurance is given in box 7.5), and the Foreign Exchange Fees Model, which indirectly measures the imputed service charge earned by Australian resident foreign exchange dealers from non-residents and vice versa.

5.43 Several models measure portfolio investment financial transactions and international investment position components, and associated investment income. These include the models Accrued Income on Debt Securities, Portfolio Investment in Equity Liabilities, and Portfolio Investment in Debt Securities Liabilities. Fuller explanations of the Income Model and Portfolio Models are given in *Appendix 2*.

5.44 The Migrants' Transfers Model measures migrants' transfers credits and debits. For credits, data are available from the Department of Immigration and Multicultural Affairs on the business migrants category, whereas for other immigrants (credits) and for emigrants (debits) estimated data for per capita transfers are applied to overseas arrival and departure data on migrants entering and leaving Australia.

CHAPTER 6 CURRENT ACCOUNT—GOODS

CONCEPTS AND DEFINITIONS

6.1 *Goods* include, with a few exceptions, all movable goods which change ownership between Australian residents and non-residents, whether or not they actually cross the customs frontier. A change of ownership is imputed for movable goods subject to a finance lease, goods shipped between a branch and its foreign head office, and certain goods for processing. The exceptions to the above definition of goods relate to a small number of movable goods which for convenience are treated as services in the international statistical standards; these exceptions are described in box 7.2.

6.2 The standard components of goods are *general merchandise, goods for processing, repairs on goods, goods procured in ports* and *non-monetary gold*. Table 6.1 illustrates the relative importance of the various standard components for 1996–97. As is evident from the table, goods credits and debits are largely in balance. By far the major component within goods is *general merchandise*, which accounts for 91 per cent of goods credits and 97 per cent of goods debits.

6.1 GOODS CREDITS AND DEBITS, 1996–97

	Credits	Debits
	$m	$m
GOODS	**80 934**	**–79 438**
General merchandise	73 379	–77 205
Goods for processing	77	–656
Repairs on goods	27	–63
Goods procured in ports by carriers	573	–625
Non-monetary gold	6 878	–889

Source: Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

6.3 *General merchandise* includes the majority of goods and, in the detailed balance of payments tables, is split into a range of export and import commodities. Merchandise includes (at their commodity transactions value rather than at face value) such items as newly-minted and unissued bank notes and coins, share scrip, debenture certificates, etc. which are produced in one country and exported to non-residents.

6.4 *Goods for processing* cover the value of goods entering and leaving Australia for processing and returning to the country from which they were consigned for processing. The gross value of the exports and imports is to be recorded even though there may be no change of ownership.[1]

6.5 The fee earned for processing is to be included in the gross value of the goods. Examples of such processing include oil refining, vehicle assembly and clothing manufacturing. This treatment recognises that the original good essentially loses its identity during processing, and is classified to a different commodity after processing. Goods imported to an economy for processing and not returned to the country from which they originated are to be shown, in theory, as an export from the originating country (including the value of processing), and the country undertaking the processing records a service earning fee.

6.6 *Repairs on goods* include repairs performed by residents on movable goods owned by non-residents, or vice versa. The value of the repair, not the gross value of the goods, is included in this component. Exceptions are:

(i) repairs on computer goods, which are included under computer and information services; and

(ii) maintenance performed on transportation equipment in ports and airports, which is included under other transportation services.

6.7 *Goods procured in ports* cover items such as fuels, provisions, stores and supplies procured by resident transport operators in foreign ports or by non-resident transport operators in Australian ports.

1 Goods exported for processing or re-exported after processing are separately identified in Australia's international trade statistics. However, the recorded values of these items may be either overstated, because the goods do not return to the country from which they were consigned to Australia, or understated because the goods are wrongly included in general merchandise. In the case of goods imported for processing or re-imported after processing no items exist to identify these goods separately. The former is approximated in two ways. First, the value of non-merchandise re-exports after repair in Australia (valued before the repairs are undertaken) is deducted from non-merchandise data on imports for repair and processing. Second, where international trade statistics include merchandise entries flagged as being for processing and re-export, these amounts are reclassified for balance of payments purposes to goods for processing. In neither case can the goods be separately identified from goods being re-exported to destinations other than the country from which they were consigned to Australia. Goods re-imported after processing are not separately identifiable and are included in general merchandise.

6.8 *Non-monetary gold* covers exports and imports of gold. It includes gold bullion, unrefined gold, and gold coins which principally derive their worth from either the value of their gold content or, alternatively, from their value as collectors' pieces. Gold held by monetary authorities, such as the Reserve Bank and other central banks, as part of an economy's official reserves, is referred to as *monetary gold*. Transactions in monetary gold between monetary authorities (such as central banks) are treated as financial transactions. However, when the Reserve Bank sells or lends gold, which may then be exported, it is said to *demonetise* the gold, turning it into non-monetary gold; the export of the gold is recorded in this standard component. Likewise, when the Reserve Bank receives gold from abroad (e.g. the repayment of a gold loan), which may then be imported, it is said to *monetise* the gold, turning it into monetary gold; the import of the gold prior to monetisation is captured in the international trade statistics and is recorded in this standard component.

VALUATION

6.9 As with all transactions, the basis on which transactions in goods should, in principle, be valued is market value. Conventionally, transaction prices are used as the closest practical approximation to market prices.

Point of valuation

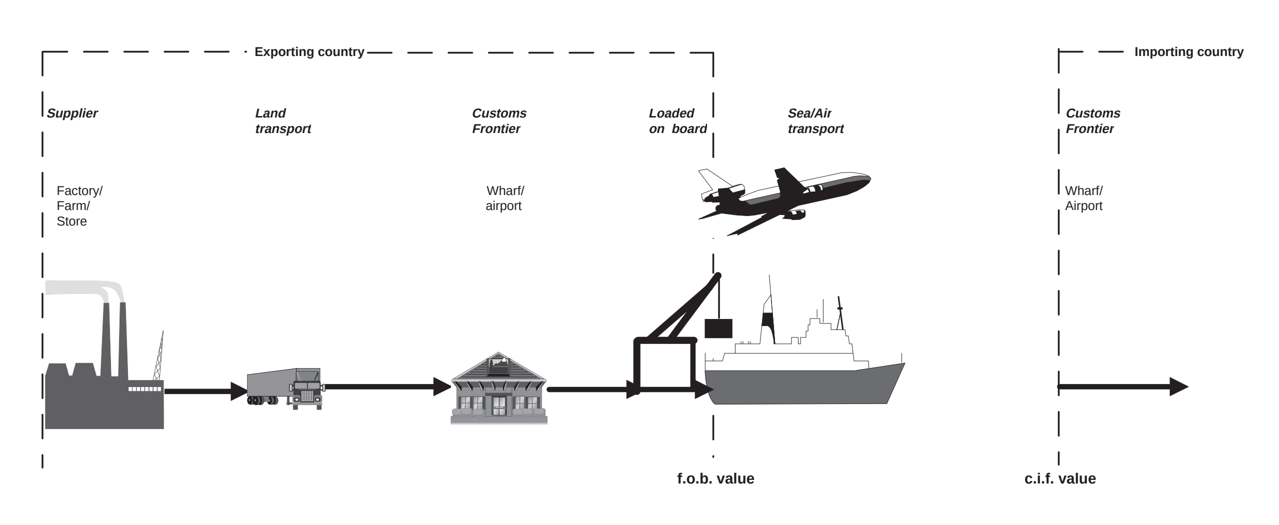
6.10 The point at which goods should be valued is, by convention, *free on board* (f.o.b.) at the customs frontier of the exporting country. An f.o.b. price at the customs frontier includes the value of the goods, the value of outside packaging (other than international containers used for containerised cargo), and related distributive services used, up to and including loading the goods onto the carrier at the customs frontier of the exporting country. The customs frontier (which may not coincide physically with the national boundary) is recommended internationally as the point of valuation for two reasons:

(i) to promote uniformity between countries' statistics, i.e. goods shipped from country A to country B will be valued consistently as A's exports and as B's imports in balance of payments statistics; and

(ii) for many countries, customs records form the only practical source for their international trade statistics and balance of payments goods accounts.

The physical movement of goods across customs frontiers and the appropriate points of valuation are illustrated in diagram 6.2.

6.2 TRADE IN GOODS: PHYSICAL MOVEMENT OF GOODS



Goods credits (exports)

6.11 Exports in international trade statistics are valued at *f.o.b. port of shipment*, generally using transaction values. Charges for international freight, merchandise insurance and any other distributive services provided beyond the customs frontier are included in the appropriate services components when the services are provided by a resident to a non-resident, or vice versa. Goods shipped on consignment are initially valued at the f.o.b. Australian port of shipment equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods are dispatched for sale. Exporters who do not know the value of the goods at shipment and enter an approximate value must subsequently submit an entry either confirming or revising the original estimate.

Goods debits (imports)

6.12 Imports in Australian international trade statistics are primarily recorded at the *customs value*. The starting point for establishing the customs value is the price actually paid or payable to the supplier (transaction value), provided a number of conditions are met. The most important of these is that the buyer and seller must be independent of each other (i.e. it is an arm's length transaction). If the conditions are not met, practical rules are used to determine a substitute price to be used as the customs value. The substitute price is intended to be as close an approximation as possible of the transaction price that would have been struck had the prescribed conditions been met. The customs value includes inland freight, insurance and other distributive services in the exporting country up to the point of export. Where goods are loaded into a container at an inland point and that same container is used to transport the goods internationally, the inland point is taken to be the point of export.

Goods debits (imports) *continued*

6.13 In addition to the customs value, the *f.o.b. value* is requested on customs import entries and recorded in the international trade statistical system. This is the value used to record imports in balance of payments statistics.[2] Imports are also recorded in the international trade system at their *cost, insurance and freight (c.i.f.) value*. This is equal to the f.o.b. transaction value plus the costs of freight and merchandise insurance involved in shipping the goods beyond the f.o.b. point up to the customs frontier of the importing economy. The difference between the aggregate f.o.b. and c.i.f. values is used, in conjunction with other data, to derive the freight services debits component in the balance of payments.

Currency conversion

6.14 The values of exports and imports of goods denominated in foreign currencies are converted into Australian dollars at market rates of exchange. Exports denominated in foreign currencies are valued at a representative mid-point of the buy and sell rates applicable at 4 pm on the date of export from Australia. The rates used for imports are the average of three daily readings of the selling rate on the date the goods were loaded onto the international carrier at the foreign port or on the date the goods were packed into a shipping container at the foreign factory.

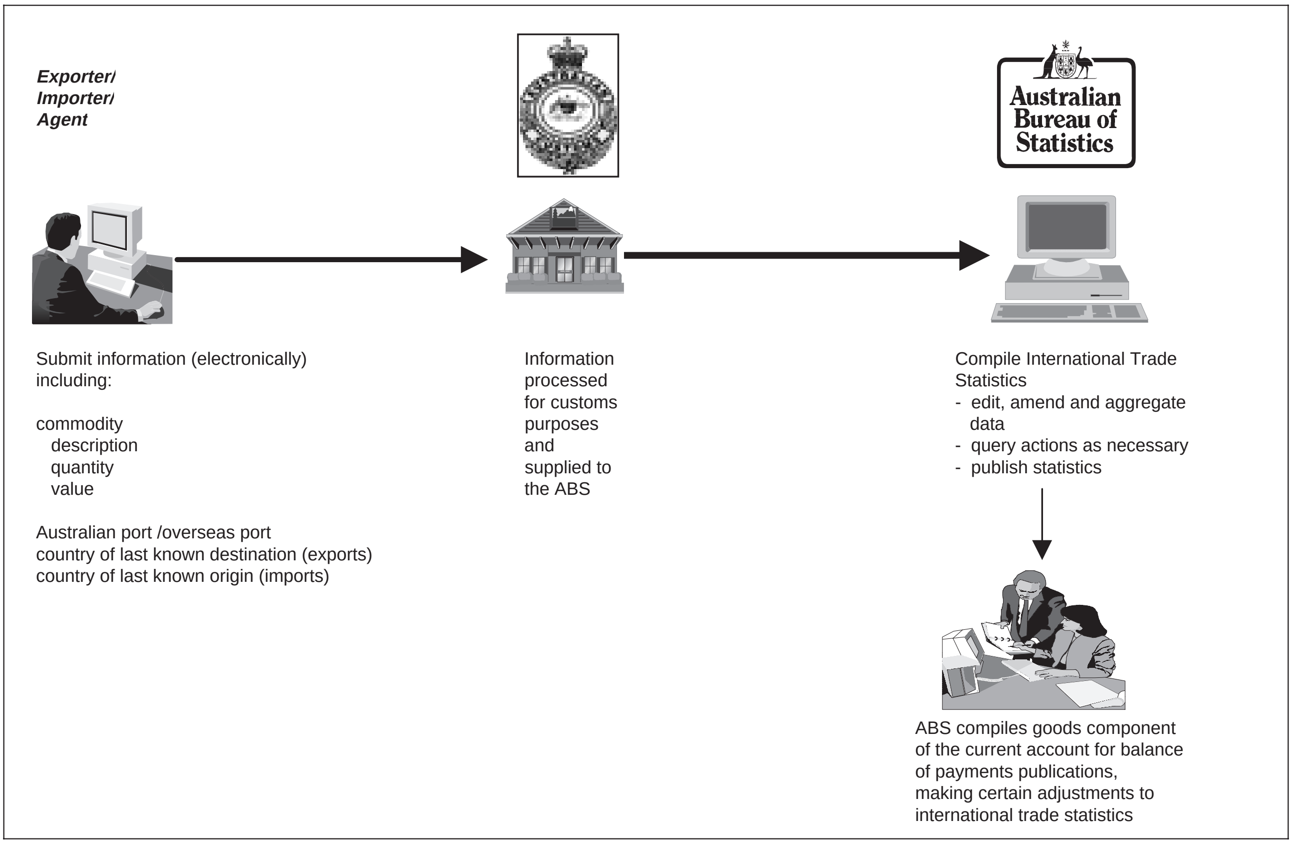
TIME OF RECORDING

6.15 Ideally, the time of recording of goods should coincide with the time of change of ownership. However, international trade statistics do not adopt this concept and for the most part it is impractical to adjust goods to a time of ownership change. The flow of documentation from the importer/exporter to Australian Customs Service and then to the ABS is illustrated diagrammatically in box 6.3. The time of recording of exports and imports is explained more fully in box 6.4.

---

2 The upward valuations in substituting customs values for transaction values are largely offset by the reductions in valuation due to shifting the point of valuation back from the f.o.b. point of valuation to the point of containerisation.

6.3 FLOW OF DOCUMENTATION: GOODS TRADE



6.16 Selected timing adjustments are made to international trade statistics to bring certain goods to a time of change of ownership basis. These include adjusting data on:

(i) ships and aircraft to the date on which the businesses in Australia sell (export) or take delivery of (import) those ships and aircraft;

(ii) exports and imports of major items of defence equipment;

(iii) wool exports to take account of wool shipped on a consignment basis to depots abroad and sold in a later period from those depots; and

(iv) (until the June quarter 1988) other goods shipped on a consignment basis and which change ownership when they are sold abroad rather than when they cross the customs frontier.

Adjustments are also made to imports, from time to time, to take account of distortions which arise when significant changes occur in the volume of import entries lodged but not yet processed by the Australian Customs Service in any one period. Evidence of a variation of this type is obtained by monitoring work flow measures available from the Customs processing system.

6.4 TIME OF RECORDING IN INTERNATIONAL TRADE STATISTICS

For exports, the measurement used is *date of shipment*, which reflects the time of physical movement of goods out of Australia. All exporters (or their agents) are required to lodge documentation with the Australian Customs Service prior to departure and then shipping companies and airlines are required to confirm the actual departure with cargo manifests. Export statistics have been compiled on this basis since the early 1990s and have been backcast on this basis to July 1981. Prior to then, exports were recorded in the month during which export entries were processed by Customs.

Imports are recorded in international trade statistics in the calendar month in which the import entries are finalised by the Australian Customs Service. Normally this is within a few days of discharge of cargo although, on occasion, import entries may be delayed before being passed on to the ABS. For that reason, recorded imports for a particular month do not necessarily represent either entries lodged or commodities actually imported during that month. Analysis of recorded imports data has shown that, in aggregate, about 90 per cent of imports by value recorded for a particular month actually arrive during that month; of the balance, the majority have actually arrived during earlier months, with the remainder yet to arrive. For individual commodities, the percentage by value representing actual arrivals in a month can vary considerably.

COVERAGE OF INTERNATIONAL TRADE STATISTICS

6.17 International trade statistics exclude certain categories of goods which cross the customs frontier, as well as goods changing ownership between residents and non-residents which do not cross the customs frontier. These goods and their balance of payments treatment are recorded in box 6.5. In addition, certain goods which cross the customs frontier, but which do not change ownership, are included in international trade statistics and need to be excluded from the balance of payments measure of goods trade. These include undersea cables from Australia to the rest of the world which remain in Australian ownership; imports of cinema and television film originals for distribution, which are valued in international trade statistics at the value of the medium on which they are carried; and personal effects of Australian travellers returning from abroad for which import entries are required (such as cameras, alcohol etc). The undersea cables do not involve change of ownership and should not be included in the balance of payments. The value of the service associated film distribution is captured in either royalties and copyrights or audio-visual and related services, as appropriate. In circumstances where passengers' personal effects require customs entries, the value of such goods is captured in travel services debits.

6.5 GOODS EXCLUDED FROM INTERNATIONAL TRADE STATISTICS

Goods which cross the customs frontier but are not included in international merchandise trade statistics (unless otherwise stated, no balance of payments adjustment is made):

(i) direct transit trade, i.e. goods being transshipped or moved through Australia for purposes of transport only;

(ii) migrants' and other passengers' personal effects. (In theory, migrants' effects should be included, with offsets in migrants' transfers. However, insufficient data are available to record these entries. Passengers' effects are included in the travel item.);

(iii) imported goods entered through customs on informal clearance documents (ICDs) where the value does not exceed $250;

(iv) parcel post items of small value (for exports the value is less than $2,000 and for imports, less than $1,000) for which customs entries are not required;

(v) single export consignments where the value of goods is less than $500 ($250 until 30 June 1986);

(vi) the movements of ships and aircraft engaged in transporting goods or passengers between Australia and other countries;

(vii) purchases and sales of aircraft (and spare parts) originally imported on or before 1 July 1987. These items were excluded from international trade statistics before that date, and adjustments were made to include them in balance of payments statistics. From 1 July 1987, these goods are included in international trade statistics;

(viii) bunkers and stores supplied to Australian operated ships and aircraft prior to arrival in Australia—data are collected in the Survey of International Trade in Services and included in goods procured in ports debits; and

(ix) goods classified as non-merchandise trade, consisting primarily of goods imported or exported on a temporary basis and intended to be re-exported or re-imported respectively, such as goods shipped for repair, alteration or renovation and subsequent return, the value of those repairs, and goods shipped for public exhibition. While goods for processing and return are excluded from merchandise trade statistics, data relating to them are used to estimate the value of goods imported and exported for processing and return, and the value of repairs, for balance of payments purposes.

Goods which do not cross the frontier and therefore are not covered in international merchandise trade statistics:

(x) offshore installations (including oil drilling rigs and platforms), ships, aircraft and satellites which operate in international waters or airspace and are purchased from or sold to non-residents—the Survey of Principal Transport Enterprises and ad hoc data are used to identify these goods and to include them in the balance of payments;

(xi) goods purchased in a foreign country by the Australian government and consumed in that country (e.g. by diplomatic or defence personnel)—included in government services n.i.e.;

(xii) fish and other sea products caught by Australian vessels in Australia or abroad directly from the high seas and sold abroad—not currently included in the balance of payments;

(xiii) gold sold to or by non-residents, but stored in Australia on their behalf—included in the balance of payments when identified, but these transactions are not often readily identified; and

(xiv) transactions involving an Australian resident buying and selling goods abroad, and transactions involving non-residents buying and selling goods in Australia. When goods are purchased from one non-resident, sold again to another non-resident, and the goods do not enter Australia, the activity is considered a merchanting transaction. (However, if the commodities are not resold by the merchant in the same accounting period, an import of goods is recorded by the compiling economy in the period of purchase, and a negative import entry is recorded in the period of sale.) For merchanting transactions involving an Australian resident buying and selling goods abroad, the merchanting service rendered (the margin) is recorded as a service transaction in the balance of payments. (See box 7.7 for more details on the treatment of merchanting services in the balance of payments.) For transactions involving non-residents buying and selling goods in Australia, merchanting is not applicable and gross goods flows should be recorded. However, with the exception of some gold transactions, and for a few other specific and significant transactions that are identified from time to time, no data are available on non-resident goods transactions within Australia.

COMMODITY CLASSIFICATION

6.18 Commodity breakdowns of general merchandise exports and imports are provided in all balance of payments publications. The underlying classification scheme, which is also used in international trade statistics, is the United Nations' *Standard International Trade Classification (SITC Rev3)*.[3] The commodity breakdown for general merchandise goods credits (exports) shown in the balance of payments is given in table 6.6, together with the Section(s) or Division(s)of the SITC which comprise the groupings shown. General merchandise goods debits (imports) are broken down into three 'end-use' categories—*consumption goods, capital goods* and *intermediate and other goods*—in broad accordance with the United Nations' *Classification By Broad Economic Categories (BEC).*[4] The classification of imports is provided in table 6.7.

3 The third revision (Rev3) of the SITC (see United Nations S*tatistical Papers Series M, No. 34, Rev.3,* New York 1986) was adopted in monthly ABS international merchandise trade statistics from January 1988. It was also adopted in balance of payments publications from late 1988, at which time estimates for a long run of earlier periods were recompiled on the new basis. For periods prior to 1988, this was done by mapping data classified on the previous basis to the closest items in the new classification.

4 United Nations S*tatistical Papers Series M, No. 53, Rev.3,* New York, 1989.

6.6 COMMODITY CLASSIFICATION OF EXPORTS(a)

Commodity	SITC Rev3 Section or Division
Rural	
Meat & meat preparations	01
Cereal grains & cereal preparations	04
Sugar, sugar preparations & honey	06
Wool and sheepskins	21*, 26*
Other rural	00, 02, 03, 05, 07 to 09, 12, 21* , 22 to 25, 26*, 29, 4
Non-rural	
Metal ores & minerals	27,28
Mineral fuels -	
— Coal, coke and briquettes	32
— Other mineral fuels	33 to 35
Metals -	
— Gold	95, 97
— Other metals	67, 68
Machinery	71 to 77
Transport equipment	78, 79
Other manufactures	5, 61 to 66, 69, 8
Other non-rural	11, 93, 96, 98

Note: * part only

(a) Rural exports are defined largely in terms of sections (1–digit level) or divisions (2–digit level) of the SITC; many individual items are classified differently from what might have been the case with a more detailed system. For example, canned fruit salad is included in rural while cotton yarn is not—both items might equally well have been classified to rural (on the basis of their origin), or to non-rural (due to the high proportion of value added during subsequent processing). The terms rural and non-rural are therefore used in a broad sense and the limitations mentioned above should be borne in mind when the estimates are used for analytical purposes.

6.7 COMMODITY CLASSIFICATION OF IMPORTS(a)

End-use category and commodity	Broad economic category (BEC) code	SITC Rev3 Section or Division
Consumption goods		
Food and beverages, mainly for consumption	112*, 122*	01*, 02*, 03*, 04*, 05*, 06*, 07*, 09*, 11*, 42*
Household electrical items	41*, 61*, 62*	76*, 77*
Non-industrial transport equipment	51, 522	71*, 78*, 79*
Textiles, clothing and footwear	61*, 62*, 63*	65*, 84*, 85
Toys, books and leisure goods	61*, 62*, 63*	89*
Consumption goods n.e.s.	61*, 62*, 63*	12*, 29*, 53*, 54*, 55*, 61*, 62*, 63*, 64*, 66*, 69*, 72*, 74*, 77*,82*, 83, 87*, 88*, 89*
Capital goods		
Machinery and industrial equipment	41*	71*, 72*, 73*, 74*, 77*
ADP equipment	41*	75*
Telecommunications equipment	41*	76*
Civil aircraft	521*	79*
Industrial transport equipment	521*	78*, 79
Capital goods n.e.s.	41*	00*, 69*, 75*, 76*, 79*, 81*, 87*, 88*, 89*
Intermediate and other merchandise goods		
Food and beverages, mainly for industry	111*, 121*	00*, 01*, 02*, 03*, 04*, 05*, 06, 07*, 08*, 09*, 11*, 22*, 41*, 42*, 43*, 59*
Primary industrial supplies n.e.s.	21	04*, 08*, 12*, 21, 22*, 23*, 24*, 25*, 26*, 27*, 28*, 29*, 43*, 63*, 66*, 68*, 79*, 97*
Fuels and lubricants	31*, 32*, 322*	24*, 32*, 33*, 34*, 59*
Parts for transport equipment	53*	62*, 69*, 71*, 77*, 78*, 79*, 82*, 88*
Parts for ADP equipment	42*	75*
Other parts for capital goods	42*	61*, 62*, 65*, 69*, 71*, 72*, 73*, 74*, 77*, 87*, 88*
Organic and inorganic chemicals	22*	51*, 52*
Paper and paperboard	22*	64*
Textile yarn and fabric	22*	65*
Iron and steel	22*	67
Plastics	22*	57, 58
Non-monetary gold	22*	97*
Processed industrial supplies n.e.s.	22*	08*, 23*, 24*, 25*, 26*, 27*, 28*, 29*, 33*, 41*, 42*, 43*, 53*, 54*, 55*, 56, 59*, 61*, 62*, 63*, 66*, 68*, 69*, 72*, 74*, 77*, 81*, 82*, 88*, 89*, 97*
Other goods	7*	79*, 89*, 93*, 95*, 96*, 98*

(a) The BEC is described in United Nations Statistical Papers Series M, No 53, Rev3. These end-use categories are further dissected into 26 SITC Rev3 commodity groups. By concording SITC categories to particular BEC categories, the BEC attempts to classify merchandise trade statistics, for purposes of general economic analysis, according to the main end-use of the commodities traded. However, it does not achieve complete alignment with the particular end-use to which articles are put in specific circumstances; for example, some passenger motor cars, which are conventionally classified as consumption goods, and some parts and accessories of capital goods, which are conventionally classified as other goods, are in fact acquired as capital equipment. The 26 merchandise imports commodity groups have been designed so that they: result in meaningful groupings which have sufficient value to warrant separate identification; provide an appropriate spread across all end-use categories without any unduly large residual components; and provide detail for major import commodities. The 26 merchandise imports commodity groups are further sub-divided into 109 commodity sub-groups for more detailed analysis. Detail at this level is not published but is available as a special data service.

DATA SOURCES AND METHODS

6.19 Most data for the goods component come from international trade statistics, including many of the data used to adjust these statistics for balance of payments purposes. Nevertheless, several other sources are also important. The data sources and methods to compile the various goods standard components are shown in table 6.8.

6.8 SUMMARY OF SOURCES AND METHODS—GOODS

Component	Sources of data	Method of estimation
General merchandise Credits	International trade statistics (ITS) ABS Survey of Principal Transport Enterprises (SPTE) Other advices as necessary	Series compiled from ITS which are adjusted for both coverage and time of change of ownership using SPTE and other sources.
Debits	International trade statistics (ITS) ABS Survey of Principal Transport Enterprises (SPTE) Survey of International Investment Department of Defence advice on defence equipment Survey of International Trade in Services (SITS) Other advices as necessary	Series compiled from ITS which are adjusted for both coverage and timing purposes. These adjustments relate to imports of ships and aircraft (using SPTE) and defence equipment (using Department of Defence advice). All imports values are adjusted from the customs value in ITS to the f.o.b. transactions value basis. In addition occasional adjustments are made to overcome significant fluctuations in the volume of imports entries processed (ITS). Adjustments are also made to exclude certain goods for processing.
Goods for processing	International trade statistics	Compiled directly from source data.
Repairs on goods	International trade statistics Survey of International Trade in Services (SITS)	Compiled directly from source data.
Goods procured in ports	International trade statistics (ITS) Survey of International Trade in Services (SITS)	For credits, data compiled from ITS. For debits, data come from SITS.
Non-monetary gold	International trade statistics (ITS) Survey of International Investment (Reserve Bank advice on gold purchases and sales by non-residents) and data on international reserves	Gold crossing the border is compiled from ITS, adjusted for gold purchases and sales by non-residents in Australia, and certain gold exports and imports associated with Reserve Bank gold loans.

CHAPTER 7 CURRENT ACCOUNT—SERVICES

INTRODUCTION

7.1 The *services* component covers services rendered by Australian residents to non-residents (credits) and by non-residents to residents (debits). Table 7.1 shows the main services components and their contribution to the balance of payments in 1996–97. Services in total are virtually in balance. However, Australia has a large travel surplus which tends to balance the large deficits on some other components, mainly transportation, royalties and licence fees, and other business services. *Travel credits* account for almost 50 per cent of services credits, and *travel debits* 32 per cent of services debits. *Transportation debits* account for just over 35 per cent of services debits and almost 28 per cent of services credits. Other important components are communications and insurance services.

7.1 SERVICES CREDITS AND DEBITS, 1996–97

	Credits	*Debits*
	$m	*$m*
SERVICES	24 384	–24 103
Transportation	6 648	–8 439
Travel	11 926	–7 769
Business	665	–2 286
Education	2 962	–492
Other	8 299	–4 991
Communications	910	–1 049
Construction	70	0
Insurance	820	–1 148
Financial	508	–325
Computer and information	278	–253
Royalties and licence fees	346	–1 369
Other business	1 870	–2 673
Personal, cultural, and recreational	448	–559
Government services n.i.e.	560	–519

Source: Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

7.2 Despite the conceptual difference between goods and services, the boundary is sometimes blurred: items classified as goods may include some service element, and vice versa. For example, personal goods acquired by travellers are included in travel services, while merchandise includes the value of transportation services to the border of the exporting country.

7.3 Movable goods treated as services in the international statistical standards are described in box 7.2.

7.2 MOVABLE GOODS INCLUDED IN SERVICES

Movable goods which, for convenience in compilation, are included in services are:

(i) goods acquired for their own use by non-residents while travelling, working or studying in Australia and by residents while travelling, working or studying abroad—these goods are included in travel services;

(ii) goods purchased in Australia by foreign governments for their use in Australia and equivalent expenditure abroad by Australian governments—these goods are included in government services n.i.e.;

(iii) goods purchased in Australia by foreign government employees and their dependants while stationed in Australia and similarly goods purchased abroad by Australian government employees and their dependants while stationed abroad—these goods are included in government services n.i.e.;

(iv) goods acquired abroad by an Australian construction enterprise for the purpose of providing on site construction services, or acquired from abroad or in Australia by a foreign construction enterprise for the purpose of providing on site construction services in Australia (provided that the construction site office is not treated as a branch in the country of construction)—these goods are included in other business services. (For more detail see paragraphs 7.17–7.19.); and

(v) goods which are included incidentally to the main transaction, which is the provision of a service.

7.4 The classification of services in Australian balance of payments statistics is shown in table 7.3. Each of the broad categories in that classification is described in the next section.

TRANSPORTATION SERVICES

7.5 *Transportation services* cover services provided by residents of one economy to those of another economy which involve the carriage of passengers, the movement of goods, and related supporting and auxiliary services. Transportation is broken down by the type of service (passenger services, freight services and other services). While the international standards call for a dissection of transportation services by mode of transport (sea/air/other), in Australia confidentiality constraints preclude the presentation of data on this basis.

7.3 CLASSIFICATION OF SERVICES IN AUSTRALIA'S BALANCE OF PAYMENTS

Transportation services

- Passenger
- Freight
- Other

Travel services

- Business
- Personal
  - Education-related
    - *Tuition fees*
      - *Sponsored students*
      - *Subsidised students*
      - *Full fee students*
    - *Other goods and services*
      - *Sponsored students*
      - *Subsidised students*
      - *Full fee students*
  - Total education-related expenditure
      - *Of which*
      - *Long term/Short term stay*
  - Other

Communication services

Construction services

Insurance services

- *Freight insurance(a)*
- *Other direct insurance(a)*
- *Reinsurance(a)*
- *Auxiliary services(a)*

Financial services

Computer and information services

- *Computer services(a)*
  - *Data processing*
  - *Maintenance*
  - *Computer training and education*
  - *Other computer hardware and software services*
- *Information services(a)*
  - *Database services*
  - *News agency services*
  - *Other information services*

Royalties and licence fees

- *Industrial processes*
- *Trademarks and franchising fees*
- *Music*
- *Computer software*
- *Computer design and hardware*
- *Other royalties*

Other business services

- Merchanting and other trade-related services
  - *Merchanting(a)*
  - *Other trade related services(a)*
- Operational leasing services
- Miscellaneous business, professional and technical
- Legal, accounting, management consulting and public relations services
  - *Legal services(a)*
  - *Accounting, auditing, bookkeeping and tax consultancy(a)*
  - *Business and management consultancy, public relations(a)*
- Advertising, market research and public opinion polling services
- Research and development
- Architectural, engineering and other technical services
  - *Architectural services*
  - *Engineering services*
  - *Surveying services*
  - *Other*
- Agricultural, mining and on-site processing services
  - *Agricultural services*
  - *Mining services*
  - *Waste treatment and depollution*
  - *Other*
- Services between affiliated enterprises, n.i.e.
- Other
  - *Manufacturing services*
  - *Other*

Personal, cultural and recreational services

- Audiovisual and related services
  - *Theatrical, films(a)*
  - *Television programs(a)*
  - *Video tapes(a)*
  - *Multimedia(a)*
- Other personal, cultural and recreational services
  - Education services
  - Health and medical services
  - Sporting and entertainment services
  - Other

Government services n.i.e..

- *Embassies and consulates(a)*
- *Military units and agencies(a)*
- *Other(a)*

Memorandum items:

- Gross insurance premiums
- Gross insurance claims

(a) These services items are not included in the monthly or quarterly publication, but are disseminated on a quarterly basis and are available on request. Otherwise, items shown in italics are only published or otherwise released annually. All other services categories are published or otherwise disseminated as quarterly series.

TRANSPORTATION SERVICES *continued*

7.6 In practice, transport services are provided using a variety of rental and leasing arrangements for the craft employed in delivering the services. Transport services are regarded as being provided by the enterprises deemed to be operating the craft. This may be the owner, or it may be an enterprise leasing or chartering the craft from the owner, or an enterprise sub-leasing or sub-chartering it from a charterer. In the case of shipping transportation, a craft is deemed to be operated by the enterprise which has it under time charter for a significant period, and therefore generally incurs the operational costs of running the craft. This operator will incur operational leasing fees for the services of the craft, and will provide transportation services with the craft. Space charters, which simply rent space on craft (whether used for cargo or not), do not constitute operation of craft and are treated as freight services provided to the space charterer. Similarly, voyage charters (point to point vessel hire) represent the purchase of freight or passenger services from the operator.

Passenger services

7.7 *Passenger services* cover, in principle, all services provided between Australia and abroad, or between two foreign economies, involving the international transportation of non-resident persons by resident carriers (credit) and of resident persons by non-resident carriers (debit). Also included in passenger services are charges for excess baggage, or for moving other personal effects accompanying the passenger, and expenditures for food, drink or other items which passengers purchase while on board carriers.

7.8 In practice, the measurement of airline passenger services involves the following:

(i) passenger services are reported by resident shipping and airline companies as travel revenue earned from international airline tickets sold abroad, whether to residents or non-residents, and regardless of whether that revenue relates to international travel or travel within a foreign country. Similarly, non-resident shipping and airline companies report revenue earned from ticket sales in Australia, whether to residents or non-residents, and regardless of whether it involves transportation between Australia and the rest of the world or transportation within Australia as part of an international journey;

(ii) for foreign visitors to Australia, data on their purchases of international airline tickets in Australia are used to adjust upwards the passenger fare earnings by resident carriers (credits) derived from (i) above, and to adjust downwards passenger fare earnings by non-resident carriers (debits). A similar adjustment is not made in respect of Australian visitors abroad, resulting in a minor overstatement of travel debits offsetting both the slight overstatement of resident carrier earnings (transportation credits) and understatement of non-resident carrier earnings (transportation debits);

Passenger services *continued*

(iii) the value of services provided to non-resident persons by Australian carriers in Australia, when sold abroad as part of an international ticket (on-carriage), is collected from the carriers and allocated to travel services. Services provided on purely domestic travel in Australia by non-residents, whether pre-purchased abroad or while in Australia, are also included in travel. No classification adjustments are made for non-resident earnings from residents for internal flights abroad, and all earnings from sales in Australia for on-carriage in a foreign country, or for pre-purchased domestic travel in a foreign country, are included indistinguishably in transportation debits; and

(iv) cruise fares are excluded from passenger services and included in travel, although sea passenger services sold in Australia and provided to residents travelling from one country to another and any resident sea passenger earnings are included in transportation.

Freight services

7.9 *Freight services* refer mainly to the transport of goods. Also included in freight services are towing and services related to the transportation of oil platforms, floating cranes and dredges. To understand the scope of freight services, it is necessary to revisit the f.o.b. valuation of goods discussed in *Chapter 6*. In economic statistics any transportation service to the border of the exporting country is included in the value of the goods; thereafter the transport of the goods is treated as a freight service. This means, inter alia, that an Australian transport operator carrying imports from the border of the exporting country constitutes a service provided by a resident operator to a resident importer and hence is not recorded in balance of payments statistics; likewise the service provided by a non-resident operator on Australian exports does not need to be included in the balance of payments. Table 7.4 describes the implications of this treatment in more detail.

7.4 TREATMENT OF FREIGHT SERVICES

Credits: earnings by resident operators	**Debits: earnings by non-resident operators**
on Australia's exports, beyond Australia's border	on Australia's imports, beyond the border of the exporting country
on Australia's imports, before the border of the exporting country	on Australia's exports, to the Australian border
on other goods owned by non-residents(a)	on other goods owned by residents of Australia(a)

(a) Includes: the transport of goods between third countries (cross-trade); coastal transportation or other transportation of goods between points within an economy; and transport of mail for postal and courier services. Excludes goods accompanying passengers.

Other transportation services

7.10 *Other transportation services* cover a range of services provided in ports, airports and other terminal facilities by residents to non-residents (and vice versa). These services include cargo handling (loading and unloading of containers etc.); storage and warehousing; packing and repacking; towing, pilotage and navigational aid for carriers; customs agency services; counter and baggage services; maintenance and cleaning of transport equipment performed in ports; and salvage operations. Also included in this category are agents' fees associated with passenger and freight transportation, including freight forwarding and brokerage services.

TRAVEL

7.11 *Travel* covers all goods and services acquired for personal use in an economy by travellers and foreign workers. A traveller is defined as an individual who stays for less than one year in a country where he or she is not a resident. There are some exceptions to this definition:

(i) foreign government officials (and accompanying dependants) employed abroad, such as diplomatic and military personnel stationed at a military base or at an embassy or consulate, are not considered travellers. Expenditures of these individuals in foreign economies are included in *government services n.i.e.* rather than *travel;*

(ii) persons who are employed in another economy for less than one year are also regarded not as travellers but as *foreign workers.* However, any personal expenditure they incur is included in *travel*; and

(iii) the one-year rule does not apply to students and medical patients; they remain residents of their economies of origin even if their length of stay in another economy is one year or more, provided they are regarded as still having their centre of economic interest in the country of origin.

7.12 The most common goods and services that travellers and foreign workers acquire are meals, accommodation, entertainment, sightseeing tours, gifts and souvenirs. As long as the goods and services are acquired by the traveller for personal rather than commercial use, it does not matter whether the goods and services are consumed immediately or later, or whether the goods and services are consumed by the traveller or by a third person.

7.13 In economic statistics, the travel component covers goods and services provided to travellers, whether or not the goods and services are paid for by the traveller, paid for by a third party or are provided by the supplier without a quid pro quo. The offset to goods and services provided without a quid pro quo (e.g. free accommodation with a relative or friend, free tuition received by a student) should be recorded in current transfers. In practice, only foreign students' expenditure in Australia funded under Australia's foreign aid program is identified as a service provided without a quid pro quo, and offsetting amounts are included in both travel credits and current transfers debits.

TRAVEL *continued*

7.14 Travel is broken down into two components, *business travel* and *personal travel*. *Business travel* covers personal expenditures on goods and services by seasonal and other non-resident workers in the economies in which they are employed, and by travellers who visit an economy for sales campaigns, market exploration, commercial negotiations, missions, meetings, production or installation work, or other business purposes, on behalf of an enterprise resident in another economy.

7.15 *Personal travel* is further broken down into *education-related travel* and *other personal travel*. Education-related travel covers all expenditure by students, including tuition fees and course material. Other personal travel covers expenditure by travellers for purposes other than business and education (i.e. for leisure activities such as holidays or participation in sports, for health purposes, and for other recreational and cultural activities, visits with relatives and friends, pilgrimages and religious observances).

COMMUNICATIONS SERVICES

7.16 *Communications services* cover three main categories of international communications transactions between residents and non-residents:

(i) telecommunications services, which encompass the transmission of sound or images, or other information, by telephone, telex, telegram, cable, broadcasting, satellite, electronic mail, facsimile services etc., and include business network services, teleconferencing and support services;

(ii) postal services rendered by national postal administrations; and

(iii) courier services provided by specific courier operators which concentrate on express and door-to-door delivery. International transport services contracted by couriers, such as courier services for mail undertaken by air companies, and the storage of goods and related services, are included in *transportation services*.

CONSTRUCTION SERVICES

7.17 *Construction services* cover work on construction projects and installations by construction enterprises in locations outside the economic territory of the enterprise. This includes all goods and services that form an integral part of construction contracts relating to: site preparation work; construction work for buildings and their completion; construction work for civil engineering; installation of machinery and assembly work; renting services of construction or demolition equipment with operator; and exterior cleaning work on buildings. Goods imported by the enterprise for use in the projects are included in the value of construction services rather than under goods; expenditures on local supplies are included under *other business services.*

CONSTRUCTION SERVICES *continued*

7.18 In Australia's case it is not possible to meet fully the international standard in regard to goods used in providing construction services. This reflects the fact that it is difficult to exclude the value of goods imported or exported as part of providing construction services (to be included as *other business services* acquired by the construction enterprise) from international trade statistics.[1]

7.19 However, much of the construction activity which at first glance appears to be a cross-border trade in construction services may be the trade of foreign affiliates and therefore outside the scope of the services component of the balance of payments. Construction businesses often establish a site office which may be treated as a branch in economic statistics if it is set up for twelve months or more, keeps separate accounts, etc. (see paragraph 2.32). Construction services provided by the branch to the client then become resident-to-resident transactions and hence outside the scope of the balance of payments. However, any services provided by the head office to the branch are included in the balance of payments. Further, income earned by the branch, after provision for taxes, depreciation and all other costs of operation, is included in direct investment income. If a construction business sets up a subsidiary in the client's country, the subsidiary is a resident entity in that country and is treated in the same way as the branch just described.

INSURANCE SERVICES

7.20 *Insurance services* cover the provision of various types of insurance to non-residents by resident insurance companies, and vice versa. It includes freight insurance (on goods being exported or imported); other types of direct insurance (i.e. life, accident, health, general liability, fire, marine, aviation etc.); and reinsurance. Also included are agents' commissions related to insurance transactions. As the concept and measurement of insurance services are complex, box 7.5 provides a technical note on insurance and related transactions and box 7.6 describes the treatment.

---

1 Implementing this standard definition would require the compiling economy to identify, and exclude from imports of goods, those materials being imported by foreign construction enterprises, from whatever source. Similarly, the economies of the construction enterprises would need to distinguish, and exclude, exports of materials to those construction activities. Further, the construction enterprises would need to distinguish their purchases from third countries (to be recorded as imports of other business services), purchases from their home economy (excluded from the accounts), and local supplies (recorded in other business services). This application is not possible in the Australian context. Instead, all purchases by Australian construction enterprises abroad are recorded in other business services debits, to compensate for any overstatement of exports. Similarly, all purchases by foreign construction enterprises are included in other business services credits.

7.5 TECHNICAL NOTE ON TREATMENT OF INSURANCE

Insurance services cover the *service charge* component included in premiums earned, rather than taking the whole of the premium, together with any commission or fee income earned by agents and brokers in placing cross-border premiums. The insurance enterprise performs a service in pooling the risks of policy holders and managing claims and, after deducting its fee from premiums paid, it redistributes the bulk of premiums back to policy holders by way of claims. Therefore the bulk of premiums paid represents income transfers into the risk pool, and claims paid are income transfers from that pool. The service charge, following the accrual concept, is measured using *premiums earned* (over the period covered by the premium) and, ideally, an actuarial assessment of the *claims to be incurred* on that level of premium rather than the cash payments made. However, an actuarial assessment of the likely claims from any policy is not readily accessible to statistical compilers. It is approximated from the average claims experience over a long period. In Australian international accounts statistics, claims are generally averaged over a five year period and, in the case of Australian catastrophes (e.g. the Darwin Cyclone and Newcastle Earthquake), over twenty years. The difference between premium payments and premiums earned (prepayments of insurance) is a financial item; similarly the difference between claims incurred and claims paid is a financial item—financial liabilities of the insurance enterprise and assets of policy holders. Because many insurance policies involve prepayment of premiums for a future period, the insurance enterprise has the use of those funds until called upon to meet claims. In economic statistics, income earned on investing these prepayment funds is attributable to policy holders and its effect is to reduce premiums actually paid. Therefore a truer measure of premiums earned includes this income earned—this is referred to as a *premium supplement*. The premium supplement is offset by an entry in other investment income attributable to the policy holders, and the stock of and transactions in prepaid premiums and unpaid claims are included in the international investment position and financial account, respectively.

In the services classification (table 7.3), the insurance service charge component of insurance services is estimated as premiums earned (adjusted for premium supplements) less claims incurred (averaged over five or twenty years).(a) The components, namely premiums (payable before the inclusion of premium supplements) and (unaveraged) claims incurred (receivable), are shown as memorandum items. The offsets to premium supplements are included in other investment income. Total premiums (adjusted for premium supplements), minus the estimated service charge, are included as current transfers to the economy of the insurance enterprise, and (unaveraged) claims payable are included as current transfers to the economy of the policy holders. Data on insurance financial transactions and levels are included in other investment in the financial accounts and international investment position accounts.

The treatment of freight insurance is consistent with the f.o.b. valuation of merchandise exports and imports, i.e. insurance cost up to the customs frontier of the exporting economy is included in the f.o.b. value of the goods exported and, if that insurance is paid for by the importer (e.g. through an enterprise resident in the importer's economy), the exporter is deemed to purchase the insurance and simultaneously recover the cost from the f.o.b. value recorded in the accounts. Insurance services provided for goods after the goods have crossed the customs frontier of the exporting economy are recorded as imports of insurance services by the importer when the insurance is provided by an enterprise non-resident in the importing economy. (If the insurance is provided by an enterprise resident in the importing economy, no entry is made in balance of payments accounts.)

7.5 TECHNICAL NOTE ON TREATMENT OF INSURANCE *continued*

To compile freight insurance, data are largely estimated using various assumptions about the ratios of insurance premiums to total freight (freight data come from international trade statistics) and claims incurred to premiums earned. Data on other non-life insurance come from (i) the Australian Prudential Regulation Authority's (APRA) Survey of Insurance Enterprises and Agents which collects relevant data in respect of insurance business received from abroad and placed abroad by resident insurance companies and agents; (ii) the Survey of International Trade in Services (insurance) which collects data from insurance brokers placing insurance business abroad; and (iii) the Survey of International Trade in Services (selected services) which collects data on own asset risk insurance placed directly abroad by Australian companies. In some cases where claims may be missed or understated (e.g. sometimes insurance agents and brokers may be bypassed in the claims process and therefore not be aware of them), reported claims data may be replaced by estimates from industry averages. While data on international life insurance have been collected separately up until 1995–96, the service amounts involved are insignificant in Australia's case, and not separately releasable.

(a) Premiums are calculated before deduction of agents' fees, commissions etc.

7.6 EXAMPLE OF INSURANCE TREATMENT IN THE BALANCE OF PAYMENTS

To illustrate the treatment of insurance described in the previous box: an insurance enterprise, in its business with non-residents in an accounting period, earns premiums of 100 and incurs claims of 60. The premium supplement on this business is estimated at 20. However, the average claims ratio is 70 percent. To simplify matters it is assumed that cash receipts for insurance equal 100 and cash payments for claims equal 60 (i.e. premiums and claims receivable equal cash receipts and payments). The relevant balance of payments entries are:

	Credit	*Debit*
Insurance services (100+20–70)	50	
Income (20)		20
Transfers (Credit: 120—50; Debit: 60)	70	60
Foreign exchange assets (100—60)		40
	120	120
Memorandum items in services table:		
Gross insurance premiums	100	
Gross insurance claims	60	

FINANCIAL SERVICES

7.21 *Financial service*s cover financial intermediary and auxiliary services conducted between residents and non-residents. Included are intermediary service fees, such as those associated with letters of credit, bankers' acceptances, lines of credit, financial leasing and foreign exchange transactions (for the latter, the spread between the mid point rate and the buying/selling rate is regarded as the service charge); commissions and other fees related to transactions in securities; commissions of commodity futures traders; services related to asset management, financial market operational and regulatory services and security custody fees.

7.22 Financial services also include Financial Intermediation Services Indirectly Measured (FISIM) which estimates the value of the services provided by financial intermediaries for which no explicit charges are made. The broad concept is that, whenever financial intermediaries take deposits or make loans, a service is being provided, and that interest rates on deposits and loans include an implicit service element. The interest rates paid by intermediaries on deposits are less than a notional pure rate of interest because the intermediaries first deduct an amount required (the service fee) to cover the deposit security, branch network costs and the costs of participation in payments mechanisms. Similarly, the interest rate charged by intermediaries on loans includes not only the notional pure interest rate, but a surcharge for the services embodied in making and administering the loans.[2] The imputed service charge on deposits and loans is included in financial services and an equivalent and offsetting adjustment is made to investment income. While both services and income flows are affected by the inclusion of FISIM, the net effect on the current account is zero.

COMPUTER AND INFORMATION SERVICES

7.23 *Computer and information services* cover computer data service and news-related service transactions between residents and non-residents. Included are: database services, such as development, storage, and on-line time series; data processing, including tabulation, provision of processing services, and management of facilities of others on a continuing basis; hardware consultancy; software implementation, including design, development and programming of customised systems; maintenance and repair of computers and peripheral equipment; newsagency services, including provision of news, photographs and feature articles to the media; and direct, non-bulk subscriptions to newspapers and periodicals.

2 There are practical difficulties in measuring FISIM. The notional pure rates of interest are not observable and must be approximated. FISIM is calculated using a 'reference rate approach' to disaggregate the interest flows into a service element and a 'pure' interest element. The margins between the reference rates and deposit and loan rates are applied to the observed effective rates being paid on cross-border deposits and loans. Australia's cross-border FISIM flows are small, with much of Australia's cross-border investment being made in securities or through direct investment where no FISIM is applicable.

ROYALTIES AND LICENCE FEES

7.24 *Royalties and licence fees* cover the exchange of payments and receipts between residents and non-residents for the authorised use of intangible, non-produced, non-financial assets and proprietary rights, and the use, through licensing agreements, of produced originals such as manuscripts or films. It includes the use of: patents, industrial designs, industrial know-how, manufacturing rights and prototypes; trademarks and franchising fees; computer software; computer design and hardware; and other royalties. Distribution and licence fees sold to the media for a limited number of showings in specified areas for films, television programs, videos, multimedia and music are included in *personal, cultural and recreational services.*

OTHER BUSINESS SERVICES

7.25 *Other business service*s cover various categories, other than those elsewhere defined, of service transactions between residents and non-residents. They include: merchanting credits (see box 7.7); other trade-related services; operational leasing services (see box 7.8); legal, accounting, management consulting and public relations services; advertising, market research and public opinion polling services; research and development services; architectural, engineering and other technical services; agricultural, mining and on-site processing services; other business services; and services between affiliated enterprises that are not included elsewhere.

7.7 MERCHANTING SERVICES

Merchanting services credits involve the purchase of a good located abroad by a resident of the compiling economy from a non-resident and the subsequent resale of the good abroad to another non-resident; during the process the good does not enter or leave the compiling economy. The difference between the value of the goods when acquired and when sold is recorded as the value of the merchanting service provided. If the commodities are not resold by the merchant in the same accounting period, an import of goods is recorded by the compiling economy in the period of purchase, and a negative import entry is recorded in the period of sale. By definition there are no merchanting services debits.

7.8 OPERATIONAL LEASING SERVICES

Operational leasing covers resident/non-resident leasing and charters of ships, aircraft and other transportation equipment.

Leases of ships and aircraft for limited periods (such as a voyage charter) for the carriage of passengers or freight, where the lessee does not operate the craft, are not regarded as leases but as the acquisition of either freight or passenger services included in transportation (see paragraph 7.6).

Excluded from operational lease services are financial leasing and leasing of land, buildings and other real estate (included in financial transactions), leasing of telecommunications equipment (included in communications services), and car rentals to foreign travellers (included in travel).

PERSONAL, CULTURAL AND RECREATIONAL SERVICES

7.26 *Personal, cultural and recreational services* (involving transactions between residents and non-residents) include audiovisual and related services and other personal, cultural and recreational services. The first category covers: services related to the production of motion pictures, radio and television programs, and musical recordings; fees to actors, producers, directors etc; distribution and licence fees for films, television programs, videos, multimedia and music sold to the media for limited showings in specified areas; sports event promotion, organisation and sponsorship including payments to athletes; and performance, presentation and promotion services relating to performing arts and other live entertainment events. The other category covers fees for the provision of correspondence courses, services rendered abroad by teachers or doctors; and all other personal services including veterinary, social and welfare services; cultural services such as those associated with museums, libraries and archives; and other sporting and recreational activities.

GOVERNMENT SERVICES, N.I.E.

7.27 *Government services, n.i.e.* is a residual category covering government service transactions for goods and services (office supplies, furnishings, utilities, official vehicles and their operation and maintenance, and official entertainment) by embassies, consulates, military units and defence agencies, and personal expenditures incurred by diplomats, consular and military staff and their dependants in the economies in which they are located. Also included are transactions associated with general administrative expenditures, etc. and not included elsewhere.

VALUATION AND TIME OF RECORDING

7.28 As with all transactions, the basis on which transactions in services should be valued, in principle, is the market price. In practice, the transaction prices recorded in the data sources for the services items are used as the closest practical approximation to market prices.

7.29 The time of recording service transactions in Australia's balance of payments statistics is in concept when the service is rendered, i.e. delivered or received. These dates often coincide with dates on which the services are produced. As a practical proxy, the time of recording by the data source is used.

CLASSIFICATIONS

7.30 The services classification used in Australia's balance of payments (table 7.3) follows *BPM5* and the more extensive OECD–Eurostat Classification. The authors of this classification have attempted to harmonise it with the United Nations *Central Product Classification (CPC)* on which the *Australian and New Zealand Standard Commodity Classification (ANZSCC)* is based. However, owing to the different natures of the *BPM5* and *CPC* classifications, complete harmonisation is not achievable and there are two main areas of difference. First, the *ANZSCC* and the *CPC* are geared to domestic transactions while the *BPM5* and OECD–Eurostat classifications are designed for international transactions. Second, three balance of payments components are defined not in terms of products, but in terms of consumption, namely travel services, goods acquired in ports, and government services, n.i.e.

DATA SOURCES

7.31 Because services cover such a diverse range of activities, various data sources and methods are used to compile the services items. These are described in table 7.9.

7.9 SUMMARY OF DATA SOURCES AND METHODS—SERVICES

Component	Source of data	Method of estimation
Transportation	Survey of International Trade in Services (SITS) International Trade Statistics (ITS) Travel by Foreign Residents Model (TFRM)	The ITS are used to compile the freight debit component. The remainder of transportation services (apart from the TFRM adjustment), is compiled directly from SITS (transportation). TFRM is used to make an adjustment to passenger fare earnings reported in the SITS (transportation) (also see paragraph 7.8 (ii)).
Travel	Travel by Foreign Residents Model (TFRM) Foreign Students in Australia Model (FSAM) Travel by Australian Residents Model (TARM)	These models source a wide variety of information in the compilation of the travel components. The models are described in Appendix 2.
Insurance services	Insurance Model (IM)	Compiled directly from IM. (A description of the treatment of insurance is given in box 7.5.)
Financial services	Financial Services Model (FSM) Commonwealth Government Transactions (Ledgers) Foreign Exchange Fees Model (FEFM)	Explicit financial services fees, the largest component of this item, are primarily estimated using FSM. A minor component of debits (Commonwealth Government loan flotation expenses) is directly compiled from the Ledgers. Implicit financial service fees for foreign exchange trading are estimated using FEFM.
Government services n.i.e.	Commonwealth Government Transactions (Ledgers) Foreign Embassy Expenditure Model (FEEM) Bases in Australia (Defence Department Advices) State Government Budget Papers	Expenditure of foreign governments and their employees in Australia (credits) are compiled from the FEEM and the Defence Department Advices. Expenditure by the Australian Government and its employees abroad (debits) are compiled from the Ledgers and annual State Government Budget Papers.
Other services	Survey of International Trade in Services (SITS) Commonwealth Government Transactions (Ledgers)	Communications services, construction services, computer and information services, royalties and licence fees, other business services, and personal, cultural and recreational services are compiled directly from the SITS. The ledgers provide timely information on withholding taxes which are used to extrapolate the largest components, royalties and licence fees and audiovisual and related services, until SITS data are available.

CHAPTER 8 CURRENT ACCOUNT—INCOME

INTRODUCTION

8.1 In economic statistics, income refers to the earnings from the use of the factors of production (labour, land and financial capital). In Australia's balance of payments, therefore, income credits refer to the return from providing non-residents with the use of Australian labour or Australian financial capital, while income debits refer to the return to non-residents made for use by residents of foreign labour and foreign financial capital. Income should be recorded in the period in which the economic benefits arising from the use of the factors of production are enjoyed by the user. Income can be valued using the returns to the providers of the factors of production. Specifically, labour factor income is valued using the compensation accruing to employees in the period, and financial capital income is valued using the investment income that accrues to the providers of the capital during the period.

8.2 Compensation of employees comprises wages, salaries and other benefits earned by individuals in economies other than those in which they are residents, as well as wages and salaries, etc. paid by extraterritorial bodies such as foreign embassies to resident individuals. Investment income comprises income derived from the ownership of foreign financial assets. Other forms of earnings, such as those from renting mobile equipment or from the use of an intangible, non-financial asset such as a copyright or patent, are treated as fees for a service and included under *operational leasing services* and *royalties and licence fees*, respectively. In the balance of payments standards it is specified that there can be no cross-border ownership of immovable assets (land and buildings), so a notional domestic enterprise is established to account for land and buildings owned by an overseas investor. The return on that investment is then treated as direct investment income.

8.3 Table 8.1 illustrates the relative importance of the main standard components for income in 1996–97. It shows that:

(i) compensation of employees is fairly small and reasonably balanced;

(ii) overall, Australia has a large investment income deficit for each category of investment income (direct, portfolio and other investment income);

(iii) direct investment income is large on both sides of the account, and in each case income on equity is the main contributor;

(iv) portfolio investment income is also significant on both sides of the account, and in each case income on debt securities is the major contributor; portfolio investment income debits are slightly higher than direct investment income debits; and

(v) other investment income is relatively minor.

8.1 INCOME CREDITS AND DEBITS, 1996–97

	Credits	*Debits*
	$m	*$m*
INCOME	**8 319**	**–27 753**
Compensation of employees	678	–539
Investment income	7 641	–27 214
Direct investment abroad/in Australia	*4 718*	*–12 008*
Income on equity	4 901	–11 011
Income on debt	–183	–997
Portfolio investment assets/liabilities	*2 052*	*–13 756*
Income on equity	536	–2 088
Income on debt	1 516	–11 668
Other investment assets/liabilities	871	–1 450

Source: Tables 22 and 23 from Balance of Payments and International Investment Position, Australia, March Quarter 1998 (Cat. no. 5302.0).

8.4 Table 8.2 shows the classification of income published in the quarterly balance of payments and international investment publication, Cat. no. 5302.0.

COMPENSATION OF EMPLOYEES

8.5 *Compensation of employees* comprises wages, salaries and any other benefits (including employers' contribution to social security and pension funds, and payments in kind) for work performed by individuals, where the employee is a resident of one economy and the employer is a resident of another. Compensation of employees should be recorded on a gross basis, before the deduction of income taxes, and may be earned (i) by persons working in an economy, other than the one where they are normally resident, for less than twelve months; or (ii) by local staff from employment in foreign diplomatic missions and military establishments. Such establishments are regarded as non-resident entities, although physically located within the host country; they are also referred to as *extraterritorial entities*.

8.6 Where persons are working abroad for twelve months or more, they cease to be regarded as residents of their home economy and are treated as residents of the economy in which they work. Therefore, earnings by foreign workers, in a country for twelve months or more, are transactions between a resident worker and a resident employer and are not measured in the balance of payments. Where such foreign workers remit funds to family abroad, such transfers are included in *workers' remittances* in private transfers. An exception is made for foreign students, who, should their centre of economic interest be regarded as remaining in their country of origin, continue to be residents of their home country irrespective of their length of stay; any wages and salaries earned by them are included in compensation of employees.

8.2 INCOME: STANDARD COMPONENTS(a)

Compensation of employees

Investment income

Direct investment abroad (in Australia)
- Income on equity
  - Dividends and distributed branch profits
  - Reinvested earnings and undistributed branch profits
- Income on debt
  - Receivable on claims on affiliated enterprises (direct investors)
  - Payable on liabilities to affiliated enterprises (direct investors)

Portfolio investment assets (liabilities)
- Income on equity
  - General government*
  - Depository corporations
  - Other sectors
- Income on debt
  - Bonds and notes
    - Reserve Bank*
    - General government
    - Depository corporations
    - Other sectors
  - Money market instruments
    - Reserve Bank*
    - General government
    - Depository corporations
    - Other sectors

Other investment assets (liabilities)
- Reserve Bank
- General government
- Depository corporations
- Other sectors

(a) Debit and credit entries apply to most of the standard components. Components marked with an asterix (*) only relate to credit entries. The text in brackets is used to indicate where debit labels differ from credit labels.

8.7 Income taxes accruing to host governments from the earnings of foreign workers should be recorded in general government transfers, while the income taxes accruing to foreign governments from residents working abroad should be recorded in other transfers of other sectors. However, data sources used to capture the earnings of foreign workers (such as the International Visitor Survey and the Survey of Returned Australian Travellers) are only likely to measure wages and salaries earned after deducting income tax. Therefore both the compensation of employees and current transfers will have offsetting understatements in their measurement in the Australian balance of payments.

INVESTMENT INCOME

8.8 Investment income credits refer to the income accruing to Australian residents from the provision of financial capital to non-residents (evidenced by ownership of foreign financial assets). Investment income debits refer to the income accruing to non-residents from the provision of financial capital to Australian residents (evidenced by their ownership of Australian financial assets).

INVESTMENT INCOME
continued

8.9 Investment income is primarily classified by direct, portfolio and other investment income (these terms are described in paragraph 3.17). The classification of direct investment income mirrors the classification for direction of investment (see paragraph 3.20) and the classification of portfolio and other investment income implicitly mirrors the asset and liability classification applied to the financial account transactions and international investment position. In turn, for direct and portfolio investment, separate data are provided for *income on equity* and *income on debt.* Within direct investment, income on equity is further divided into *dividends and distributed branch profits*, and *reinvested earnings and undistributed branch profits.* For portfolio investment, income on equity is synonymous with dividends. While financial derivatives are a type of financial instrument, they are created by the issuers without the provision of financial capital. Therefore there cannot, in concept, be any income accruing to the use of financial capital. Any capital gain or loss on these instruments, as with all other financial instruments, is included, when realised, in the financial account.

8.10 The direct investment credit entry represents income earned from direct investment enterprises abroad (foreign affiliates) less any income earned by foreign affiliates from their Australian direct investors (i.e. it is a net position). Similarly, the debit entry represents income earned by direct investors abroad from their Australian direct investment enterprises less income earned by those enterprises from their direct investors abroad. This netting process is shown explicitly in table 8.2 where the underlying income components for direct investment debt are shown separately. This netting process can result in the recording of a negative credit entry (income earned by Australian direct investors from their foreign affiliates is exceeded by income earned from the Australian direct investors by the foreign affiliates) and a positive debit entry (income earned by foreign direct investors from their Australian direct investment enterprises is exceeded by income earned by the Australian direct investment enterprises from their direct investors abroad).

Valuation

8.11 Investment income is measured before the deduction of withholding taxes, which should be shown in current transfers. In Australian balance of payments statistics, this before tax measurement has been adopted since 1960–61 for income debits and since 1985–86 for income credits. For prior periods investment income was measured after deducting withholding taxes. Investment income, when denominated in foreign currency, is converted to Australian dollars by businesses and other entities reporting to the ABS, at the mid-point exchange rate at the time the income is earned. Holding gains and losses are not included in income. When holding gains and losses are realised they are included in the financial account, and when unrealised they are included in the price change component in the international investment position. From the September quarter 1998, the ABS plans to adjust interest income to take account of implicit financial services charges applicable to certain financial intermediation activities (see paragraph 2.26), and record the service flows separately in financial services.

Time of recording

8.12 Investment income is measured on an accrual basis. The earnings of direct investors from their ownership of direct investment capital are recorded in the period that the direct investment enterprises earned their operating and other current income. Dividends, in direct and portfolio investment, are measured in the period in which they are declared payable. Therefore reinvested earnings in direct investment enterprises are measured as the direct investors' equity share of their current earnings less dividends declared payable and distributed profits of branches (i.e. withdrawals by the head office). Interest income is accrued in the period in which it is earned. For an explanation of the impact of accrued interest income on the financial account see box 11.1.

8.13 In the case of portfolio debt securities, a number of difficulties are encountered in collecting interest income accrued from liability issuers and asset holders. They occur because both issuers and holders may adopt historical cost accounting or include holding gains and losses which, in economic statistics, are excluded from measures of income and are included in the financial account. For these reasons, the ABS models income transactions on debt securities; this is referred to as the Accrued Income on Debt Securities Model.

8.14 For long-term debt securities (issued for twelve months or more), the approach used in the model is to take the average stock of securities for a quarter (i.e. half the opening plus half the closing stock), valued at market value, and apply market yields (interest earnings) appropriate to the security. This may be applied at an aggregate level, but preferably at an individual security level, as yields may vary for a number of reasons including credit worthiness of the issuer, the currency of denomination of the security, and the duration of the instrument. When average yields are applied to aggregate stocks, the model attempts to distinguish the sector of issuer, the market in which the issue is made and the currency of issue. In the longer term, the ABS hopes generally to move to a security-by-security model. For short-term securities, reported income is assumed to be a good proxy for accrued income because the very short duration of the instruments means that yield changes can have less impact; however, some smoothing of reported data is undertaken to take account of positions held across quarters. The methodology outlined here is not applied to Reserve Bank holdings, where the reported income on reserve assets is used directly in compiling investment income.

Equity and interest income

8.15 *Dividends* are earnings distributed to the shareholders of an incorporated enterprise. Dividends represent income that is declared payable without a binding agreement between the creditor and the debtor, i.e. dividends are regarded as discretionary. Stock dividends, i.e. shares issued in lieu of cash, are included in dividends with an offsetting equity investment in the financial account. Bonus shares issued, which represent the substitution of one type of equity for another (e.g. paid-up capital for reinvested earnings), or simply the division of shares, are not regarded as dividends. Income earned on non-participating preference shares, which are regarded as debt and not equity instruments, is excluded from dividends and included in interest. Liquidating dividends are regarded as a financial transaction and again are not recorded as dividends. *Distributed branch profits* refer to the distribution of income of branches and other unincorporated enterprises to their owners. As with dividends, income distributed in this way is at the discretion of the owners.

8.16 *Reinvested earnings and undistributed branch profits* refer to that part of the undistributed income of a direct investment enterprise that is attributable to direct investors in the enterprise. Undistributed income attributable to direct investors is included as investment income in the current account, with a corresponding offsetting entry in the financial account (see paragraph 2.25). This treatment is adopted because it is considered that direct investors, through their significant influence on the operations of the direct investment enterprise, are able to determine the level of distributed income and therefore the reinvested earnings of the direct investment enterprise. In the case of an incorporated direct investment enterprise, attribution of reinvested earnings to the direct investor is in the proportion of the direct investor's holding of voting shares to the total voting shares issued by the direct investment enterprise. If the direct investment enterprise is unincorporated, the proportion used is that represented by the ownership interest of the direct investor. Attributing reinvested earnings to shareholders is not extended to portfolio investors because they are not able to influence the level of distributed and undistributed income.

8.17 *Interest* is measured through the return to the providers of financial capital, evidenced by holdings of debt (non-equity) instruments, such as non-participating preference shares, debentures, bonds, bills, notes, loans, deposits, financial leases and accounts receivable. It may be described as non-discretionary because it accrues on a continuous basis over the period of the provision of capital and is evidenced by a contractual agreement between creditor and debtor.

Equity and interest income *continued*

8.18 Within portfolio investment debt securities, separate components are shown for *bonds and notes*, including debentures (long-term instruments), and *money market instruments* (short-term instruments). However, separate details are not currently available in respect of income credits, for long- and short-term instruments. Portfolio investment income credits include income earned on official reserve assets. Portfolio investment income on equity and debt is classified by the four main institutional sectors: Reserve Bank (only applicable for investment income on debt, credit), general government (not applicable to equity income debit), depository corporations and other sectors.

8.19 Other investment income (i.e. other than from direct or portfolio investment) measures interest earned by residents from claims on non-residents and interest earned by non-residents on resident liabilities to non-residents. It includes interest earned from deposits, loans and trade credits. Interest earned on loans includes that part of financial lease payments construed to represent interest on loans, and in the past when the facility has been used, interest related to the use of IMF credit and loans. Other investment income also includes net charges on holdings of Special Drawing Rights[1] and the imputed income earned by insurance policy holders (the offset to premium supplements).

8.20 As with portfolio investment income, other investment income is classified by the four main institutional sectors.

Measuring direct investment earnings

8.21 Direct investment equity earnings are measured on the basis of the direct investors' equity share in the current operating performance and other current income and transfers of the direct investment enterprise. Operational earnings represent income from the normal operations of the enterprise and do not include holding gains and losses.[2] Earnings of direct investment enterprises are measured after deducting provision for corporate taxes (considered to be payable by the enterprise and not the owners) and depreciation of fixed capital. Depreciation should be calculated at current replacement cost taking into account the expected life of the asset (based on normal wear and tear and foreseen obsolescence). Businesses in the Survey of International Investment are asked to report earnings on this basis, but many businesses have difficulties in calculating earnings strictly in accordance with the ideal measure, although the differences may not be material.

1 Net charges on holdings of Special Drawing Rights are the charges by the IMF for the allocation of Special Drawing Rights to Australia, less the interest earned by Australia for the Special Drawing Rights held.

2 Such as gains and losses resulting from valuation changes (e.g. revaluation of fixed assets and investments, inventory write-offs), equipment sales due to business closure, write-off of intangibles (e.g. goodwill) because of unusual developments in a period, research and development expenditure write-offs, bad debt or expropriation write-offs, abnormal provisions on long-term contracts, and exchange rate losses.

Measuring direct investment earnings *continued*

8.22 Direct investors' share in net losses, other than holding gains and losses, of the direct investment enterprise, should be recorded as negative income. That is, for Australian investment abroad, losses are recorded as a negative credit, and for foreign investment in Australia, losses are reported as a positive (without sign) debit. This is to maintain the relationship that income on direct investment abroad is recorded as a net credit while income on direct investment in Australia is recorded as a net debit (see paragraph 8.10).

DATA SOURCES AND METHODS

8.23 For compensation of employees, data come from: (i) the travel models which estimate, inter alia, wages and salaries earned by Australian travellers and workers abroad and foreign travellers and workers in Australia; (ii) the Foreign Embassy Expenditure Model which measures earnings by Australian residents working for foreign embassies in Australia; and (iii) the Commonwealth Ledgers, which measure the wages and salaries paid to local employees of Australian embassies and military bases abroad. For investment income most data come from the Survey of International Investment, the Portfolio Investment Income on Debt Securities Model and the Insurance Model. Data sources and methods are explained in more detail in table 8.3.

8.3 SUMMARY OF SOURCES AND METHODS—INCOME

Component	Sources of data	Method of estimation
Compensation of employees	Travel by Australian Residents Model (TARM) Foreign Embassy Expenditure Model (FEEM) Travel by Foreign Residents Model (TFRM) Foreign Students in Australia Model (FSAM) Commonwealth Government Transactions (Ledgers)	Credits consist of wages and salaries, etc. earned by Australian residents working abroad (derived from TARM) and Australian residents working for foreign embassies (FEEM). Debits consist of wages and salaries, etc. earned by non-residents working in Australia (derived from TFRM and a small amount from FSAM) and local employees working for Australian embassies and military bases abroad (Ledgers).
Investment income		
Direct investment income	Survey of International Investment (SII)	The SII provides data for the compilation of dividends, distributed branch profits, reinvested earnings and undistributed branch profits. It also provides data on interest accrued on direct investment debt. The SII measures both the credit and debit components.
Portfolio investment income	Survey of International Investment (SII)	For dividends credit, data for trading and financial enterprises are reported in the SII. For dividends debit, data are reported by trading enterprises, nominees and other financial enterprises in the SII.
	Accrued Income on Debt Securities Model (AIDSM) Survey of International Investment (SII)	For interest on debt securities credit (excluding reserve assets), data are derived from AIDSM. For interest earned on official reserve assets, including income on debt other than securities, data come from SII (Reserve Bank component). For interest on debt securities debit, data come from AIDSM.
Other investment income	Survey of International Investment (SII) Insurance Model (IM)	For credits and debits, data on interest earned for trading and financial enterprises come from SII; income on official reserves related liabilities comes from SII data collected from the Reserve Bank; and data for the offsets to premium supplements come from the Insurance Model.

CHAPTER 9 CURRENT ACCOUNT—TRANSFERS

CONCEPT AND DEFINITION

9.1 Most entries in the balance of payments record transactions in which real or financial resources (e.g. a good, a service, a financial or non-financial asset) are provided or received in exchange for resources of equal value. When resources are provided without any exchange (e.g. gifts, taxes, grants), such transactions are said to be one-sided and to lack a quid pro quo. To maintain the double entry recording system in the balance of payments, the value provided is matched in the accounts by an offsetting entry that is designated a *transfer*. Transfers may be voluntary or compulsory and may be recorded in either the current or capital account. *Current transfers* are distinguished from *capital transfers*, with the latter included in the capital account.

9.2 Transfers are considered current if they directly affect the level of disposable income and influence the consumption of goods and services. Consumption implies that goods and services are consumed within twelve months. An example of a current transfer is the provision of wheat abroad by Australia in the form of aid, where the wheat is available to be consumed within a relatively short period of it being provided. This is in contrast to capital transfers which result in the transfer of a fixed asset, or the forgiveness of a liability, or the provision of cash linked to or provisional on, the acquisition or disposal of a fixed asset. A transfer that is current in nature to one party, but capital in nature to the other party, is treated as a capital transfer.

9.3 Table 9.1 illustrates the size of the various components of current transfers for 1996–97. It shows that the current transfers account is balanced. *Other sectors* is the largest component for both credits and debits, encompassing 71 percent and 64 percent, respectively, of current transfers.

9.1 CURRENT TRANSFERS CREDITS AND DEBITS, 1996–97

	Credits	*Debits*
	$m	*$m*
CURRENT TRANSFERS	**3 377**	**–3 251**
General government	985	–1 157
Other sectors	2 392	–2 094
Non-life insurance transfers	1 492	–1 440
Other	900	–654

Source: Table 24 from Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

CLASSIFICATION

9.4 Current transfers are classified primarily by institutional sector, i.e. general government and other sectors, with the latter further split into workers' remittances and other transfers. Within the other transfers component, non-life insurance transfers are separately identified. The standard classification of current transfers is shown in table 9.2. In Australia's balance of payments statistics it is not possible to identify workers' remittances separately, for which estimates are included in other transfers.

9.2 CURRENT TRANSFERS: STANDARD COMPONENTS

General government
Other sectors
Workers' remittances
Other transfers
Non-life insurance transfers
Other

9.5 As with all balance of payments entries, this classification represents transactions from the point of view of the Australian entity. For example, pensions paid by the Australian Government to former Australian residents (now non-residents) are classified to general government sector debit, while pensions received by residents from foreign governments are classified to other sectors credit.

General government sector

9.6 The principal components of current transfers of the general government sector include:

(i) the Australian Government's foreign aid program, including gifts of food, clothing, other consumer goods, medical supplies, technical assistance, etc. (and including the Government's administrative costs associated with aid). An important component of this aid is contributions made by the Commonwealth Government toward expenditure on education services (fees) and living expenses of foreign students studying in Australia (these contributions are offset in the students' expenditure component of travel credits);

(ii) other transfers in kind effected between governments for the purpose of financing current consumption, including consumption under foreign military assistance programs;

(iii) social security benefits paid to non-residents;

(iv) regular contributions to international organisations of which Australia is a member; and

General government sector *continued*

(v) withholding taxes levied by the Australian Government on the earnings in Australia of non-residents in the form of dividends, interest and royalties; on freight earnings of foreign shipping operators; and insurance and reinsurance premiums paid abroad.

Other sectors

9.7 The principal components of the current transfers of other sectors are:

(i) workers' remittances, which cover remittances by employees who are migrants, to family and relatives abroad. Migrants are persons who stay in an economy (other than the economy of which they were previously residents) for a year or more (foreign students are not covered by this twelve months rule). Where persons move abroad to work for less than twelve months they are treated as foreign workers, not migrants; their wages and salaries are included in compensation of employees, and their expenditure in the country visited is included in travel services;

(ii) net premiums (i.e. gross premiums minus an imputed service charge) and claims on non-life insurance (see box 7.5 for a fuller explanation);

(iii) pensions paid by foreign governments to residents, either directly or through the Commonwealth Government;

(iv) withholding taxes paid by residents to foreign governments;

(v) regular contributions to charitable, religious, scientific and cultural organisations, and aid of a current nature, by the non-government sector; and

(vi) other miscellaneous transfers—principally receipts by residents from abroad, or payments to non-residents, of gifts, alimony, legacies and inheritances, tickets sold by and prizes won from lotteries, other sustenance payments between individuals, regular contributions (including membership dues) to charitable, religious, scientific and cultural organisations, and non-government pension payments.

VALUATION AND TIME OF RECORDING

9.8 Current transfers should be valued at the market value of the real and financial resources to which the transfers are offsets. If no actual market values are in evidence, those resources should be valued on the basis of explicit costs incurred in their provision or on the basis of amounts that would be received if resources were sold. However, to ensure that the same values are recorded by both donors and recipients, the donor-assigned values are preferred.

VALUATION AND TIME OF RECORDING *continued*

9.9 Ideally, transfers are recorded at the times when the resources to which they are offsets change ownership, so that the date of occurrence of the underlying transactions becomes the time of recording for various transfers.

9.10 Transfer items derived from Government Ledgers are valued on the basis of the Australian dollar amounts received or paid by the Commonwealth Government. They are valued on a cash flow basis, which matches the correct timing for the components of cash aid. For some components, such as aid in kind, the cash basis will capture when the Australian Government pays for the goods or services, rather than on the more conceptually correct accrual basis of when the goods and services are supplied to the recipient economy, although for current transfers any differences are likely to be small. For other sectors' transfers, the most significant component measures non-life insurance transfers on an accrual basis, using data on premiums earned and claims payable. The residual other transfers category covers only the contra entries to 'unrequited' cash flows into and out of Australia, where the timing and valuation bases match the required conceptual basis.

DATA SOURCES AND METHODS

9.11 Government Ledgers are the main source of data on Australian Government current transfers. Data from the Ledgers measure most receipts from withholding taxes (supplemented by data from the Australian Taxation Office), adjusted where necessary for balance of payments purposes,[1] and foreign aid payments. A Department of Treasury advice provides data on Australia's contributions to international development institutions. These data are supplemented by Budget Papers which provide data on Government veterans' and social security pensions paid to former Australian residents now living abroad.

9.12 For other current transfers, data on non-life insurance transfers come from the Insurance Model. The residual item other private transfers includes withholding tax payments abroad and other private transfers. The former are estimated from Survey of International Investment data. Other private transfers are estimated from the Survey of Foreign Unrequited Transfers (SOFUT). The Department of Veterans Affairs reports pensions paid to former New Zealand residents now living in Australia. Data sources and methods used to compile the standard components of current transfers are described in more detail in table 9.3.

1 From time to time withholding taxes are actually paid by residents to the Australian Tax Office; because they are resident to resident transactions they are excluded.

9.3 SUMMARY OF SOURCES AND METHODS—CURRENT TRANSFERS

Component	Source of data	Method of estimation
General government Credits	Commonwealth Government Transactions (Ledgers) Withholding Tax (Australian Taxation Office (ATO))	Ledgers provide data on dividend, interest and royalty withholding tax receipts (adjusted for balance of payments purposes), while the ATO provides data on royalty, insurance and other withholding taxes received from non-residents.
Debits	Commonwealth Government Transactions (Ledgers) Veterans Affairs and Social Security pensions (Commonwealth Government Budget Papers) Contributions to International Development Finance Institutions (IDFIs) (Department of Treasury)	Ledgers provide data on Australian foreign aid abroad, while Budget Papers provide data on pensions paid to former Australian residents. Contributions to IDFIs are provided by the Treasury.
Other sectors Non-life insurance transfers	Insurance model	See box 7.5 for explanation of concepts, data sources and methods.
Other current transfers	Survey of International Investment (SII) Veterans' pensions paid to Australian residents (Department of Veterans Affairs) Survey of Foreign Unrequited Transfers	Until 1995–96, SII provided some data on withholding tax on dividends and interest payable to non-residents, which were used as the basis for estimating withholding tax payments abroad. For subsequent periods these data are estimated. The Department of Veterans Affairs provides data on veterans' pensions paid by the New Zealand Government to former New Zealand residents now resident in Australia. Otherwise, the bulk of this component is estimated using the Survey of Foreign Unrequited Transfers.

CHAPTER 10 CAPITAL ACCOUNT

INTRODUCTION

10.1 The capital account comprises two major components—*capital transfers* and the *acquisition/disposal of non-produced, non-financial assets*. Table 10.1 illustrates the size of the main components of the capital account for 1996–97. *Capital transfers* are clearly the dominant component.

10.1 CAPITAL ACCOUNT CREDITS AND DEBITS, 1996–97

	Credits	*Debits*
	$m	*$m*
CAPITAL ACCOUNT	**2 221**	**–903**
Capital transfers	2 200	–877
Acquisition/disposal of non-produced non-financial assets	21	–26

Source: Table 25 from Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

CAPITAL TRANSFERS

Concept

10.2 The concept of and requirement for transfers entries in the balance of payments were discussed in paragraph 9.1. *Capital transfers* are those entries required to offset transactions recorded for forgiveness of a liability by a creditor, the provision of cash when linked to a change in ownership of fixed assets, or the transfer in kind of ownership of a fixed asset without a quid pro quo, i.e. where no specific recompense in the form of goods, services, income or financial items is provided in exchange. Unlike current transfers, they are not directly related to the processes of production and consumption.

Classification

10.3 Capital transfers are primarily classified to two institutional sectors—general government and other. Within the general government sector, capital transfers are further classified to the standard components: debt forgiveness and other transfers. For other sectors, the standard components are migrants' transfers, debt forgiveness and other. Table 10.2 shows the standard components of the capital account.

10.2 CAPITAL ACCOUNT: STANDARD COMPONENTS

Capital Transfers
General Government
Debt forgiveness (debits only)
Other (debits only)
Other sectors
Migrants' transfers
Debt forgiveness
Other
Acquisition/disposal of non-produced non-financial assets

Debt forgiveness

10.4 *Debt forgiveness* refers to a financial liability of a debtor which is formally cancelled (through a contractual arrangement) by the creditor. The balance of payments reflects a reduction in the liability in the financial account of the debtor, offset by a capital transfer. This treatment is only applicable to debt that is formally forgiven and needs to be clearly distinguished from debt which is written off by the creditor due to the fact that the creditor is unlikely to be able to enforce the collection of the liability. The latter is treated not as a capital transfer, but as an *other volume adjustment* in the level of debt outstanding in international investment position statistics. To date, there have been no significant Australian examples of debt forgiveness, and so this component is shown with nil entries.

Migrants' transfers

10.5 *Migrants' transfers* constitute, for Australia, the most significant component of the capital account. Migrants are defined as individuals (other than students, medical patients or diplomatic, military or similar personnel stationed abroad) who move to a new country and are expected to stay there for at least one year. In principle, migrants' transfers include all the net worth of the migrant in his or her former persona as a non-resident (immigrant) or resident (emigrant). Net worth includes household and personal effects, movable capital equipment, funds transferred by the migrant at the time of change of residency, and the ownership of real estate and investments, less any financial liabilities. Transfers of personal effects and equipment should be recorded as imports of goods by the economy receiving the immigrant, with an offset in migrants' transfers. Generally the amounts involved in migrants' transfers of goods are not large, and no attempt has been made to measure these in the goods account of the Australian balance of payments, so that no offsetting capital transfers entries are required. Funds transferred and other assets and liabilities should be recorded, by the economy receiving the immigrant, as an increase in financial assets (or reduction in liabilities) offset by a migrant's transfer. Generally, however, only the cash transactions are captured in the financial account, and therefore capital transfers have so far only been required to offset this element of migrants' funds.

10.6 Australia's immigration program recognises a number of categories of immigrants. From an economic viewpoint, one of the most significant is the Business Skills Category, for which the Department of Immigration and Multicultural Affairs identifies the numbers of immigrants each month and the value of funds (including the value of goods) that will be transferred by them. Data for other inward migrants and outward migrants are based on the numbers of migrants entering and leaving Australia, together with estimates of the average cash funds from the Survey of Foreign Unrequited Transfers (SOFUT) which measures cash funds transferred to and from Australia by migrants. More comprehensive data on inward migrant transfers are being measured by the Department of Immigration and Multicultural Affairs' Longitudinal Survey of Immigrant Arrivals. This survey is being investigated as a possible source for estimating inward migrants' transfers.

Other transfers

10.7 *Other transfers* include, in the general government sector, investment grants in cash or kind made by the Australian Government to non-residents (other transfers debit). These include the direct provision of roads, buildings and other structures, transport equipment, machinery, other equipment, or finance to cover the costs of acquiring such assets. In practice only those grants which are clearly dedicated to specific projects, such as buildings or other structures, are included in capital transfers, and it is possible that some funds which may finance fixed investment are included in current transfers. As Australia is not a recipient of foreign aid, similar data are not estimated on the credit side. While other transfers conceptually include capital taxes (inheritance taxes, death duties and gift taxes) levied by foreign governments on the values of assets, in practice these items are not significant and no estimates are included in Australia's capital account statistics. In practice, the amounts may be included indistinguishably in current transfers debits, or on a net basis in current transfers credits. Compensation payments by governments to non-residents, for extensive damages to capital assets (oil spills, explosions and other) not covered by insurance policies, would also be included here if such transactions occurred.

10.8 Other non-government transfers include large donations by households, non-profit organisations and enterprises as legacies or gifts (to universities, laboratories, etc.) to finance gross fixed capital formation. Also included are compensation payments for extensive damage to capital assets not covered by insurance. In practice, such transfers are not large for Australia, and data sources do not separately identify these transactions from current transfers of cash. Therefore, no amount is shown separately for them in Australia's balance of payments statistics.

Valuation and time of recording

10.9 In concept, the valuation and the time of recording of capital transfers in the balance of payments are the same as for current transfers (see paragraphs 9.8 to 9.10). Data on the Australian Government's foreign aid program come from the Government Ledgers, which record cash payments and therefore do not necessarily reflect the accrual principle that capital transfers are recorded in the same period as the transactions they offset. This may give rise to some minor asymmetry.

10.10 Migrants' transfers should be recorded at the time of migration. As indicated in paragraph 10.6, this item measures migrants' transfers credits from the Business Skills Category data (60 percent of migrants' transfers credits), and for both other migrants' transfers credits (40 per cent) and all of migrants' transfers debits, from the numbers of migrants and estimates of average migrants' transfers based on the SOFUT data. Data from the Business Skills Category measure funds which the migrant actually transfers into Australia both before their arrival and during the first three years following migration. Funds transfer intentions, together with historical information on the realisation of transfer intentions, are used for preliminary estimates of the funds transferred until survey data are available. This timing basis best matches the concept of migrants'

Valuation and time of recording *continued*

transfers, but does not fully coincide with the transfer of those funds as measured in the financial account; this may give rise to some asymmetry in the balance of payments. As the SOFUT data reflect the time of transfer of funds, no asymmetry is reflected in data recorded in the balance of payments, but the funds transfer may not fully coincide with the migrant's change of residency.

ACQUISITION/DISPOSAL OF NON-PRODUCED, NON-FINANCIAL ASSETS

10.11 The acquisition/disposal of non-produced, non-financial assets comprises two types of transactions:

(i) purchase or sale of intangible, non-financial assets, such as patents, copyrights, trademarks, franchises and licenses; and

(ii) the acquisition of land by a government or international organisation (for the purpose of establishing an embassy or similar institution), or the disposal of such land.

10.12 Transactions in these assets are recorded at the time of change of ownership, at the actual transaction value of assets acquired or relinquished. Change of ownership is usually deemed to occur when the parties to the transaction enter it in their books.

10.13 For the intangible assets component, it is important to distinguish between the *purchase* or *sale* of such assets, which are recorded in this category, and the *use* of such assets for which the user pays a fee, which is recorded under the royalties and license fees component of services.

DATA SOURCES AND METHODS

10.14 As there have been no significant debt forgiveness transactions involving Australia, no data are shown for this component. Other capital transfers, involving Australia's official foreign aid program, are identified from the Ledgers. Data for other capital transfers associated with migrants' transfers are obtained from the Migrants' Transfers Model, which uses data from the Department of Immigration and Multicultural Affairs under the Business Skills Category, data on numbers of migrants entering and leaving Australia and estimates of per capita (non-business) migrants' transfers based on the SOFUT data. Data sources and methods are summarised in table 10.3.

10.3 SUMMARY OF SOURCES AND METHODS—CAPITAL TRANSFERS

Component	**Source of data**	**Method of estimation**
General government sector		
Debt forgiveness	No debt forgiveness transactions have occurred to date	
Other transfers	Commonwealth Government Transactions (Ledgers).	The Ledgers provide sufficient data to identify separately that part of Australia's foreign aid program involving capital transfers.
Other sectors		
Debt forgiveness	No debt forgiveness transactions have occurred to date.	
Migrants' transfers credits	Migrants' Transfers Model (MTM)	MTM is used to estimate migrants' transfers credits. It relies heavily on Business Skills Category (BSC) information (from the Department of Immigration and Multicultural Affairs), overseas arrivals and departures data on the number of migrants entering and leaving Australia, and estimated per capita transfers (non-business) from SOFUT.
Migrants' transfers debits	Survey of Foreign Unrequited Transfers (SOFUT) Overseas Arrivals and Departures (OAD) Average Weekly Earnings (AWE)	Per capita transfers (derived from SOFUT data) are extrapolated using OAD data on emigrants and movements in AWE.
Other transfers	Other transfers are not separately identified, and included in current transfers.	
Acquisition/disposal of non-produced, non-financial assets	Survey of International Trade in Services (SITS) (selected components)	The SITS (selected components) collects data on the purchase and sale of non-produced, non-financial assets, which are used directly to estimate this component. Data on land purchases and sales by embassies are identified as they occur, from media reports, and the appropriate source is approached for the relevant details.

Chapter 11 FINANCIAL ACCOUNT AND INTERNATIONAL INVESTMENT POSITION

INTRODUCTION

11.1 The financial account covers all transactions, including the creation and liquidation of financial claims, associated with change of ownership in foreign financial assets and liabilities during a period. On the other hand, the international investment position is the balance sheet of the stock of foreign financial assets and liabilities at a point in time. The international investment position may be viewed more broadly as a reconciliation statement, showing the levels of Australia's international assets and liabilities at two successive points in time and the components of change, namely financial transactions (as recorded in the balance of payments financial account) and non-transaction changes (price changes, exchange rate changes and other adjustments). The relationship between the financial account and the international investment position is described in *Chapter 2*.

CONCEPT OF A FINANCIAL ASSET

11.2 The concept of a financial asset relates to a claim by an entity on another entity. The existence of such a claim generally will be recorded on two balance sheets—that of the issuer of the liability, and that of the holder of the claim as an asset. For example, corporate equities and bonds issued by non-resident enterprises and owned by residents of Australia are recorded as liabilities in the balance sheets of the non-resident issuers and as assets in the balance sheets of the Australian holders. Certain financial assets which are not matched by a liability in another transactor's books, namely, *monetary gold* and *Special Drawing Rights* in the IMF, are also included in these statistics.

11.3 Assets, to be recognised, must represent actual legal claims. Options and other derivative instruments are therefore included in the definition, but authorisations, commitments or extensions of unused lines of credit and contingent obligations are excluded.

11.4 Certain other items are recognised as financial assets. Following from the imputation of change of ownership (see paragraphs 2.25 to 2.27), these include:

(i) imputed financial lease claims for goods under a financial leasing arrangement, where the imputed change of ownership in the good is matched by a financial claim (i.e. a financial asset of the lessor and a liability of the lessee)—repayments of such leases are divided into interest and debt components, with the interest being recorded in the investment income part of the current account and the debt reduction as a repayment in the financial account;

(ii) imputed trade credit for goods sent abroad for processing and return, but which do not return in the same period; these amounts represent a financial claim by the exporting economy on the importing economy;

CONCEPT OF A FINANCIAL ASSET *continued*

(iii) equity of an enterprise in an unincorporated enterprise (a branch) which it has established in another country—the head office is considered to have a financial claim on the branch covering the financial and non-financial assets, less any liabilities, of the branch; and

(iv) imputed equity claims on immovable assets such as land and structures located in one economy and owned by a resident of another economy—ownership is imputed to a resident entity, in the economy of location, over which the non-resident owner has a financial claim.

VALUATION AND TIME OF RECORDING

11.5 The general principles covering valuation and time of recording are set out in *Chapter 2*. These state that:

(i) market prices should be used to value transactions and stocks;

(ii) where financial instruments are denominated in a foreign currency, these should be converted at market rates; and

(iii) the time of ownership change should be the basis of recording financial transactions and stocks.

11.6 Ownership changes when transactions are entered in transactors' books. These should be recorded on an accrual basis, which means that certain items should be capitalised in the appropriate component of the financial account and international investment position. For example, income in the current account is recorded when earned. The difference between income earned and cash settlement when payment becomes due is included in the accounts as a net financial transaction in the underlying instrument (see box 11.1 for a description). Similarly, the prepaid premiums and unpaid claims on insurance (i.e. the difference between premiums earned and claims payable on the one hand, and premium and claim payments on the other) should be recorded as financial transactions. Every effort is made in data collections to adhere to these principles, and data in the financial account and international investment position are considered to approximate them. However, the valuation of portfolio investment transactions in shares and debt securities issued in Australia, which are compiled for recent years using data models, may in practice only approximate the true market transaction value. Some difficulty is also encountered in valuing the stock of investment, because survey reporters may not provide actual market values (especially for direct investment), or data models are used (in inward and outward portfolio investment) to estimate market values. Because of the relative newness of financial derivatives, data providers also experience some problems in reporting them.

11.1 IMPACT OF ACCRUAL ACCOUNTING OF INCOME ON THE FINANCIAL ACCOUNT, AND ITS MEASUREMENT

In the balance of payments, income should be recorded during the period or periods in which the economic benefits arising from the use of the factors of production are enjoyed by the user, and measure the use of those factors (see paragraph 8.1). Following from this concept of income, interest should be recorded on an accrual basis and not just at the time interest payments are actually made, and should reflect current market rates of interest in the accounting period. Entries are required in both the income account for the income accrued, and the financial account for the liability to settle the claim for payment of the income. The liability for the accrued interest is to be recorded as a transaction in the financial account in the instrument on which the income accrues.

The implementation of full accrual accounting for income in surveys is complicated by the prevalence of historical cost accounting, and by the use of residual 'accruals' accounts and other accounting practices that do not meet statistical requirements. For non-tradable debt (e.g. trade credit, loans, deposits) it is assumed that historical cost is generally a reasonable approximation of current market rates, and data providers can report the amounts accrued over time. However, for tradable debt securities (bonds and notes and money market instruments), the differing accruals practices of data providers, and the asymmetries between counterparties in reporting the same transactions, mean that summing such reported 'accrued' amounts cannot produce meaningful statistics. In the Survey of International Investment, therefore, survey reporters are asked to report only the cash flows identified as interest. These cash flows are included in the financial account as settlement transactions. The accrued income, and the equivalent liability for settlement in the financial account, are calculated by the ABS using quoted market rates for the particular securities involved, or quoted average rates for an appropriate class of securities.

For the international investment position, survey reporters are asked to report the levels of investment on a market value basis, which reflects income accrual. Where survey levels data are not reported on a market value basis, they are converted to that basis using actual market prices for the particular security or for an appropriate class of securities.

Valuation of the stock of direct investment in equity capital

11.7 In measuring the value of equity capital (including equity in branches), much of which is never traded or is traded infrequently, the following principles are applied:

(i) for listed enterprises, the market value of the equity positions should be reported using a recent transaction share price. If recent transaction prices are not available, the midpoint of the quoted buy and sell prices of the shares on their main stock exchange at the reference date specified provides a useful approximation; and

(ii) for unlisted enterprises, if a market value of the shares is not available the data reporter is asked to estimate the market value by one of the following methods (in descending order of preference): a recent transaction price; director's valuation; or net asset value.

Valuation of the stock of direct investment in equity capital *continued*

11.8 The *net asset value of an enterprise* is equal to total assets, including intangibles, less non-equity liabilities and less paid up value of non-voting shares. Ideally, assets and liabilities should be valued at the market value. If this is the case, the net asset value may be regarded as providing a good approximation of the market value. Even in such cases, the net asset value may still be less than a willing buyer would be prepared to pay for the equity, as the enterprise may have a higher perceived value as a going concern. Often, historical costs (as distinct from current values) are used by enterprises to value assets and liabilities on balance sheets. To the extent that assets are not revalued to reflect market values, the calculation of net asset value based on such balance sheets will have further deficiencies as a proxy for market value. However, Australian accounting standards require fairly frequent asset revaluations, particularly so when valuations are likely to change significantly, and there is evidence indicating that reported valuations have improved progressively since the market value principle was first introduced into the statistics.

Valuation of the stock of portfolio investment

11.9 Survey reporters are asked to report market values at the reference date (the end of a quarter) when reporting portfolio investment. For equity securities the method of valuation is the same as in paragraph 11.7. For debt securities survey reporters are asked to report traded price at the date specified. If that value is not available, they are asked to report in order of preference one of the following methods: yield to maturity; discounted present value; face value less written value of discount; issue price plus amortisation of discount; or another mark to market basis. Where data models are used for measuring either the stock of portfolio investment in equity capital (shares) and debt securities issued in Australia and held by nominees, or debt securities issued abroad, or the transactions in these instruments, market values are used based on market prices recorded on Australian or foreign stock exchanges or appropriate stock indexes at the reference date. Again, when reporting the value of financial derivatives, survey reporters are asked to report market value.

Valuation of the stock of other instruments

11.10 Notes and coins, trade credits, loans and deposits are examples of instruments which cannot be readily transferred from one transactor to another. In principle, they are valued at market value; in the Survey of International Investment, survey reporters are asked to 'use nominal (face) value as an approximation for market value, unless book values have been devalued.'

Valuation of the stock of official reserve assets

11.11 Official reserve assets consist of a number of instruments such as monetary gold, Special Drawing Rights, reserve position in the IMF, foreign currency notes and coins, foreign currency deposits, bonds and notes, money market instruments, financial derivatives and other claims. Monetary gold is valued at the current market price of commodity gold, debt securities and derivatives are valued at market value as described in the previous paragraphs, Special Drawing Rights are valued at an administrative rate determined by the IMF. The reserve position in the IMF is valued at a rate which reflects the current market value of the currency that can be accessed (under certain conditions) or of the loans outstanding by the IMF to the creditor. Other instruments are valued according to the principles, appropriate to the instrument, described above.

CLASSIFICATION

11.12 The broad classifications of the financial account and international investment position are set out in tables 3.2 and 3.3, respectively. More detailed standard components are shown in tables 12.4, 13.3, 14.2 and 14.3. The classifications follow international recommendations, bring out different behavioural characteristics and facilitate comparisons with other statistical data sets. They reflect important elements of finance such as the type of investor, the type of financial instrument used, the original contractual maturity of the investment, the type of client, etc. For assets and liabilities in the international investment position it is analytically useful to know what caused the changes in position between periods, i.e. whether the changes have been brought about by transactions or by valuation changes, exchange rate changes or other volume adjustments.

Type of investment

11.13 The primary classification is by functional category or type of investment (direct investment, portfolio investment, other investment and reserve assets) as described in paragraph 3.17, and it is elaborated further in the following chapters. It illustrates that different categories of investment exhibit different behavioural characteristics. For example:

(i) a direct investor has a significant influence on the management of a direct investment enterprise and may have a number of specific objectives associated with that investment; whereas

(ii) a portfolio investor is more concerned with having a suitable portfolio which will maximise income and capital appreciation (or minimise losses) on the portfolio as a whole, and is less concerned with exercising a particular influence on the companies in which the investment occurs;

(iii) an exporter offering trade credit may be concerned with maximising sales;

(iv) a financial enterprise may wish to attract deposits and offer loans to good risk clients; and

(v) the central bank, through its management of official reserves, is concerned, inter alia, with intervention in exchange markets, although the return on the investment of reserves is also a consideration.

Assets and liabilities

11.14 The importance of this classification has been described earlier (paragraphs 3.18 to 3.20), where it is noted that, for portfolio and other investment, the main classification is by asset and liability; the reserves component contains only assets. For direct investment, the main classification is direction of investment (i.e. direct investment abroad or direct investment in Australia). Within each direction of investment, separate data are recorded for direct investment assets and liabilities.

Sector

11.15 For analytical purposes within the balance of payments context, the components of portfolio investment and other investment are classified to four sectors according to the institutional sector classification of the resident creditor or debtor. In addition, for analysis of foreign debt and equity markets, and for comparison with other statistical systems such as the national accounts, the components of direct, portfolio and other investment are all classified to the four resident sectors. These sectors are defined in box 11.2.

11.2 DEFINITION OF SECTORS

General government comprises departments of state and similar entities that are the agents or instruments of Commonwealth, State or local governments. These are resident entities whose goods and services are provided free of charge, or at nominal prices well below their cost, to other general government bodies or the public or both.

Reserve Bank refers to Australia's central bank.

Depository corporations comprise banks and other depository corporations. Banks include trading, savings and development banks, which are licensed under the Banking Act to act as banks or which have been created under Commonwealth or State legislation. This category excludes the Reserve Bank. Other depository corporations encompass various depository institutions defined in Australia under the Financial Corporations Act.

Other sectors comprise non-financial corporations, insurance companies, pension funds, other non-depository financial intermediaries, central borrowing authorities, private non-profit institutions and households. Central borrowing authorities are entities set up by State and Territory Governments to centralise the borrowing and financial assets management of both general government and public trading enterprises within the relevant State or Territory.

Instrument

11.16 A classification of the financial account by instrument of investment is useful in analysing the form international investment is taking and its changing composition over time. It also helps comparison with domestic financial statistics. A range of instruments of investment is identified in the Australian balance of payments. A description of each instrument is given in box 11.3. Some of these instruments are only applicable to one type of capital, e.g. the instrument reinvested earnings is only used for direct investment, while *monetary gold* and *Special Drawing Rights* are only used for reserve assets. Reinvested earnings are not strictly an instrument of investment, but rather a component of direct investment in equity capital. However, because of their importance, traditionally they have been shown separately in tables classifying investment flows by instrument; this practice is followed in the Australian balance of payments.

11.3 DESCRIPTION OF FINANCIAL INSTRUMENTS

Monetary gold is gold held by the Reserve Bank as part of Australia's reserve assets. The creation or extinction of monetary gold is referred to as *monetisation/demonetisation* of gold and is included in the other adjustment item of the international investment position.

Foreign exchange consists of the Reserve Bank of Australia's holdings of securities and currency and deposits. Currency and deposits consist of foreign and domestic notes and coin in circulation, transferable deposits which are exchangeable on demand and freely transferable, and other deposits such as fixed term deposits and those redeemable at short notice. Also included are banks' nostro and vostro accounts.

Special Drawing Rights are international reserve assets created by the IMF to supplement the reserves of IMF member countries. They are not regarded as liabilities of the IMF. The creation or extinction (should the latter occur) of Special Drawing Rights is referred to as *allocation/cancellation* of Special Drawing Rights and is included in the other adjustment item of the international investment position.

Reserve position in the IMF consists of two elements: (i) foreign currency amounts that a country may draw from the IMF at short notice and without conditions, and (ii) indebtedness of the IMF under a loan agreement

Equity is that part of the issued capital of an incorporated enterprise, or the equivalent in an unincorporated enterprise, which acknowledges a claim to the residual value and income of the enterprise after the claims of all other creditors have been met. It includes ordinary and participating preference shares in an incorporated enterprise, equity in an unincorporated enterprise such as a branch, units in incorporated trusts, and non-withdrawable share capital of building societies and credit unions. Non-participating preference shares are included in debt securities.

Reinvested earnings, a component of direct investment, represents the undistributed income of a direct investment enterprise which is attributable to its direct investor in another economy. It is an imputed transaction with offsetting entries in investment income and the financial account. While this component is separately identifiable in the balance of payments, it is not separately identified in the international investment position statement, where it is included in equity capital.

Debt securities consist of three sub-instruments:

(i) *Bonds* and *notes* (including debentures, non-participating preference shares and negotiable long-term certificates of deposit) are instruments issued for more than twelve months which give the holder the unconditional right to a pre-determined income and, except for perpetual bonds and debentures, to a fixed amount on a specified date as repayment of principal.

(ii) *Money market instruments* are instruments (such as treasury bills, commercial paper and bankers' acceptances, short-term certificates of deposit, and short-term notes issued under a note issuance facility) issued for less than or equal to one year, usually traded at a discount (depending on the interest rate and time remaining to maturity) in organised markets, and give the holder the unconditional right to receive a pre-determined amount on a specified date.

(iii) *Financial derivatives* are secondary securities linked to specific financial instruments, indicators or commodities, and give the holder a qualified right to receive a benefit (cash, a primary financial instrument, the underlying commodity, etc.) at some future date. Derivatives are usually tradable and have a market value, and include options (on currencies, interest rates, commodities, indices, etc.), traded financial futures, warrants, and currency and interest rate swaps.

Trade credit covers deferred and advanced payments (prepayments) for goods and services, including progress payments for internationally traded goods.

Loans include the direct lending of funds from a creditor (lender) to a debtor (borrower) where the lender receives no security evidencing the transaction or receives a non-negotiable document or instrument. Included are loans to finance trade, other loans and advances (including mortgages), financial leases, repurchase agreements where the enterprise acquiring the securities does not become their registered holder, and use of IMF credit and loans from the IMF. The latter category comprises Australia's drawings on and repayments to the IMF's Compensatory Finance Facility. Australia repaid its last obligation under that facility in the December quarter 1983.

Other assets and *other liabilities* include such items as miscellaneous accounts receivable and payable, prepaid insurance premiums and outstanding claims on insurance.

Long- and short-term investment

11.17 While the distinction between long- and short-term is less important than it used to be, it is still used in the delineation of debt instruments in portfolio investment (where bonds and notes are long-term and money market instruments are short-term) and in the other investment component. *Long-term* refers to debt issued with an original maturity of more than twelve months; *short-term* debt is debt with an original maturity of less than or equal to one year. Australia's international investment statistics also provide data on time remaining to maturity.

Domiciled in Australia and abroad

11.18 In tables which show foreign debt, the debt liabilities are classified to *domiciled in Australia* and *domiciled abroad.* For debt securities, this refers to whether a debt security is issued in Australia or abroad. For other debt instruments, such as deposits and loans, it refers to country of residence of the institution accepting the deposit or providing the loan. Therefore, deposits taken by Australian institutions are classified as debt domiciled in Australia, and loan liabilities to the rest of the world as debt domiciled abroad. Trade credit liabilities are classified as domiciled abroad.

Industry

11.19 Industry-classified statistics should be treated with some caution as they do not necessarily reflect the industry in which the funds are ultimately employed. This reflects the fact that data for the entire enterprise group are classified to the predominant activity of the enterprise, even though the enterprise may be involved in a broad range of activities.

11.20 For foreign investment in Australia, an additional problem in analysing industry statistics stems from the fact that a significant proportion of the total level of foreign investment in Australia is in the form of borrowing by enterprises classified to the finance and insurance industry. This category includes enterprises, such as banks, which commonly borrow funds as principals and then on-lend to clients in other industries. In such cases, the classification of investment transactions reflects the industry of the immediate liability holder rather than the industry of end-use of the funds.

RELATIONSHIP BETWEEN INTERNATIONAL INVESTMENT POSITION AND EXTERNAL DEBT

11.21 Within the balance of payments and international investment position statistics, the instrument of investment may be assigned to either equity or debt. Debt instruments are defined as those other than equity instruments. A country's external debt is therefore a subset of the financial liabilities in its international investment position. To present a complete understanding of a nation's foreign debt situation, it is necessary to show its foreign debt assets (its debt claims on the rest of the world), its foreign debt liabilities (gross debt liabilities to the rest of the world), and its net foreign debt (the net sum of debt liabilities and debt assets).

11.22 Table 11.4 shows Australia's international investment position and the split into foreign equity and debt for 1996-97. The levels of international investment at the beginning and end of the period are included, as well as the transactions and other changes (price changes, market value changes and other adjustments). At the end of 1996-97, Australia's net international investment position was $312 billion, consisting of net equity of $98 billion and net debt of $213 billion. The table also shows the gross asset and liability components of the international investment position, and of net equity and net debt.

11.4 INTERNATIONAL INVESTMENT POSITION: ASSETS AND LIABILITIES, 1996–97

	Position at beginning of period	*Transactions*	*Other changes*	*Position at end of period*
	($m)	*($m)*	*($m)*	*($m)*
INTERNATIONAL INVESTMENT POSITION (NET)	***287 921***	***17 451***	***6 271***	***311 642***
Assets	–178 402	–19 027	–10 378	–207 808
Liabilities	466 322	36 478	16 651	519 450
Foreign equity (net)	*93 190*	*3 371*	*1 603*	*98 163*
Assets	–96 642	–10 669	–8 831	–116 142
Liabilities	189 831	14 040	10 434	214 305
Foreign debt (net)	*194 731*	*14 080*	*4 669*	*213 479*
Assets	–81 760	–8 359	–1 547	–91 666
Liabilities	276 491	22 439	6 215	305 145

Source: various tables from Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat no. 5302.0).

11.23 Foreign debt data can be further classified in terms of any of a number of classifications. In Australia's quarterly balance of payments and international investment publication (Cat. no. 5302.0) debt is classified by institutional sector. Table 11.5 shows the classification used to present foreign debt transactions and levels in Cat. no. 5302.0.

11.24 Measurement of external debt is useful for economic analyses. The ABS publishes the ratios of the levels of net foreign debt and net foreign equity to Gross Domestic Product, net investment income on net foreign debt and net foreign equity to goods and services credit (in Cat. no. 5302.0). Such ratios provide an indication of the impact of external debt and equity financing on the economy.

11.5 FOREIGN DEBT TRANSACTIONS AND LEVELS: STANDARD COMPONENTS

ASSETS/LIABILITIES/NET FOREIGN DEBT

Public sector
General Government
- Commonwealth(a)
- State(a)

Financial corporations
- Reserve Bank(a)
- Other financial corporations(a)

Non-financial corporations(a)

Private sector
Financial corporations
Non-financial corporations

(a) For liabilities, separated into debt domiciled abroad and debt domiciled in Australia.

RECONCILIATION OF GROSS ASSETS AND LIABILITIES WITH DIRECTION OF INVESTMENT

11.25 The difference between the concepts of gross assets and liabilities on the one hand, and Australian investment abroad and foreign investment in Australia on the other, centres on the treatment of direct investment claims and liabilities between enterprises in a direct investment relationship. The concepts of gross assets and liabilities are needed for reconciliation with *SNA93*-based statistics, while Australian investment abroad and foreign investment in Australia (both net concepts as described below) are used in international investment position-based statistics. To arrive at net Australian investment abroad from Australia's gross assets (claims on the rest of the world, monetary gold and Special Drawing Rights), it is necessary to:

(i) add the liabilities of Australian direct investors to their affiliates abroad (to arrive at net claims); and

(ii) deduct the claims on direct investors (because these are reflected in foreign investment in Australia).

A similar adjustment is necessary to arrive at foreign investment in Australia from Australia's gross liabilities. This is referred to as the *direct investment adjustment* (shown in tables 28 and 29 of Cat. no. 5302.0). The derivations of Australian investment abroad and foreign investment in Australia are illustrated in table 11.6 which shows, respectively, the total foreign assets and liabilities, the components of the direct investment adjustment, and Australian investment abroad and foreign investment in Australia.

11.6 ADJUSTMENTS TO ASSETS AND LIABILITIES TO SHOW AUSTRALIAN INVESTMENT ABROAD AND FOREIGN INVESTMENT IN AUSTRALIA, 1996–97

	Position at beginning of period	Transactions	Other changes	Position at end of period
	$m	*$m*	*$m*	*$m*
Total foreign assets(a)	–178 402	–19 027	–10 378	–207 808
plus liabilities to affiliated enterprises(b)	4 314	144	545	5 003
less claims on direct investors(c)	–3 057	–645	–450	–4 152
Australian investment abroad(a)	–171 031	–18 237	–9 386	–198 653
Total foreign liabilities(d)	466 322	36 478	16 650	519 450
less liabilities to affiliated enterprises(b)	4 314	144	545	5 003
plus claims on direct investors(c)	–3 057	–645	–450	–4 152
Foreign investment in Australia(d)	458 951	35 688	15 656	510 295

(a) From table 28 of *Balance of Payments and International Investment Position, March quarter 1998* (Cat. no. 5302.0).
(b) From table 32 of Cat. no. 5302.0.
(c) From table 33 of Cat. no. 5302.0.
(d) From table 29 of Cat. no. 5302.0.

CHAPTER 12 DIRECT INVESTMENT

CONCEPT AND DEFINITION

12.1 *Direct investment* is investment undertaken by an entity resident in one economy in an enterprise resident in another economy, with the objectives of obtaining or sustaining a lasting interest in the enterprise and exercising a significant degree of influence in its management. The entity undertaking the investment is referred to as the *direct investor* and the enterprise in which the investment takes place is referred to as the *direct investment enterprise*.[1] These terms are described in box 12.1.

12.1 DEFINITIONS OF DIRECT INVESTMENT ENTERPRISE AND DIRECT INVESTOR

A *direct investment enterprise* is an incorporated or unincorporated enterprise in which a direct investor owns 10 per cent or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise). Direct investment enterprises comprise branches (unincorporated enterprises), subsidiaries (incorporated enterprises that are more than 50 per cent owned by the direct investor), and associates (incorporated enterprises that are between 10 and 50 per cent owned by the direct investor). Specific examples are given in box 12.2.

A *direct investor* may be an individual; an incorporated or unincorporated private or public enterprise; an associated group of individuals or enterprises; a government or a government agency; an estate or trust; or an international organisation which has an investment of 10% or more in a direct investment enterprise in an economy other than the one in which the direct investor resides.

An enterprise that has significant long-term operations in more than one economy is divided into separate entities in each economy. These entities are always in a direct investment relationship: the *head office* constitutes the direct investor, and its *branches* constitute the direct investment enterprises.

1 The concept of direct investment as set out above is consistent with *BPM5*. This is also the basis for the definition adopted in the second edition of the *OECD Detailed Benchmark Definition of Foreign Direct Investment*. In *BPM5*, a direct investment relationship is deemed to exist between two enterprises (a direct investor in one country and a direct investment enterprise in another country) when one has an equity interest in the other of at least 10 per cent. The *BPM5* definition is more precise than that used in *BPM4*, which left compilers to choose a range of equity links between 10 and 25 per cent in which a direct investment relationship could be deemed to exist and, further, did not elaborate on how the definition should be applied down an ownership chain. In Australia, the 10 per cent link has been used since 1985-86; before this, the equity threshold used to determine a direct investment relationship was 25 per cent. However, the impact of that change in threshold was less than half of one percent of the level of foreign direct investment in Australia at 30 June 1986, and had no measurable impact on the measure of Australian direct investment abroad.

CONCEPT AND DEFINITION
continued

12.2 The concept of direct investment is meant to identify a form of investment which differs markedly from other forms:

> "The benefits that direct investors expect to derive from a voice in management are different from those anticipated by portfolio investors having no significant influence over the operations of enterprises. From the viewpoint of direct investors, enterprises often represent units in a multinational operation, the overall profitability of which depends on the advantages to be gained by deploying the various resources available to the investors in units located in different economies. Direct investors are thereby in a position to derive benefits in addition to the investment income that may accrue on the capital that they invest (e.g. the opportunity to earn management fees or other sorts of income). Such extra benefits are likely to be derived from the investors' associations with the enterprises over considerable periods of time. In contrast, portfolio investors are primarily concerned about the safety of their capital, the likelihood of appreciation in value, and the return generated. Portfolio investors will evaluate, on a separate basis, the prospects of each independent unit in which they might invest and may often shift their capital with changes in these prospects, which may be affected by short-term developments in financial markets." (*BPM5*, p. 86.).

12.3 Direct investment transactions comprise not only the initial equity transaction establishing the relationship between the direct investor and the enterprise, but also all subsequent transactions between them and among affiliated enterprises, both incorporated and unincorporated. In addition, equity and other investments acquired by the investor before triggering the direct investment threshold are reclassified from *portfolio* or *other investment* to *direct investment* in the international investment position. Such reclassifications are recorded as 'other adjustments to changes in position'.

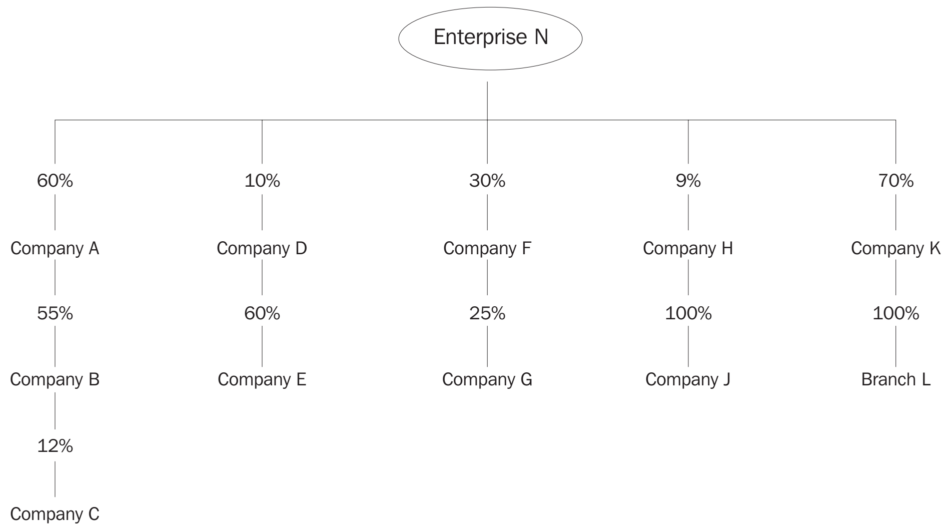
12.4 In the case of banks and other financial intermediaries (depository corporations) in a direct investment relationship, only equity transactions and permanent debt (loan capital representing a lasting interest) transactions between them are included in direct investment, while other forms of finance are excluded; the latter are included, as appropriate, in portfolio and other investment. This aspect of the definition of direct investment was not adopted in the ABS implementation of *BPM4*. Its application under *BPM5* has resulted in other foreign direct investment capital in Australia being reduced by about $8 billion at 30 June 1997, as the 'normal' intermediation transactions were reclassified to other investment. Other Australian direct investment abroad rose by about $7 billion, reflecting the reclassification, to other investment, of substantial intermediation liabilities of Australian institutions to their direct investment enterprises abroad.

CONCEPT AND DEFINITION
continued

12.5 The direct investment relationship extends to the direct investment enterprise's subsidiaries, sub-subsidiaries, and associates (unless the direct investment enterprise itself is an associate). Examples of direct investment relationships are shown in box 12.2. The definition of the direct investor is broad in that it may cover associated individuals or enterprises; this associated group may extend beyond a single economy. Therefore, any financial transactions between a member of the direct investor group and a member of the investee group are classified as direct investment (unless the transactions are non-equity or non-permanent transactions between depository corporations—see paragraph 12.4).

12.2 EXAMPLES OF DIRECT INVESTMENT RELATIONSHIPS

The illustration shows the direct investment relationships (if any) with Enterprise N, which is in one economy, of the other enterprises shown, which are in one or more other economies.



In this illustration, enterprises A, B, C, D, E, F, K and L are considered to be in direct investment relationship with N. Enterprises G, H and J are not. Under the definition of direct investment:

A is a subsidiary of N;

B is a subsidiary of A and therefore a subsidiary of N, even though only 33 per cent (60% x 55%) of B's capital is indirectly attributable to N;

C is an associate of B and therefore an associate of N through its subsidiary B, even though only 4 per cent of C's capital is indirectly owned by N;

D is an associate of N;

E is a subsidiary of D and, therefore, an associate of N, even though only 6 per cent of E's capital is indirectly owned by N;

F is an associate of N;

G is an associate of F, but not of N; F is only an associate of N;

H is neither a subsidiary nor an associate of N;

J is a subsidiary of H, but neither a subsidiary nor an associate of N;

K is a subsidiary of N;

L is a branch of K, and thus a branch of N.

It is also important to note that these enterprises are considered to be in direct investment relationships with each other. Therefore, for example, transactions between company E and company K represent direct investment transactions.

Note: While the definition of direct investment appears relatively straightforward, there may be circumstances where judgement is required if a foreign investor exercises a significant influence in the management of an enterprise, which does not strictly conform to the direct investment definition. However, the impact of enterprises not adhering to the definition would be minor, and to date no attempt has been made to determine whether enterprises reporting in the Survey of International Investment strictly comply with the definition of direct investment.

Source: IMF Balance of Payments Compilation Guide, p. 151.

CONCEPT AND DEFINITION
continued

12.6 Table 12.3 illustrates the financial *transactions* for Australia's direct investment abroad and foreign direct investment in Australia during 1996–97, as well as the overall *levels* of direct investment abroad and in Australia at the end of the year. It is evident from the table that:

(i) direct investment in Australia is much larger than Australia's direct investment abroad, owing to Australia's traditional reliance on foreign direct investment as a source of finance;

(ii) *equity capital* and *reinvested earnings* make up the largest part of direct investment; and

(iii) *other capital* is positive for Australia's direct investment abroad, which reflects the fact that the claims of overseas affiliates exceed their liabilities to their Australian direct investors.

12.3 DIRECT INVESTMENT TRANSACTIONS AND LEVELS, 1996–97

	Financial transactions		*Position at end of period*	
	Direct investment abroad	*Direct investment in Australia*	*Direct investment broad*	*Direct investment in Australia*
	$m	*$m*	*$m*	*$m*
Direct investment	**–5 908**	**11 282**	**–67 766**	**151 115**
Equity capital and reinvested earnings	–6 391	11 439	–68 162	127 982
Other capital	*483*	*–156*	*396*	*23 133*
Claims	338	–645	–4 607	–4 152
Liabilities	144	489	5 003	28 286

Note: Consistent with the use of sign elsewhere in the balance of payments, an increase in Australian investment abroad is shown by a negative sign, while an increase in direct investment in Australia is shown without sign (positive).

Source: Tables 26, 32 and 33 from Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

CLASSIFICATIONS

Direction of investment

12.7 The primary classification in direct investment statistics is the direction of investment. Investment by resident direct investors in direct investment enterprises abroad is labelled *outward investment* (or direct investment abroad). Investment in resident direct investment enterprises by direct investors is referred to as *inward investment* (or direct investment in Australia). The definitions associated with Australian direct investment abroad are symmetrical with those for foreign direct investment in Australia.

12.8 Within each direction of investment, separate data in respect of assets and liabilities are collected in the Survey of International Investment. Some cases of reverse equity investment (including reinvested earnings) do exist, although they are rare. Reverse equity investment occurs where the direct investment enterprise has an equity interest in its direct investor. If the reverse equity were below 10 per cent, to arrive at direct investment abroad (or direct investment in Australia) equity investment (and reinvested earnings) by the direct investment enterprise in the direct investor is deducted from the direct

Direction of investment *continued*

investor's equity investment in the direct investment enterprise. If the reverse participation is at or above 10 per cent, then direct investment equity relationships are established and measured in both directions.

12.9 While instances of reverse equity participation are very rare in Australia, it is more common for direct investors to incur liabilities to their direct investment enterprises. This is recognised in the *other capital* component in table 12.4, where separate data are shown for direct investment assets (claims) and liabilities. In order to arrive at other capital for Australian investment abroad, liabilities are netted against assets. Similarly, in order to arrive at other capital for foreign investment in Australia, assets are netted against liabilities.

12.4 DIRECT INVESTMENT: MAJOR STANDARD COMPONENTS

Direct investment abroad
Equity capital
Reinvested earnings(a)
Other capital
Claims on affiliated enterprises
Liabilities to affiliated enterprises
Direct investment in Australia
Equity capital
Reinvested earnings(a)
Other capital
Claims on direct investors
Liabilities to direct investors

(a) In tables showing the level of investment, reinvested earnings are included with equity capital.

Type of capital

12.10 Within direct investment, the distinction is maintained between equity capital (including reinvested earnings) and debt (other capital). Unless the direct investor and direct investment enterprise are both depository corporations, all debt instruments, including bonds and notes, money market instruments, derivatives, trade credit, loans, etc. between enterprises in a direct investment relationship are included in other capital.

DATA SOURCES AND METHODS

12.11 The data source and methods used to estimate the components of direct investment are detailed in table 12.5.

12.5 SUMMARY OF SOURCES AND METHODS—DIRECT INVESTMENT

Component	Source of data	Method of estimation
All direct investment	Survey of International Investment (SII)	SII measures financial transactions, level of investment, price change, exchange rate change and other adjustments for both Australian direct investment abroad and direct investment in Australia. Data are extracted directly from the source.

RELATIONSHIP BETWEEN DIRECT INVESTMENT STATISTICS AND FOREIGN INVESTMENT REVIEW BOARD DATA

12.12 While Foreign Investment Review Board statistics may appear at first glance to be a useful source for data on foreign direct investment in Australia, there are substantial differences between these statistics and ABS balance of payments and international investment statistics. These include differences in coverage, concepts and timing. For example, Foreign Investment Review Board data only measure proposals approved in the relevant period, for inward investment that require Commonwealth Government approval. They do not cover investment levels, investment income, or actual transactions and other changes in inward or outward investment; all these aspects are covered in balance of payments and international investment statistics. In some situations, approved projects do not proceed. Also, the Foreign Investment Review Board adopts a different concept of ‘foreign interest’. For example, if an Australian subsidiary of a non-resident enterprise purchased land in Australia using funds sourced within Australia, the Foreign Investment Review Board would include the full amount in its approvals statistics as it would regard the subsidiary as a ‘foreign interest’. However, this transaction would be excluded from balance of payments and international investment statistics as the subsidiary would be regarded as an Australian resident entity and the financing of the purchase would not involve changes in foreign financial assets or liabilities.

Chapter 13 PORTFOLIO INVESTMENT

CONCEPT AND DEFINITION

13.1 *Portfolio investment* consists of international equity and debt securities not classified to either direct investment or reserve assets.

13.2 The financial *transactions* and the overall *levels* of Australia's portfolio investment assets and liabilities are illustrated in table 13.1. The following features are demonstrated in the table:

(i) since Australia relies on overseas funds to finance its current account deficit, Australia's portfolio liabilities are traditionally much greater than portfolio assets;

(ii) *equity securities* make the greatest contribution to Australia's portfolio investment assets;

(iii) *debt securitie*s make up the largest part of Australia's portfolio investment liabilities and, within this component, the largest contributor is bonds and notes (i.e. long-term securities);

(iv) in 1996–97, Australia's holdings of financial derivatives abroad, on account of transactions, fell by over $900 million. However, in terms of the level at the end of the period, the assets and liabilities for financial derivatives were largely offsetting.

13.1 PORTFOLIO INVESTMENT TRANSACTIONS AND LEVELS, 1996–97

	Financial transactions		*Position at end of period*	
	Assets ($m)	*Liabilities* ($m)	*Assets* ($m)	*Liabilities* ($m)
Portfolio investment	**–3 548**	**16 927**	**–69 441**	**295 816**
Equity securities	*–4 278*	*2 601*	*–47 980*	*86 323*
Debt securities	*730*	*14 326*	*–21 460*	*209 494*
Bonds and notes	–426	12 905	–8 907	160 538
Money market instruments	214	273	–3 288	38 735
Financial derivatives	942	1 148	–9 266	10 220

Source: Tables 26, 32 and 33 from Balance of Payments and International Investment Position, Australia (Cat. no. 5302.0), March quarter 1998.

13.3 Portfolio investment in equity capital is more passive or speculative in nature than direct investment in equity capital because the portfolio investor has virtually no ability to influence either the managerial decision-making for the enterprise in which investment takes place or the return on that investment. Transactions in this instrument include take-up of new issues as well as purchases and sales of existing securities on secondary markets. Transactions may take place on organised markets (such as stock exchanges) or, on occasion, off-market (bypassing the stock exchange), and they may take place in Australia or abroad.

CONCEPT AND DEFINITION *continued*

13.4 Debt securities include tradable instruments such as bonds, debentures and notes (long-term instruments[1]) and money market instruments (short-term instruments[2]). Also included in portfolio debt securities, following international recommendations, are financial derivatives. These have a market value and are therefore financial instruments; most are traded or considered tradable because they can be offset in organised markets. Examples of derivatives are options, futures, warrants and currency and interest rate swaps. The major types of derivatives are described in box 13.2.

13.2 MAIN TYPES OF FINANCIAL DERIVATIVES

Recent international statistical standards recognise financial derivatives as financial instruments within the system of national accounts and balance of payments statistics. These are secondary instruments linked to, but separate from, a specific financial instrument or indicator, or commodity, and through which specific financial risk can be traded in its own right. They are used for a number of purposes including risk management, hedging, arbitrage between markets, and speculation. Derivatives may be included under the direct investment, portfolio investment or reserve assets categories. Some of the more common financial derivatives are described below.

Options and warrants

Options are contracts in which both the price and time for buying or selling are specified, and give the holder the right, but not an obligation, to buy (call options) or sell (put options) a particular financial instrument or commodity from or to another entity (the option writer). They can relate to equities, commodities, foreign currencies, interest rates, etc. Creating and exercising the option contracts, as well as secondary trading in options, all constitute transactions for balance of payments purposes where the holder and the writer are residents of different countries. Payment of the option price is treated in the balance of payments, under the financial derivatives component of portfolio debt securities, as an increase in financial assets of the buyer and an increase in financial liabilities of the seller. Theoretically, the option price consists of a financial asset and a service charge, and the latter component should be considered as a financial service. However, it is not possible to isolate the service component, and the full purchase price is

---

1 In the Survey of International Investment, long-term debt instruments are defined as securities with an original contract of more than one year. They include: non-participating preference shares; bonds such as treasury, zero coupon, stripped, deep discounted, bunny, currency linked (e.g. dual currency), equity-related (e.g. convertible bonds), Eurobonds, global, foreign (e.g. dragon, yankee, samurai, bulldog, matador); asset-backed securities such as mortgage backed bonds, collateralised mortgage obligations (CMO); bearer depository receipts (BDR); securities issued and lent or otherwise provided under sale/buy back arrangements where the recipient becomes the registered holder of those securities; index-linked securities e.g. property index certified; floating rate notes (FRN) such as perpetual rate notes (PRN), variable rate notes (VRN), structured FRN, reverse FRN, collared FRN, step up recovery FRN (SURF), range/corridor/accrual notes; Euro medium term notes (EMTN) with contractual maturity of more than one year; debentures; certificates of deposit with contractual maturity of more than one year; and any other long-term securities.

2 In the Survey of International Investment, short-term debt instruments are defined as short-term commercial and financial paper with an original contractual maturity of one year or less. They include: treasury notes; certificates of deposit with a contractual maturity of one year or less; short-term notes issued under note issuance facilities (NIF) and revolving underwriting facilities (RUF); convertible and non-convertible short-term securities; short-term promissory notes; bills of exchange; and any other short-term commercial and financial paper.

recorded in the financial account. Corresponding treatments are accorded options in the international investment position statement, where the value recorded in the transactor's books is used. Warrants are a form of option; they are usually written by an enterprise on its own shares, and are treated similarly to other options.

Futures
Futures are contracts between two parties to exchange, at a specified time and price, a real or financial asset for another financial asset. Such contracts can cover commodities, equities, currencies, interest rates and other financial instruments, and are all considered to be financial in character. Where the two parties are residents of different countries, tradable futures are recorded in both the balance of payments and international investment position in a manner similar to options.

Swaps
Swaps are contracts, usually relating to interest rates or currencies, between two entities who agree to exchange cash flows over time on a notional amount of principal. Interest rate swaps involve the exchange of cash flows related to interest rates that are different in nature, e.g. fixed and floating rates, two different floating rates. Cross currency interest rate swaps, sometimes known as currency swaps, involve the exchange of cash flows related to interest rates and an exchange of principal amounts at an agreed exchange rate at the end of the contract. There may also be an exchange of principal at the beginning of the contract with subsequent payments to amortise the principal over time in accordance with the swap contractual terms. While the *BPM5* treatment was to include in the current account the net cash flows related to interest rate swaps, more recently agreement has been reached internationally to change the standard and record such net settlements under the financial derivatives component of the financial account in a similar manner to other derivatives. Where a swap has been undertaken to hedge a loan or other commitment, the underlying repayments of the principal of the primary investment are valued and classified to the financial account in accordance with the relevant debt instrument, and not at the hedged rate in the derivative.

Forward rate agreements
Forward rate agreements are arrangements associated with interest rates, in which two entities agree on a settlement cash flow based on the difference between an agreed interest rate and prevailing rates, at a future date, applied to a notional amount of principal. The settlement amount is recorded in the financial account at the time of settlement in a similar way to swaps (again this is different to the recommendation in *BPM5*, but is consistent with later international agreements on revisions to the standards). The international investment position will include the market value of the forward rate agreements in levels, price changes to that level over time, and the final settlement transaction.

Forward foreign exchange contracts
Forward foreign exchange contracts involve the exchange of funds in one currency for funds in another currency at a specified rate at a future date.

The values recorded for all financial derivatives do not include fees paid to financial intermediaries to establish or trade in them. Such fees are classified as financial services in the current account. Similarly, margin payments made between two entities as security against future obligations are recorded in the currency and deposits component of other investment, rather than as financial derivatives.

CLASSIFICATIONS

13.5 The standard components of portfolio investment are shown in table 13.3. Portfolio investment is primarily split into foreign assets (claims on non-residents) and liabilities (obligations to non-residents). Within these categories, equity securities and debt securities are separately identified. Debt securities are further sub-divided into three categories: (i) bonds and notes, (ii) money market instruments, and (iii) financial derivatives. Both equity and debt securities are also split by (resident) institutional sector, namely general government, depository corporations, and other sectors (see box 11.2 for the definition of these sectors).

13.3 PORTFOLIO INVESTMENT: STANDARD COMPONENTS (ASSETS AND LIABILITIES)

Equity securities
General government (assets only)
Depository corporations
Other sectors
Debt securities
Bonds and notes
General government
Depository corporations
Other sectors
Money market instruments
General government
Depository corporations
Other sectors
Financial derivatives
Depository corporations
Other sectors

13.6 Other classifications of portfolio investment are available. These include the currency and residual maturity of levels and the industry of domestic enterprises receiving investment from abroad and undertaking investment abroad.

DATA SOURCES AND METHODS

13.7 The data sources and methods used to estimate the various components of portfolio investment are detailed in table 13.4. The backbone of the compilation is data coming from the Survey of International Investment, although in some places those data undergo some modelling before reaching their final form.

13.8 On the assets side, data coming from the survey are modelled to enable the separate identification of debt and equity securities held under management abroad, and to estimate the transactions and price change components of total change in the investment position from period to period. The Accrued Income on Debt Securities Model is also used to reclassify accrued income transactions flows using the apparent price changes on debt securities initially derived in the modelling.

13.9 On the liabilities side, for shares issued by resident entities and held by non-residents, apart from shares held through nominees, the data come from company share registers and are reported in the Survey of International Investment. Likewise data on derivatives and debt securities domiciled abroad are directly compiled from the survey.

13.10 However, also on the liabilities side, data on portfolio investment in shares held through nominees and debt securities domiciled in Australia (about 25 per cent of debt securities), come from data models based on data supplied by nominees in the Survey of International Investment. Such investments, which include equity (shares and units in unit trusts) issued by financial and trading enterprises and debt instruments issued by the Australian and State Governments, and financial and trading enterprises, are held by nominees on behalf of non-residents. Where nominees are involved, the issuer generally does not know who holds the share or debt security issued. Nominees are the main data source for measuring the levels for equity capital and for debt securities domiciled in Australia. However, nominee data are incomplete and need a degree of manipulation. Hence there is a need to resort to the complex data models briefly described in Appendix 2. The Accrued Income on Debt Securities Model is also used to reclassify accrued income transactions flows from the apparent price changes on debt securities derived in the modelling.

13.4 SUMMARY OF SOURCES AND METHODS—PORTFOLIO INVESTMENT

Component	Source of data	Method of estimation
Assets	Survey of International Investment (SII)	SII measures, through direct collection and modelling, financial transactions, level of investment, price change, exchange rate change and other adjustments for portfolio investment assets. These data cover equities, long- and short-term debt securities and financial derivatives. Data are extracted directly from the source.
	Accrued Income on Debt Securities Model (AIDSM)	The AIDSM is also used to reclassify accrued income transactions flows from the apparent price changes on debt securities initially derived in the modelling.
Liabilities		
–equity securities	Survey of International Investment (SII)	SII measures financial transactions, levels of investment, price changes, exchange rate changes, and other adjustments for portfolio investment in shares issued by Australian resident enterprises and recorded on share registers. The SII also measures levels of shareholdings in Australian resident enterprises held by Australian nominees on behalf of non-residents. Data supplied by nominees are adjusted using the PIELM model, which is discussed below.
–debt securities, excluding derivatives	Portfolio Investment in Equity Liabilities Model (PIELM)	PIELM is used to estimate financial transactions, the market value level of investment, price change, exchange rate change and other adjustments for portfolio investment in equities issued by Australian resident enterprises, from face value levels data supplied by nominees to the SII.
	Survey of International Investment (SII)	SII data on financial transactions, level of investment, price change and exchange rate change for debt securities issued abroad are used directly. Data supplied by nominees to the SII on debt securities issued in Australia are adjusted using PIDSLM.
	Portfolio Investment in Debt Security Liabilities Model (PIDSLM)	PIDSLM is used to estimate financial transactions, the market value level of investment, price change, exchange rate change and other adjustments for portfolio investment in debt securities issued in Australia.
	Accrued Income on Debt Securities Model (AIDSM)	The AIDSM is also used to reclassify accrued income transactions flows from the apparent price changes on debt securities initially derived in the modelling.
–financial derivatives	Survey of International Investment (SII)	SII data on level of investment, price change, exchange rate change and other adjustments for financial derivatives liabilities are used directly.

CHAPTER 14 OTHER INVESTMENT AND RESERVE ASSETS

INTRODUCTION

14.1 This chapter examines two broad standard components of the financial account, namely, other investment such as trade credit, deposits and loans (not included in direct investment and reserves), and reserve assets.

14.2 Table 14.1 illustrates the financial *transactions* and the overall *levels* of other investment and reserve assets during 1996–97. It is evident from the table that:

(i) Australia's other investment liabilities outweigh its assets, with the majority of liabilities consisting of *loans* and *currency and deposits*;

(ii) loans also make up a large proportion of other investment assets;

(iii) for financial transactions, on the assets side there were increases in all components (as reflected in the minus sign); on the liabilities side there were large increases in all components apart from a small fall in *trade credits*; and

(iv) most of Australia's reserve assets are held as *foreign exchange*, which consists of deposits and debt securities issued abroad.

14.1 OTHER INVESTMENT AND RESERVE ASSETS: TRANSACTIONS AND LEVELS, 1996–97

	Financial transactions		*Position at end of period*	
	Assets	*Liabilities*	*Assets*	*Liabilities*
	$m	*$m*	*$m*	*$m*
Other investment	**–3 558**	**7 480**	**–38 656**	**63 363**
Trade credits	–1 867	–129	–7 089	4 434
Loans	–873	3 331	–25 908	34 213
Currency and deposits	–789	3 720	–4 788	21 850
Other assets/liabilities	–29	557	–871	2 866
Reserve assets	**–5 224**		**–22 790**	
Monetary gold	0		–1 757	
Special drawing rights	2		–37	
Reserve position in the IMF	–2		–627	
Foreign exchange	–5 224		–20 369	

Source: Tables 26, 32 and 33 from Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

OTHER INVESTMENT

14.3 *Other investment* is the residual category of finance measured in balance of payments and international investment position statistics. The standard components of other investment are set out in table 14.2. It covers finance not included in direct investment, portfolio investment and reserve assets. (See *Chapters 12* and *13* for definitions of direct and portfolio investment respectively. Reserve assets are defined in paragraphs 14.5 to 14.8.) It includes such instruments as trade credits, loans, currency and deposits, and other assets and liabilities, each of which is discussed in box 11.3.

OTHER INVESTMENT *continued*

14.4 As with portfolio investment, other investment is primarily split into foreign assets (claims on non-residents) and liabilities (obligations to non-residents). Each of these components is further split into four major instrument categories: trade credits, loans, currency and deposits, and other assets/liabilities. In turn, each instrument is shown, where appropriate, by institutional sector: Reserve Bank, general government, depository corporations, and other sectors (defined in box 11.2), and instruments other than currency and deposits are shown by long-term and short-term (see paragraph 11.17). Long-term loan liabilities are generally further split into drawings and repayments.

14.2 OTHER INVESTMENT: STANDARD COMPONENTS

- Trade credits
  - General government
    - Long-term(a)
    - Short-term
  - Other sectors
    - Long-term(a)
    - Short-term
- Loans
  - Reserve Bank
    - Long-term(a)
    - Shor-term
  - General government
    - Use of IMF credit and IMF loans (liabilities only)
    - Other long-term(a)
    - Short-term
  - Depository corporations
    - Long-term(a)
    - Short-term
  - Other sectors
    - Long-term(a)
    - Short-term
- Currency and deposits
  - Reserve Bank
  - General government (assets only)
  - Depository corporations
  - Other sectors (assets only)
- Other assets (liabilities)
  - General government
    - Long-term
    - Short-term
  - Depository corporations
    - Long-term(a)
    - Short-term
  - Other sectors
    - Long-term(a)
    - Short-term

(a) Separated into drawings and repayments for liabilities.

RESERVE ASSETS

14.5 From the gold standard era, when attention was focused on monetary gold, to the present day, when the focus has shifted to a range of reserve assets, it has been regarded as desirable that balance of payments statements should identify the components comprising transactions in reserve assets. The concept of *reserve assets* relates to those foreign financial assets that are *effectively controlled* by the monetary authorities and are *available for use* in meeting balance of payments needs. In Australia's case, reserve assets include monetary gold, Special Drawing Rights, reserve position in the IMF, and foreign exchange (currency, deposits and debt securities) held by the Reserve Bank as part of Australia's official reserve assets. Each of these components is described in box 11.3. The classification of these assets is shown in table 14.3.

14.3 RESERVE ASSETS: STANDARD COMPONENTS

Monetary gold
Special Drawing Rights
Reserve position in the IMF
Foreign exchange
Currency and deposits
Securities

14.6 Transactions in reserve assets are recorded at market value as they occur and are converted to Australian dollars at the market rate of exchange ruling at the time of the transaction (or a very close approximation).

14.7 Statistics for levels of reserve assets at the end of a period, for June 1976 onwards, are converted to Australian dollar equivalents at market prices and at market rates of exchange. For this purpose, the exchange rate used for amounts denominated in United States dollars is a representative mid-point determined by the Reserve Bank on the basis of market quotations at 4 pm on the last working day of the period to which the statistics relate. (Between June 1976 and June 1983, the rate used was the mid-point of the rates at which the Bank was prepared to deal with the Australian trading banks.) Rates used for other currencies are calculated by crossing the rate for the United States dollar with the mid-point of closing buying and selling rates for other currencies largely on Asian markets (the New York market was used between June 1976 and June 1983). The bases of valuation of reserves before June 1976 are described in box 14.4.

14.4 VALUATION OF RESERVES BEFORE JUNE 1976

For periods prior to June 1976, a number of other bases were used by the Reserve Bank for valuing the levels of *reserve assets*. The evolution of the valuation basis used is traced briefly below. The valuation basis used in the ABS *reserve assets* series is identical to that used by the Bank, and it has been changed consistently with the changes in the Bank basis described below.

From the end of September 1959 until December 1971, the series were valued in terms of the official parities between the Australian dollar and gold and foreign currencies. Following the international currency crisis of the latter half of 1971, the floating of the United States dollar and the widening of the permitted margin for fluctuation of market rates of exchange around the official parity, in December 1971 the Bank began to value holdings of foreign exchange at market rates for its balance sheet purposes. However, official parities continued to be used in the calculation of the *reserve assets* series. Towards the end of 1972, the difference between the two methods of calculation became more pronounced and the Bank began publishing the *reserve assets* series on the basis of market rates as well as on the basis of official parities. A further change introduced by the Bank in June 1973 was to take account of current market values in determining the foreign currency value of overseas securities included in official reserve assets in the Bank's balance sheet. Previously, these securities were generally included at the lower of cost or face value.

The next important change occurred when, from July 1974, the IMF began determining the value of the Special Drawing Rights on a daily basis using market exchange rates for a basket of sixteen currencies. This change was immediately adopted in valuing Special Drawing Rights and the reserve position in the IMF in the reserve assets series, and the opportunity was taken to discontinue publication of the series based on official parity relationships. The final step in the progressive adoption of a market valuation basis for items in the series occurred in August 1977. At that time the reserve assets series back to June 1976 was amended to show gold holdings valued at the average London gold price for the month, converted to Australian dollars at the market rate of exchange applying on the last day of the month.

Treatment of gold loans

14.8 Gold loans made by the Reserve Bank provide the Bank with a gold loan claim (a secured commitment to repay the gold) on a resident or non-resident in exchange for its surrendering gold. Repayment of such loans results in a reduction of the claim and the acquisition of physical gold. Given the near substitute nature of such loans for physical gold, the Reserve Bank, consistent with the practice of other central banks, treats such loans as part of monetary gold in reserve assets. A brief discussion of this treatment is set out in box 14.5.

14.5 TREATMENT OF RESERVE BANK GOLD LOANS

Gold loans made to residents require no balance of payments entries. The gold is 'demonetised' (a non-transaction change in reserves), and then exchanged for a gold loan claim (resident to resident transaction) which is subsequently monetised (again, a non-transaction change in reserves). Therefore, three 'other adjustments' entries are required in the reconciliation presentation of the international investment position: the demonetisation of monetary gold reserves; and two other adjustment entries to re-route the monetisation of the gold loan, creating a monetary gold asset on the one hand, and an offsetting loan liability to the rest of the world for the loan counterparty.

Gold loans made to non-residents result in an export of gold in exchange for a gold loan claim on a non-resident. Therefore the balance of payments includes both a goods credit entry and an entry in *other investment loan assets of the Reserve Bank*. As with loans to residents, in the international investment position the initial loan requires an other adjustment for the demonetisation of the monetary gold, followed by the subsequent monetisation of the loan claim, requiring other adjustments in both reserves and other investment assets.

A more detailed description of this treatment is given in the December quarter 1997 issue of Cat. no. 5302.0.

DATA SOURCES AND METHODS

14.9 The data sources and methods used to estimate the various components of other investment and reserve assets are shown in table 14.6. For other investment, the chief data source is the Survey of International Investment, supplemented by the Defence Finance Model for data on prepayments associated with defence equipment purchases. For reserve assets, data come from the Survey of International Investment (from data supplied by the Reserve Bank on official reserve assets).

14.6 SUMMARY OF SOURCES AND METHODS—OTHER INVESTMENT AND RESERVE ASSETS

Component	Source of data	Method of estimation
Other investment	Survey of International Investment (SII)	SII measures financial transactions, level of investment, price change, exchange rate change and other adjustments for other investment assets and liabilities of financial and trading enterprises. Data are extracted directly from the source.
	Defence Finance Model (DFM)	The DFM measures the financial transactions, level of investment, price change, exchange rate change and other adjustments associated with the prepayments for the purchase and sale of defence equipment.
Reserve assets	Official Reserves (Reserve Bank of Australia)	Reserve Bank data on financial transactions, level of investment, and price and exchange rate changes are used for measuring Official Reserves. In addition, Reserve Bank data on monetisation/demonetisation of gold and, should it occur, allocation and cancellation of SDRs, are used to compile the 'other adjustment' item.

CHAPTER 15 DATA QUALITY[1]

THE CONCEPT OF QUALITY

15.1 To be of most benefit to users, statistics need to be a reasonable and timely measure of the real world economic events to which they relate. There are a number of dimensions of high quality statistics. They need to be:

(i) accurate;

(ii) not subject to large revisions;

(iii) timely;

(iv) relevant (i.e. measure the concepts in which users are interested);

(v) comprehensive in coverage; and

(vi) easily accessible.

15.2 This chapter considers each of these aspects of quality, and then assesses the balance of payments and international investment statistics against them.

Accuracy and revisability

15.3 Ideally, all balance of payments and international investment position statistics should be compiled by summing the notional foreign accounts of all the economic units (governments, businesses and households) in Australia. Alternatively, every individual transaction between residents and non-residents could be accessed, classified and summed. If either approach could be undertaken, the true measure of the balance of payments would be obtained. In practice neither approach is feasible. Economic units do not maintain 'foreign accounts' (i.e. many units are not interested in identifying their counterparties according to whether they are resident or non-resident), nor do they compile accounts for a subset of their counterparties. In addition, many of the accounting practices adopted by businesses and others do not conform with the requirements of national and international statistics. Also, of course, the costs of accessing every individual transaction would be huge. Instead, the estimates are derived by combining available data from a wide variety of sources (including administrative processes, sample surveys and censuses), carrying varying degrees of accuracy, frequency, detail and timeliness.

15.4 *Accuracy* is concerned with the proximity of an estimate of a data component to the ideal or *true value* of that component. *Revisability* refers to the differences between the initial estimate for a particular period or point in time, any intermediate estimates for that period or point in time and the final estimate for that period or time point.

---

1 This chapter summarises and partly updates the ABS *Information Paper: Quality of Australian Balance of Payments Statistics, 1996* (Cat. no. 5342.0), which provides a much more comprehensive analysis of data quality. The chapter adapts the terminology to a *BPM5* basis and extends the discussion to include the international investment position. It also substitutes the term 'revisability' for 'reliability'. 'Revisability' is now the preferred ABS term.

Accuracy and revisability *continued*

15.5 In the extreme case, estimated data may be completely inaccurate, but subject to no revisions, i.e. although the estimate bears no resemblance to the true value, because of the absence of better information the initial estimate is never revised. Alternatively, highly accurate estimates may only be producable after long time lags, while early estimates are poor and subject to considerable revisions. Generally, as the estimate for a particular period passes through a sequence of revisions, the size of revisions becomes smaller (the statistic becomes less revisable) and the estimate moves closer to the true value (the statistic becomes more accurate). In balance of payments and international investment statistics this is often the case, but not always.

15.6 The *accuracy* of the statistics is affected by a number of influences, including:

(i) data collection errors (inability of survey providers to report on the correct basis; mistakes in reporting or late reporting by providers; errors introduced during recording and processing of data reported);

(ii) methodological errors (arising from misinterpretation of the nature and extent of transactions and the residency status of transactors, and also from shortcomings in data sources and estimation methods);

(iii) inconsistencies in the time of recording and valuation of the corresponding credit and debit entries and the corresponding stocks;

(iv) undercoverage (due to difficulties in identifying all the businesses involved in international economic activity during a period);

(v) the application of a revisions policy, in the production of estimates, which has the effect that data are not always revised as soon as they could be, although the impact is considered to be small (see paragraph 4.12); and

(vi) the use of sample surveys rather than complete enumeration.

15.7 The *revisability* of these statistics is also affected by a number of influences, including:

(i) the need to extrapolate series prior to the availability of source data;

(ii) errors in reported data which are detected and corrected at a later date. Such errors sometimes arise from transactors' attempts to meet timeliness requirements;

(iii) errors in ABS estimation and compilation processes which are subsequently detected and corrected; and

Accuracy and revisability *continued*

(iv) the introduction of improved methodologies and data sources which better approximate the concept underlying a series, but which necessarily result in revisions to previous estimates for that series.

Sampling error

15.8 Where data are estimated from a sample survey rather than from a fully enumerated survey, the estimates are subject to *sampling error*. Sampling procedures are used in some of the survey sources contributing to the balance of payments and international investment position statistics, such as:

(i) the Survey of International Trade in Services;

(ii) the Survey of International Investment;

(iii) Overseas Arrivals and Departures;

(iv) the International Visitor Survey;

(v) the Survey of Returned Australian Travellers; and

(vi) the Survey of International Students' Expenditure.

15.9 The relative sampling errors for the main aggregates from these surveys are generally small; for the more detailed aggregates, relative sampling errors may be somewhat higher.

Non-sampling errors

15.10 A range of factors (listed in paragraph 15.6 (i) to (v)) other than those caused by the use of sample surveys, contribute to errors in the estimates. These are referred to collectively as *non-sampling errors*.

Timeliness

15.11 *Timeliness* refers to the lag between the end of the reference period and the initial publication of statistics for that period. There is an important trade-off for many users between accuracy, revisability and detail on the one hand, and timeliness of the release of statistics on the other. Frequently the data available to compilers in these statistical fields come from a wide variety of sources which reflect varying frequency, detail and timeliness, and for which valuation and coverage may only approximate a desired concept. Generally, within given resource levels, significant improvements in timeliness can only be made at the expense of detail, accuracy and revisability. One user undertaking long-term analysis may well prefer statistics which are available only annually and released with a considerable time lag, but which provide very accurate measures of transactions and stocks for quite detailed cross-classifications. Another user may prefer very timely and frequent estimates of the 'broad brush' type that indicate current directions.

Timeliness *continued*

15.12 The timing of quarterly and annual balance of payments and international investment position publications is based on a number of compromises. For example, the first published quarterly estimates are made available about 43 working days after the end of the reference quarter. In this timeframe it is not possible for all the surveyed enterprises and other data sources to provide detailed figures on their foreign activities. For those service and income components for which full data for the latest quarter are not available in time for inclusion in the quarterly publication, estimates are made by extrapolating historical series using the best available indicators of current activity. The latest estimates for the quarter are subsequently revised as more data become available. Similarly, in the financial accounts and international investment position, only broad preliminary estimates are included for the latest quarter[2], with the detailed standard components being released with a one quarter lag. While care is needed in the use and interpretation of the preliminary estimates for the quarter, they are considered useful for those analytical purposes which require a broad indication of current developments in the external accounts.[3]

15.13 The annual publication, Cat. no. 5363.0, provides detailed estimates which are, as far as possible, not subject to many of the sources of revision that arise in the trade-off between timeliness and accuracy in the more frequent estimates, but are still subject to revision due to methodological improvements. The annual publication incorporates data for the reference year from all major data sources. It is not issued until detailed figures from the various contributing surveys become available for the reference year. Timeliness is given a lower priority, in favour of providing detailed statistics that are more accurate.

Relevance and links to other series

15.14 An important aspect of statistical quality is that the concepts, definitions and classifications used should be relevant to and understandable by users, be internally coherent, and support relatability of these statistics to others. ABS balance of payments and international investment statistics are produced within an integrated statistical framework, based on international standards *(BPM5)* which are fully compatible with those for the national accounts *(SNA93)*. These standards have been developed on the basis of the needs of key users involved in macroeconomic analysis and policy formation. To maintain the relevance of the statistics, the conceptual framework is augmented from time to time to deliver additional, relevant domestic perspectives to accommodate economic and financial developments. The sources and methods used are reviewed regularly, and periodically changes are made to the compilation of components to approximate more closely the concepts being measured.

---

2 More complete data are available with the later release of Cat. no. 5232.0—see paragraph 4.10.

3 The same principle applies to the compilation of monthly goods and services data, which are published in the monthly publication (Cat. no. 5368.0) within 21 working days of the reference month, i.e. many services and some goods components need to be extrapolated initially.

ASSESSMENT OF QUALITY

15.15 Compilation of balance of payments and international investment statistics is a complex task. Given the variety of data sources and methods used, there is no single comprehensive measure of the quality of these estimates. Nevertheless, each of the quality indicators described below provides a partial insight into the quality of the statistics. To get an overall picture, all measures need to be viewed together while taking account of their limitations. At best, such an assessment can only be subjective.

Measures to monitor quality

Relative standard errors

15.16 Sampling errors, generated from the use of sampling techniques to derive population estimates for a range of items, can be expressed as relative standard errors, which provide an indication of accuracy for particular items. These relative standard errors are kept under regular review and are considered to be acceptable. When sampling errors are considered too high for aggregates or sub-aggregates, the next opportunity will be taken to adjust sample selection (selecting more units in categories showing higher variability) to reduce future sampling error. The ABS publishes these sampling errors from time to time to make users aware of them and to help users to assess data quality.

Net errors and omissions

15.17 An examination of the size and direction of the *net errors and omissions* item may shed some light on the accuracy of estimates. As noted earlier, the adoption of the double entry accounting system of recording means that, in principle, the net sum of all credit and debit entries should equal zero. In practice such equality rarely exists, and any differences are recorded in the net errors and omissions item. The item reflects the net effect of differences in coverage, timing and valuation, as well as errors and omissions which occur in compiling all the individual component series. Therefore both users and statisticians can focus on the item as an immediate and systematic indicator of the quality of the balance of payments statistics.

15.18 Persistently large figures in one direction (negative or positive) may be taken as an indication of serious and systematic errors. However, a small figure does not necessarily mean that only small errors and omissions have occurred, since large positive and negative errors may be offsetting. Offsetting errors may be either related or unrelated, resulting from a measurement problem affecting either both sides or only one side of a transaction. If positive and negative net errors and omissions tend to offset each other in successive periods, errors may be due to timing differences in data reported by the different sources used to estimate the credit and debit sides of a transaction.

Net errors and omissions
continued

15.19 The fourth edition of the IMF's *Balance of Payments Manual* suggested, as an empirical rule of thumb, that a net errors and omissions component in excess of five per cent of the gross sum of merchandise exports and imports was cause for concern. While the relevance of such a measure has diminished since the fourth edition was published in the late 1970s, when financial flows were generally more constrained and services and income flows were of less significance, it still gives some indication of accuracy, especially when compared to broader balance of payments aggregates. Australia's experience with the relative size of the net errors and omissions item, expressed as a proportion of (i) gross goods credits and debits, and (ii) gross current account credits and debits, is given in table 15.1.

15.20 Over the 14-year period from 1945–46 to 1958–59 net errors and omissions, expressed as an annual average percentage, represented 3.0 per cent and 2.4 per cent of gross goods and current account transactions, respectively. The annual average ratio to gross goods remained steady through to the 1980s while the ratio to the gross current account transactions improved slightly to 2.1 per cent. During the 1990s to date, the ratio to gross goods has been reduced by 70 per cent to 0.9 per cent, while the ratio to gross current account transactions has shown significant (60 per cent) improvement.

15.1 NET ERRORS AND OMISSIONS ITEM AS A PROPORTION OF GROSS GOODS AND GROSS CURRENT ACCOUNT TRANSACTIONS

		Credits plus debits		*Net errors and omissions item as a proportion of*	
Year	*Net errors and omissions item*	*Goods*	*Current account*	*Goods*	*Current account*
	$m	$m	$m	%	%
Annual average(a)					
1945–46 to 1958–59	77	2 548	3 268	3.0	2.4
1959–60 to 1979–80	362	11 366	16 266	3.1	2.2
1980–81 to 1989–90	2 018	64 902	97 543	3.1	2.1
1990–91 to 1996–97	1 142	130 804	204 919	0.9	0.6
1990–91	35	102 249	163 359	0.0	0.0
1991–92	–90	106 896	167 828	–0.1	–0.1
1992–93	482	120 538	187 189	0.4	0.3
1993–94	1 786	129 282	200 075	1.4	0.9
1994–95	257	142 418	223 845	0.2	0.1
1995–96	–90	153 875	240 580	–0.1	0.0
1996–97	–1 238	160 372	251 559	–0.8	–0.5

(a) The annual averages are derived without regard to sign.

Source: Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0), except for the 1945–46 to 1958–59 averages, which are taken from the 1996–97 annual publication.

Examination of the statistical processes

15.21 The compilation processes involved in business and household surveys and in the final balance of payments and international investment compilation were described in *Chapter 5*. Obviously the processes are complex, and poor procedures at any one step in the process may lead to an inaccurate result. Therefore, management of these processes involves ensuring that, at each phase, objectives are set, monitored and evaluated. Careful attention is paid to:

(i) identifying the population of businesses and households undertaking certain types of international activity;

(ii) ensuring that sample frames and/or collection frames and estimation procedures are up-to-date;

(iii) design and testing of questionnaires to ensure that they are understood and can be completed by respondents;

(iv) obtaining high response rates (95 per cent or more), with complete response from large enterprises;

(v) implementing and monitoring standards for data verification and analysis, and publication procedures; and

(vi) ensuring that overall management procedures and computer systems are efficient and effective.

15.22 Where data models are used they are examined to ensure that data sources and estimation procedures continue to be appropriate and accurate. Management of these processes gives the statistician a good feel for the quality of the data so that, where obvious errors occur, these are corrected or procedures established to minimise them. Apart from this, reviews are undertaken regularly of collections and procedures to ensure that they are consistent with their objectives. Where there is an assessment that data quality problems cannot be fixed (e.g. concerns about the ability to measure adequately household investment abroad and purchases of real estate by non-resident individuals), these are drawn to the attention of users as appropriate.

Examination of series over time

15.23 Series are analysed to check whether their behaviour over time provides a good explanation of economic activity, or whether they behave in erratic and inexplicable ways. Often, related series are examined to determine whether a ratio formed by two or more series behaves in an appropriate way. Examples of such ratios are: freight rates (comparing freight earned to imports f.o.b.), and investment yields (comparing investment income to the level of international investment, for various types of instruments of investment).

Data confrontation

15.24 Data confrontation studies, in which the same or similar data items provided in different collections are compared and reconciled, if possible on an enterprise by enterprise basis, but also for groups of data providers, have proved useful in improving quality. Data confrontation at this detailed level has been very useful, for example, in identifying deficiencies and improving data quality in international investment position and financial accounts statistics. It is also useful in resolving problems with the definitions of units reporting in the different surveys, or where classifications are employed differently. That is, it also helps in identifying errors from statistical compilation as well as reporting differences by providers.

Partner country comparisons

15.25 Another form of data confrontation is to examine Australia's balance of payments and international investment statistics by partner country with those countries' corresponding data for Australia. There are many conceptual and practical difficulties in undertaking such comparisons. However, bilateral studies are regularly undertaken comparing Australian international trade statistics with particular countries against those countries' corresponding data. Such work undertaken in bilateral comparisons of data by region with our trading partners, both within the framework of the Asia Pacific Economic Co-operation (APEC) initiative (see paragraph 18.23) and more generally, has reaffirmed the quality of Australia's merchandise trade aggregates. For example, several joint studies in bilateral reconciliation between the ABS and the US Bureau of the Census, covering merchandise trade flows (on an international merchandise trade basis) between Australia and the United States of America, demonstrated that a significant part of the asymmetry in the bilateral results came from conceptual factors underlying the compilation of the statistics. Actual data errors proved to be insignificant. The residual (unexplained) discrepancies represented 4.8 per cent and 6.3 per cent, respectively, of Australia's published merchandise import and export trade with the USA for 1994. Bilateral merchandise trade reconciliations have also been carried out with Japan, New Zealand and the European Union.

Assessment of revisability

15.26 From an analytical perspective, users want to know how much reliance they can place on an estimate. If it is likely to be revised, how much is that revision likely to be and in which direction? Are decisions made on the basis of initial estimates likely to prove ill-founded in the light of later revisions? To help answer these questions, an analysis of the ***revisability*** of the various series, measured by the extent to which the estimate published initially is revised as it is republished, may be undertaken in a variety of ways. The two measures on which most focus is placed, namely *bias* and *dispersion*, are summarised in box 15.2.

15.2 BIAS AND DISPERSION

Bias is a measure of the extent to which the initial estimate is generally lower or higher than the latest estimate, and indicates the direction of revisions. *Dispersion* is a measure of the spread of latest estimates about the initial estimates, and indicates the magnitude of revisions. The ABS *Information Paper: Quality of Australian Balance of Payments Statistics, 1996* (Cat. no. 5342.0), provides a thorough review of the revisability of these statistics for the period from 1986 to 1994. It concluded that:

(i) initial estimates of most items were negatively biased, i.e. the initial estimates were understated, and that generally positive revisions would be required in later estimates;

(ii) the size of revisions required was highest for income debits and credits, making them the least reliable of all the current account components for all frequencies, which reflected the errors contained in the reinvested earnings (income credits) estimates; and

(iii) initial estimates of the current account deficit tended to be relatively closely dispersed around the final estimate, while initial estimates of financial assets carried a strong negative bias (implying an understatement) and the behaviour of revisions was erratic. This means that the initial estimates of the net errors and omissions item, and subsequent revisions to it, largely reflect deficiencies in measuring net financial account transactions.

15.27 Users may wish to take a long term view of quality, analysing bias in and magnitude of revision to first-published estimates compared to ‘final’ estimates after a reasonable time. This view enables users to assess the impact of the various short-term quality issues arising from the process of regular revision, and gives them a perspective on the shifts in estimation levels resulting from changes in concepts and methods. Analyses of the direction of revisions from initial to final estimates, and of changes in period-on-period movements based on initial and final estimates, provide a similar long-term perspective on quality.

15.28 A shorter-term perspective on quality may be adopted by other users. These users have a need to factor into their analyses of statistics for the most recent period the expectation of revision over the next year or so as quarterly data sources replace extrapolations, as annual results replace partial coverage quarterly estimates, and as revised annual results replace preliminary annual results. These users have a focus on the ‘sharp end’ of the series; revisions to periods more than twelve months ago are less significant. A longer-term shift in the level of a series (arising from a methodological change) that does not alter current trends is recognised as a quality improvement that does not impact on current analyses. To support this shorter term perspective on quality, it is useful to analyse:

Assessment of revisability *continued*

(i) the direction of revisions within the year immediately following initial release of an estimate (will the estimate go up or down as it is revised?);

(ii) the magnitude of those revisions (are the initial estimates in the right ball park?); and

(iii) whether those revisions generally move the series in the right direction (will the early revisions provide data of improved quality on which to make decisions?).

15.29 Several general points need to be kept in mind when considering the revisability of these statistics:

(i) revisability analysis inevitably reflects past experience and may not be a good indicator of the likely behaviour of the statistics in the immediate future;

(ii) the findings for aggregate or net series should be treated with caution as they will reflect the varying impacts of revisions on their component series;

(iii) substantial change in the volume and size of transactions for an aggregate occurring over a relatively short time will make the effect on the revisability of the series difficult to predict;

(iv) the latest estimate is assumed to be a better approximation of the notional true value than earlier estimates; and

(v) significant changes in a concept or methodology need to be considered carefully in quality assessment. For example, a better approximation of a concept will improve accuracy, but at the cost of revising series and impairing revisability measures unless these impacts can be isolated.

Subjective assessment of accuracy

15.30 Analyses of the statistical processes used in the ABS, observation of the types of error occurring, examination of residuals and of consistency in the behaviour of series, and comparisons with partner country data, together with the revisions history of the series, have led to the subjective assessments of quality shown in table 15.3. The assessments relate to the first published monthly goods and services estimates, the quarterly and annual estimates for the principal balance of payments aggregates, and the first published quarterly and annual estimates for the principal international investment position aggregates. To give an idea of the relative importance of each item, 1996–97 values are also shown. The ratings given are current assessments of the quality of the estimates in terms of (i) the possible discrepancy between the estimated value and the true value, and (ii) the upper bounds in which revisions may occur from time to time.

15.3 SUBJECTIVE ACCURACY RATINGS OF PRINCIPAL BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION AGGREGATES(a)

		Accuracy of 1995–96 estimates		
Aggregate	*Value in 1996–97 ($m)*	*Initial monthly estimates in Cat. no. 5368.0*	*Initial quarterly estimates in Cat. no. 5302.0*	*Initial annual estimates in Cat. no. 5363.0*
CURRENT ACCOUNT				
Goods				
credits	80 934	A	A	A
debits	–79 438	A	A	A
Services				
credits	24 384	B	B	A
debits	–24 103	B	B	A
Income				
credits	8 319	. .	C	B
debits	–27 753	. .	B	A
Current transfers				
credits	3 377	. .	C	C
debits	–3 251	. .	C	C
Balance on current account	–17 531	. .	B	B
CAPITAL ACCOUNT	1 318	. .	C	B
FINANCIAL ACCOUNT				
Direct investment				
abroad	–5 908	. .	C	B
in Australia	11 282	. .	C	B
Portfolio investment				
assets	–3 548	. .	C	C
liabilities	16 927	. .	D	C
Other investment				
assets	–3 558	. .	D	C
liabilities	7 480	. .	D	C
Reserve assets	–5 224	. .	A	A
Balance on financial account	17 451	. .	D	C
INTERNATIONAL INVESTMENT POSITION				
Australian investment abroad				
Direct investment abroad	–67 766	. .	B	B
Portfolio investment assets	–69 441	. .	C	C
Other investment assets	–38 656	. .	C	C
Reserve assets	–22 790	. .	A	A
Total foreign assets	–198 653	. .	C	B
Foreign investment in Australia				
Direct investment in Australia	151 115	. .	B	B
Portfolio investment liabilities	295 816	. .	C	B
Other investment liabilities	63 363	. .	C	B
Total foreign liabilities	510 295	. .	C	B
Net international investment position	311 642	. .	C	B

(a) The accuracy ratings used relate to the following approximate margins of error: A less than 5 per cent; B 5 per cent to less than 10 per cent; C 10 per cent to less than 15 per cent; D 15 per cent and greater.

Source: Balance of Payments and International Investment Position, Australia, March quarter 1998 (Cat. no. 5302.0).

15.31 The table shows that initial annual estimates are generally assessed to be more accurate than initial quarterly estimates. Generally, as more complete and more thoroughly validated data become available, revisions are made to estimates and their accuracy improves. The overall accuracy of initial estimates for the current account is judged to be better than that of initial estimates for the financial account.

CHAPTER 16 THE BALANCE OF PAYMENTS AND RELATIONSHIP TO THE NATIONAL ACCOUNTS

INTRODUCTION

16.1 Conceptually the balance of payments, including the international investment position, form part of the broader system of the Australian national accounts. The national accounts provide a comprehensive and systematic set of statistics for the Australian economy, with information on economic transactions, other changes in the levels of assets and liabilities, and the levels of assets and liabilities themselves. The Australian national accounts have generally been compiled according to the System of National Accounts and, as mentioned elsewhere, the Australian national accounts will be aligned with *SNA93* from the September quarter 1998. Linkages between the Australian balance of payments and national accounts are reinforced by the fact that, as in many other countries, the Australian balance of payments are compiled first and subsequently included in the national accounts.

16.2 The information in this chapter relates to the national accounts on the *SNA93* basis, which are explained in the *Information Paper: Implementation of Revised International Standards in the Australian National Accounts, 1997* (Cat. no. 5251.0).

16.3 The national accounts are a closed system in which both ends of every transaction involving a resident economic entity are recorded. A set of accounts is introduced to capture transactions that involve economic relationships with non-resident entities. These accounts are known as the *rest of the world accounts* and are presented from the perspective of non-residents rather than residents. Consequently, entries in the balance of payments (which show transactions from the perspective of residents) are reversed in the presentation of the rest of the world accounts. The accounts for resident entities, which consist of the production, income and accumulation accounts, are described in more detail below.

16.4 Two important accounting differences occur when one compares the balance of payments and the national accounts. First, each transaction is recorded twice in the balance of payments (double entry) and four times in the national accounts (quadruple entry). This is because in the balance of payments the activity of only one transactor is recorded, that of the resident entity (with a non-resident entity), whereas in the national accounts the activity of both transactors is recorded (i.e. the activity of either two residents or a resident and a non-resident). Second, in the balance of payments, transactions are shown from the perspective of the resident entity, whereas in the national accounts, transactions are shown from the perspective of the resident in the production, income and accumulation accounts and from the perspective of the non-resident in the rest of the world account.

RELATIONS BETWEEN NATIONAL ACCOUNTS AND BALANCE OF PAYMENTS CONCEPTS AND CLASSIFICATIONS

16.5 Because the balance of payments, including the international investment position, forms an integral part of the national accounts, there is complete concordance between them in concept and classification, although the extent of cross-classifications may differ between the two systems.

16.6 The balance of payments and national accounts identify resident producers and consumers identically, and both invoke the same concepts of economic territory and centre of economic interest. Both use market prices as the primary concept of valuation of transactions and they adopt identical concepts of accrual accounting. The systems use identical conversion procedures to convert transactions, which take place in foreign currency, to Australian currency.

16.7 While for some purposes it would be convenient if classifications used in the rest of the world accounts and the balance of payments accounts were identical, differences between the two are justifiable because, on occasion, they serve different purposes. For example, in the balance of payments financial account, precedence is given to classification of transactions by type of investment (i.e. direct, portfolio, reserve assets, other), whereas in the rest of the world financial account the instrument of investment is the primary classification. More important is the fact that concepts, definitions and classifications are consistent between the two systems.

The production, income and capital accounts of the national accounts

16.8 The national accounts tables reflect the basic aspects of economic life (production, income, consumption, accumulation and wealth). The tables which follow show summarised versions of the main accounts in the national accounts publications. The tables illustrate the main structure of the national accounts aggregates with particular reference to external transactions. An important element of the system is that in each table a balance is derived which is carried through to the next account.

16.9 For many analysts, *Gross Domestic Product (GDP)* is the key economic aggregate as it measures the total value added for the Australian economy in any period. GDP may be measured as:

(i) the total value of output less the cost of goods and services used in the production process (intermediate consumption)—this is referred to as the *production approach*;

(ii) the value of income accruing from the production process to each of the factors of production (plus net taxes on production and imports)—this is referred to as the *income approach*; or

(iii) total final expenditure on goods and services during the period—the *expenditure approach*.

The production, income and capital accounts of the national accounts *continued*

Conceptually these measures are equal, but because different and imperfect data sources are used to measure each approach, the measures may differ in practice, which is reflected in the *statistical discrepancy* item. From the September quarter 1998 the national accounts will be benchmarked to balanced annual supply and use tables. This will ensure that, except for the latest year, the three measures of GDP will be equal on an annual basis from 1994–95, though there will still be a statistical discrepancy between the quarterly estimates based on the three approaches.

16.10 Table 16.1 shows the *Gross Domestic Product Account* for the whole economy showing the components of the expenditure approach and the income approach to measuring GDP, while table 16.2, the *Production Account*, shows the derivation of GDP using the production approach.[1] The expenditure based measure of GDP is derived as final consumption expenditure by government and households, plus *investment* in fixed capital formation and changes in inventories, plus *exports* minus *imports of goods and services*, plus (or minus) the statistical discrepancy. Exports and imports are the same as the balance of payments components, exports and imports of goods and services. The income based measure of GDP shows the components of factor income, namely compensation of employees, gross operating surplus and mixed incomes, plus taxes less subsidies on production and imports. The production based measure of GDP is shown in table 16.2 as total gross output at purchasers' prices less intermediate consumption. For the purpose of discussion here, all values are in current prices.

16.11 Table 16.3 shows the *National Income and Use of Income Account*, showing the derivation of *gross national income, gross disposable income* and *use of gross disposable income*. Gross national income is equivalent to GDP plus *primary income receivable from non-residents* less *primary income payable to non-residents*. These primary income items are the same as the balance of payments income components which are used in the derivation of gross saving (gross disposable income less consumption) and net saving (gross saving less consumption of fixed capital). Table 16.3 illustrates how the various balance of payments income and current transfers components affect the nation's saving. To derive gross disposable income, net secondary income receivable from non-residents is added to gross national income; secondary income items are equivalent to the net current transfer components in the balance of payments. The segment of table 16.3 dealing with use of gross disposable income shows the derivation of gross saving (gross disposable income less consumption) and net saving (gross saving less consumption of fixed capital). Table 16.3 illustrates how the various balance of payments income and current transfers components affect the nation's saving.

---

1 Tables 16.1 to 16.7 are extracts, with some minor changes, from the *Information Paper: Implementation of Revised International Standards in the Australian National Accounts, 1997* (Cat. no. 5251.0). Tables 16.8 to 16.11 show the comparable rest of the world tables.

The production, income and capital accounts of the national accounts *continued*

16.12 Table 16.4, the *National Capital Account*, shows the link between gross saving and *net lending/ borrowing* (to/from the rest of the world). The latter is derived as gross saving plus net capital transfers from non-residents less investment in fixed capital and inventories and the net acquisitions of non-produced, non-financial assets from non-residents. The items net capital transactions and net acquisitions of non-produced non-financial assets are both sourced from the balance of payments capital account. The capital account was introduced into the balance of payments to emphasise this clear relationship between the balance of payments and the national accounts.

The financial account and balance sheet of the national accounts

16.13 Net lending/borrowing is also the balance shown in table 16.5, the *Financial Account*. The financial account shows how the net lending/borrowing is financed through a combination of transactions in financial assets and liabilities. As table 16.5 is a summary account for the economy, transactions between resident sectors are offset and eliminated. Therefore table 16.5 is also equivalent to the balance of payments financial account. However, there are some important differences in classification emphasis between table 16.5 and the balance of payments financial account. In table 16.5 the emphasis is on instrument of investment (currency and deposits, securities, loans, equity, etc.), while in the balance of payments financial account, the emphasis is on type of investment (direct investment, portfolio investment, etc.). Both presentations give emphasis to the asset and liability classification.

16.14 It is worth noting that, if table 16.5 were expanded to include the financial transactions taking place between the various resident sectors, it would show the full financial account for the economy (which is published quarterly in *Australian National Accounts: Financial Accounts* (Cat. no. 5232.0)).

16.15 Table 16.6, the *National Closing Balance Sheet*, shows Australia's non-financial assets (fixed assets, inventories, tangible and intangible non-produced assets (such as land, copyright, etc.)), financial assets, and liabilities and net worth at the end of the period. As table 16.6 is a summary account for the economy, financial assets and liabilities only measure financial claims by residents on non-residents and liabilities by residents to non-residents. In other words, in this table the financial assets and liabilities components are the international investment position statement for Australia. Claims and liabilities between resident sectors have been offset and eliminated. Again, there are some important classification differences between table 16.6 and the international investment position statement. In table 16.6 the emphasis is on instrument of investment, while in the international investment position statement the emphasis is on type of investment. Both presentations give emphasis to the asset and liability classification.

The financial account and balance sheet of the national accounts *continued*

16.16 Table 16.7, the *Balance Sheet Accounts and Accumulation and Revaluation Accounts*, shows in summary form the reconciliation of the opening stock of assets and liabilities with transactions and other changes. This is also the approach used to reconcile the financial transactions in the balance of payments with the opening and closing positions of the international investment position statement.

Rest of the world accounts of the national accounts

16.17 There are four accounts for the rest of the world in the national accounts. These are:

(i) table 16.8, the *External Income and Use of Income Account*;

(ii) table 16.9, the *External Capital Account*;

(iii) table 16.10, the *External Financial Account*; and

(iv) table 16.11, the *External Balance Sheet Accounts and Accumulation and Revaluation Accounts*.

Each of these will be shown in the annual publication, *Australian System of National Accounts* (Cat. no. 5204.0). However, in the quarterly publication, *Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5206.0), the first two accounts will be combined into one and the last two tables will not appear. The External Financial Account will appear in *Australian National Accounts: Financial Accounts* (Cat. no. 5232.0). As mentioned in paragraph 16.3, these accounts are required to close the system of national accounts and, while essentially the same as the balance of payments accounts and international investment position statement, they are compiled from the perspective of the non-resident transactor. Table 16.8 is essentially the current account of the balance of payments, table 16.9 the capital account, table 16.10 the financial account, and table 16.11 the international investment position and reconciliation statement. The reader should be able to readily identify the counterpart entries in tables 16.1 and 16.3 to 16.7.

16.18 The various relationships among the key aggregates may be expressed algebraically. The equations in table 16.12 show the relationships between the current account balance (CAB) and saving and investment, and between net foreign investment (NFI) and saving, investment and net capital account transactions (NCT). The numbers included in tables 16.1 to 16.11 were taken from illustrative tables provided in *SNA93*. As *SNA93* only provides illustrative numbers selectively, not all the tables shown have them.

16.1 GROSS DOMESTIC PRODUCT ACCOUNT (example data only)

		$m
Final consumption expenditure		1 399
General government	(G)	368
Household (incl. NPISH(a))	(C)	1 031
Gross fixed capital formation	(IF)	376
Domestic final demand		1 775
Changes in inventories	(IV)	38
Gross national expenditure	(GNE)	1 813
Exports of goods and services	(X)	540
Less imports of goods and services	(M)	499
Statistical discrepancy		0
Gross domestic product (expenditure approach)	**GDP**	**1 854**
Compensation of employees		762
Gross operating surplus and mixed income		901
Gross domestic product at factor cost		*1 663*
Taxes less subsidies on production and imports		191
Statistical discrepancy		0
Gross domestic product (income approach)	**GDP**	**1 854**

(a) Non Profit Institutions Serving Households

Source: Extract from table A1 of Cat.no. 5251.0.

16.2 PRODUCTION ACCOUNT (example data only)

		$m
Total gross output at basic values		3 604
Taxes less subsidies on products		133
Output at purchasers' prices		3 737
Less intermediate consumption		1 883
Statistical discrepancy		0
Gross domestic product (production approach)	**GDP**	**1 854**

Source: Extract from table A2 of Cat. no. 5251.0.

16.3 NATIONAL INCOME AND USE OF INCOME ACCOUNT (example data only)

		$m
Compensation of employees		762
Gross operating surplus and mixed income		901
Taxes less subsidies on production and imports		191
Gross domestic product (income approach)	**GDP**	**1 854**
Primary income receivable from non-residents		
Compensation of employees		6
Property income		63
Less primary income payable to non-residents		
Compensation of employees		2
Property income		38
Gross national income	**GNI**	**1 883**
Net secondary income receivable from non-residents (current transfers)		–29
Gross disposable income	**GNDY**	**1 854**
Use of gross disposable income		
Final consumption expenditure		1 399
General government	(G)	368
Households (incl NPISHs)	(C)	1 031
Net saving		233
Consumption of fixed capital		222
Use of gross disposable income		**1 854**

Source: Extract from table A4 of Cat. no. 5251.0.

16.4 NATIONAL CAPITAL ACCOUNT (example data only)

		$m
Net saving		233
Consumption of fixed capital		222
Capital transfers		
Receivable from non-residents		1
Less payable to non-residents		4
Gross saving and capital transfers		**452**
Gross fixed capital formation	(IF)	376
Changes in inventories	(IV)	38
Acquisitions less disposals of non-produced non-financial assets		0
Statistical discrepancy		0
Net lending (+)/net borrowing (–)		**38**
Total capital accumulation and net lending (+)/net borrowing (–)		**452**

Source: Extract from table A5 of Cat. no. 5251.0.

16.5 FINANCIAL ACCOUNT (example data only)

	$m
Net lending (+)/net borrowing (–)	**38**
Statistical discrepancy	0
Net change in financial position	**38**
Changes in assets	
Monetary gold and SDRs	–1
Currency and deposits	–2
Short-term securities other than shares	4
Long-term securities other than shares	14
Derivatives	2
Loans and placements	37
Equity	3
Insurance technical reserves	0
Other accounts receivable	30
Net acquisition of financial assets	**87**
Changes in liabilities (including equity)	
Currency and deposits	11
Short-term securities other than shares	2
Long-term securities other than shares	2
Derivatives	1
Loans and placements	10
Equity	3
Insurance technical reserves	0
Other accounts payable	20
Net incurrence of liabilities	**49**

Source: Extract from table A6 of Cat. no. 5251.0.

16.6 NATIONAL CLOSING BALANCE SHEET (example data only)

	$m
Assets	
Non-financial assets	
Produced assets	6 336
Fixed assets	
Inventories	
Non-produced assets	4 068
Tangible non-produced assets	
Intangible non-produced assets	
Financial assets	
Monetary gold and SDRs	0
Currency and deposits	116
Securities and other shares	134
Loans and placements	80
Shares and other equity	118
Insurance technical reserves	26
Other accounts receivable	155
Total financial assets	*629*
Total assets	**11 033**
Liabilities and net worth	
Liabilities	
Currency and deposits	114
Securities other than shares	99
Loans and placements	54
Shares and other equity	6
Insurance technical reserves	25
Other accounts payable	89
Total liabilities	**387**
Net worth	**10 646**
Total liabilities and net worth	**11 033**

Source: Extract from table A7 of Cat. no. 5251.0.

16.7 BALANCE SHEET ACCOUNTS AND ACCUMULATION AND REVALUATION ACCOUNTS

	Opening balance sheet	*Net capital formation/ financial transactions*	*Other changes*	*Closing balance sheet*
	$m	*$m*	*$m*	*$m*
Assets				
Non-financial assets				
Produced assets				
Fixed assets	No illustrative figures have been included in this table			
Inventories				
Total produced assets				
Non-produced assets				
Tangible non-produced assets				
Intangible non-produced assets				
Total non-produced assets				
Financial assets				
Monetary gold and SDRs				
Currency and deposits				
Short-term securities other than shares				
Long-term securities other than shares				
Loans and placements				
Equity				
Insurance technical reserves				
Other accounts receivable				
Total financial assets				
Total assets				
Liabilities and net worth				
Liabilities				
Currency and deposits				
Short-term securities other than shares				
Long-term securities other than shares				
Loans and placements				
Equity				
Insurance technical reserves				
Other accounts payable				
Total liabilities				
Net worth				
Total liabilities and net worth				

Source: Extract from table A8 of Cat. no. 5251.0.

16.8 EXTERNAL INCOME AND USE OF INCOME ACCOUNT (example data only)

	$m
Income of non-residents	
Imports of goods by residents	392
Imports of services by residents	107
Total imports of goods and services	*499*
Compensation of employees	2
Property income	38
Other current transfers	39
Total income of non-residents	**578**
Use of income by non-residents	
Exports of goods by residents	462
Exports of services by residents	78
Total exports of goods and services	*540*
Compensation of employees of residents	6
Property income of residents	63
Other current transfers received by residents	10
Current external balance	**–41**
Total use of income by non-residents	**578**

16.9 EXTERNAL CAPITAL ACCOUNT (example data only)

	$m
Current external balance	–41
Capital transfers receivable by residents	1
Capital transfers payable by residents	4
Net capital transfers receivable by residents	3
Gross saving and capital transfers	**–38**
Total acquisitions less disposals of non-produced non-financial assets	0
Net lending (+)/ net borrowing (–)	**–38**

16.10 EXTERNAL FINANCIAL ACCOUNT (example data only)

	$m
Acquisition of assets by non-residents	
Currency and deposits	11
Short-term securities other than shares	2
Long-term securities other than shares	3
Loans and placements	10
Equity	2
Insurance technical reserves	0
Other accounts receivable	21
Net acquisition of financial assets by non-residents	**49**
Incurrence of liabilities by non-residents	
Monetary gold and SDRs	–1
Currency and deposits	–2
Short-term securities other than shares	5
Long-term securities other than shares	15
Loans and placements	37
Equity	3
Insurance technical reserves	0
Other accounts payable	30
Net acquisition of liabilities by non-residents	**87**
Statistical discrepency	0
Net lending (+)/borrowing (–) by non-residents	**–38**

16.11 EXTERNAL BALANCE SHEET AND ACCUMULATION AND REVALUATION ACCOUNTS

	Opening balance sheet	*Financial transactions*	*Other changes*	*Closing balance sheet*
	$m	*$m*	*$m*	*$m*
Assets of non-residents				
Currency and deposits				
Short-term securities other than shares				
Long-term securities other than shares				
Loans and placements	No illustrative figures have been included in this table			
Equity				
Insurance technical reserves				
Other accounts receivable				
Total financial assets				
Total assets of non-residents				
Liabilities and net foreign investment of non-residents				
Monetary gold and SDRs				
Currency and deposits				
Short-term securities other than shares				
Long-term securities other than shares				
Loans and placements				
Equity				
Insurance technical reserves				
Other accounts payable				
Total liabilities				
Net foreign investment by non-residents				
Total liabilities and net foreign investment				

16.12 RELATIONSHIPS AMONG KEY AGGREGATES

1	**GDP (Gross Domestic Product)**	**= C + G + I + X – M**
	Explanation From table 16.1, we know that GDP *equals* consumption by households (C) and government (G), *plus* investment in fixed capital and inventories (I) or where separately identified, investment in fixed capital (IF) and investment in inventories (IV), *plus* exports less imports of goods and services (X – M)	
2	**GNDY (Gross National Disposable Income)**	**= GDP + NY + NT**
	Explanation From table 16.3 we know that gross national disposable income (GNDY) equals GDP *plus* net income receivable from non-residents (NY) *plus* net transfers receivable from non-residents (NT)	
3	**GNDY**	**= C + G + I + X – M + NY + NT**
	Explanation For GDP in equation 2, we substitute C + G + I + X - M from equation 1	
4	**CAB (Current Account Balance)**	**= X – M + NY + NT**
	Explanation From the balance of payments we know that the current account balance *equals* exports minus imports of goods and services (X-M) *plus* net income from abroad (NY) *plus* net transfers from abroad (NT)	
5	**GNDY**	**= C + G + I + CAB**
	Explanation Same as equation 3 with CAB replacing X - M + NY + NT (see equation 4)	
6	**S (Gross Saving)**	**= GNDY – C – G**
	Explanation From table 16.3 we know that gross saving (S) *equals* GNDY *minus* household and government expenditure (C + G)	
7	**S**	**= I + CAB**
	Explanation From equations 5 and 6 we know that S = C + G + I + CAB – C – G and C and G cancel out.	
8	**CAB**	**= S – I**
9	**NFI (Net Foreign Investment)**	**= CAB + NCT** **= S – I + NCT** **= net lending/borrowing**

Explanation

NFI (net foreign investment)
equals current account balance (CAB)
plus net capital account transactions (NCT) (net capital transfers
less net purchases of non-financial, non-produced assets)
equals gross saving less investment + net capital account transactions
equals net lending/borrowing

Chapter 17 CLASSIFICATION BY PARTNER COUNTRY

INTRODUCTION

17.1 For many years Australia has published its balance of payments and international investment position statistics not only on a *global* basis (that is, recording its economic relationships with all other countries), but also on selected country and regional bases (classification by partner country). However, international standards for the compilation of such statements were only enunciated for the first time with the issue of *BPM5*. In line with this increased international emphasis on production of partner country statements, Australia will continue to compile and publish such statements annually in accordance with these international guidelines.

REGIONAL ALLOCATION PRINCIPLES

17.2 The general principles applying to the compilation of global balance of payments and international investment position statements for Australia can be applied to the preparation of statements for Australia's transactions, or financial assets and liabilities, with an individual country or a group of countries. All that is necessary is to substitute a reference to residents of that country or group of countries for each reference to non-residents as a whole.

17.3 The following general principles are used in Australian balance of payments and international investment position statistics to allocate transactions and stocks between countries and country groupings. In accordance with the general principle of change of ownership which underlies the recording of such statistics, the country classification of goods is based on the country of the former owner for imports (although in practice this cannot always be met), and the country of the new owner for exports. Analogously, the country classification of services is based on the country of the provider or recipient, and the regional classification of income is based on the country earning the income or from which the income is earned. The country allocation of transfers is made according to the country of allocation of the one-sided transaction to which the transfer is an offset. (For example, the offset entry to an Australian donation of food aid abroad is allocated according to the country of residence of the new owner, the recipient of the food.) The country allocation of financial transactions and levels is based on the country of residence of the creditor in the case of Australia's foreign liabilities, or of the debtor in the case of Australia's foreign financial assets.

DATA SOURCES AND METHODS

17.4 In practice, some divergences are made from these principles where data sources use different classification principles, or where suppliers of information have difficulties in providing it on the required basis. The following paragraphs describe the methods for allocating global estimates to individual countries or groups of countries.

DATA SOURCES AND METHODS *continued*

17.5 The *goods* component is classified to country largely based on country data reported in international trade statistics. In these statistics, exports and imports are classified to the country of consignment (final destination) and origin respectively. This will conform broadly to the principle of country of new owner for exports. However, while the country of origin will also generally conform with the country of former owner (imports) it is subject to significant error. For example, goods from China that are bought by traders in Hong Kong and then on-sold to Australia will appear as imports from China, not from Hong Kong. The extent of this mismatch between the country of transactor and the country of origin of the goods varies with the commodity and the country concerned. For some countries the error is as high as 20 per cent; in other cases, such as for Australia's imports from the USA (our largest imports supplier) the error is about 10 per cent. Gold purchases and sales reported by the Reserve Bank on behalf of non-residents (reported in the Survey of International Investment) are not allocated to country.

17.6 For *transportation services* three main principles of country allocation are followed. First, for the non-freight earnings from Australia by non-resident transport operators and for their acquisition of services in Australia, the country of head office of the non-resident operator is used to allocate data to country. Second, for freight debits the global estimate from 1993–94 onwards is allocated to country on the basis of the value of the commission earnings and representative costs components of the acquisition of services in Australia of foreign transport operators. In previous years, freight earnings by country were directly estimated from detailed voyage by voyage reporting of cargoes by shipping agents. From analysis of past reporting, commission and representative costs in Australia were considered the best practical approximation for country shares of Australia's freight on imports. Finally, for transactions by resident transport operators, the country to which the service is provided or from which it is obtained is used to allocate data to country.

17.7 For *travel services*, separate estimates are compiled for foreign student expenditure in Australia and other travellers' expenditure in Australia and abroad. For foreign students, global estimates of fees and other expenditure in Australia are allocated to country according to the country shares of expenditure obtained from Foreign Student statistics (Department of Employment, Education, Training and Youth Affairs). For other travel credits, global estimates of travel expenditure derived from the Travel by Foreign Residents Model are estimated by country on the basis of both the numbers of visitor arrivals from each country in the Overseas Arrivals and Departures statistics (based on country of residence) and the expenditure amounts per visitor, by country, measured in the International Visitor Survey conducted on behalf of the Bureau of Tourism Research. For other travel debits, amounts are estimated using both Overseas Arrivals and Departures statistics (based on main country visited) and expenditure per visitor by main country visited from the Survey of Returned Australian Travellers. Where

Australian travellers abroad visit more than one country, this allocation basis will differ from the stated principle to the extent that they will not necessarily spend money in those countries in proportion to the time actually spent in those countries.

17.8 For 'other' services, including *insurance* and *financial services*, estimates are allocated to country on the basis of country of user (credits) or provider (debits) reported in the Survey of International Trade in Services (miscellaneous services) and other sources. The business surveys and other sources that are used to allocate these services credits and debits are not as good as for transportation and travel, and about 15 per cent of both credits and debits remains unallocated, making 'unallocated' the second largest country category (after the USA) for these other services. Some of the data are confidential by country. In other cases, only the top one or two trading partners are provided to the ABS, with the balance shown as unallocated. While the amount unallocated for total services credits and debits is about 6 per cent, within the 'other' services category this proportion jumps to 15 per cent. Care should be used in interpreting the country allocations for these 'other' services.

17.9 For *current transfers* and *capital transfers* various data sources are used to determine the country of allocation. For the acquisition/disposal of non-produced, non-financial assets, data come from the Survey of International Trade in Services.

17.10 For income, *compensation of employees* is estimated based on the Overseas Arrivals and Departures statistics as obtained for travel services. *Investment income* is as reported in, or based on data reported in the Survey of International Investment. In the case of investment income, limited data are available for many types of debt securities issued abroad and for reserve assets, as explained in the following paragraphs.

17.11 For the financial account and international investment position, country data are as reported in, or based on data reported in the Survey of International Investment. The data are available on bases which broadly correspond to the principle of country of foreign creditor/debtor. However, in the case of debt securities issued on a single capital market abroad, information is only available to classify transactions to the country of the lead manager of the issue and not necessarily according to the country of the supplier of funds (the creditor). Issues floated on several markets at once (such as Eurobonds) are classified to an *international capital markets* category.

DATA SOURCES AND METHODS *continued*

17.12 Only limited country data are available for reserve assets. As a result, foreign exchange denominated in United States dollars is classified to the United States of America. Foreign exchange not denominated in United States dollars is classified to *Other OECD*, reflecting the fact that these reserves represent claims on countries that are mostly members of the OECD. No country breakdown is applicable for the items *monetary gold* or *SDRs*. Monetary gold is allocated its own special category (Reserve Bank gold) while SDRs are allocated to the international institutions category.

17.13 In instances where balance of payments transactions relate to but cannot be classified to a specific country, they are recorded in an *unallocated* category. No country classification is attempted for the net errors and omissions item.

SELECTION OF COUNTRIES, AND OF REGIONAL AND OTHER GROUPINGS

17.14 *BPM5* does not prescribe a list of countries or country groupings to be shown by any economy. The breakdown relevant for each economy is left to the national compiler to decide. The countries separately identified in Australian balance of payments and international investment position statistics are listed in table 17.1. Though not all countries can be supported for the international investment position statistics, separate identification of these countries is generally made because of their significant economic links to Australia and/or general user interest in them. Countries which are not identified individually are allocated to residual continental groupings. Also, because of their economic importance to Australia, a number of economic groupings are identified. These are: the Asia Pacific Economic Cooperation (APEC) group, the Association of South East Asian Nations (ASEAN), the European Union (EU) and the Organisation for Economic Co-operation and Development (OECD).

17.15 In addition to categories such as *international capital markets*, used when creditor countries cannot be identified, a number of 'non-countries' are used to classify transactions that do not relate to a specific country or group of countries. These are *international institutions* and *Reserve Bank gold*.

17.16 The international capital markets category is especially applicable in cases of bearer securities issued by Australian residents or where liabilities are incurred on markets not associated with any one country (for example, the Eurodollar market). However, a loan liability to a syndicate of foreign lenders is allocated to the countries of the syndicate members in proportion to their share as specified in the contract. The international institutions category includes activity associated with the United Nations, the IMF, the International Bank for Reconstruction and Development, the Asian Development Bank and the Bank for International Settlements. Reserve Bank gold is monetary gold held by the Reserve Bank as a form of international reserve assets.

SELECTION OF COUNTRIES, AND OF REGIONAL AND OTHER GROUPINGS *continued*

17.17 The annual publication, Cat. no. 5363.0, contains a range of country-classified tables for the major components of the current, capital and financial accounts and the international investment position, for the most recent six years, at the more detailed country split shown in table 17.1. It also contains the latest year's data for more detailed balance of payments components, but only for a smaller selection of countries. Longer time series are available on request.

17.18 An unallocated category is used as a residual. It contains data for countries when the data provider is unable to give country details, or when the amount is confidential and cannot be allocated in published statistics.

17.1 COUNTRY CLASSIFICATION IN AUSTRALIA'S BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATISTICS(a)

COUNTRIES	
Belgium and Luxembourg	New Zealand
Brunei Darussalam	Papua New Guinea
Canada	Philippines
Central America and Caribbean	Russian Federation
Chile	Singapore
China, People's Republic of	South Africa
Fiji	Sweden
France	Switzerland
Germany	Taiwan
Greece	Thailand
Hong Kong	United Kingdom
Indonesia	United States of America
Ireland, Republic of	Africa n.e.s.
Italy	America n.e.s.
Japan	Asia n.e.s.
Korea, Republic of	Europe n.e.s.
Malaysia	Oceania n.e.s.
Mexico	
Netherlands	
COUNTRIES NOT AVAILABLE	
Unallocated	
International capital markets	
COUNTRIES NOT APPLICABLE	
Reserve Bank gold	
International institutions	
COUNTRY GROUPS	
APEC	
ASEAN	
EU	
OECD	

(a) As published in 1996–97, Cat.no. 5363.0.

Chapter 18 EMERGING ISSUES

INTRODUCTION

18.1 Significant and rapidly evolving economic developments often pose both challenges and opportunities for statisticians in measuring and reporting on economic phenomena. This is true also of measuring Australia's balance of payments and international investment position. This chapter focuses on emerging issues relating to statistical sources; the likely impact of foreseeable changes to international statistical standards; and future challenges such as the measurement of internet commerce and the growing demand to measure the impact of globalisation. The chapter finishes with some international perspectives on balance of payments and international investment statistics.

DEVELOPMENTS IN DATA SOURCES

18.2 Data sources and estimation methods for balance of payments and international investment position statistics are frequently changing as some sources are found to be less satisfactory and new ones come to light. For example, in recent times the ABS has improved the sources and methods for education-related travel credits, financial services and financial derivatives. Improvements to sources for estimating portfolio investment in Australia will be introduced during 1999, while work is also underway on evaluating new sources for measuring the migrants' transfers.

Longitudinal Survey of Immigrants to Australia

18.3 The Longitudinal Survey of Immigrants to Australia, being conducted on behalf of the Department of Immigration and Multicultural Affairs, collects information from about 5,000 recently arrived migrants and accompanying family members reflecting their experience of settlement in Australia. Migrants in the survey are approached on three separate occasions over three and a half years. The ABS has contributed to the survey to enable questions to be asked on the value of goods and funds brought into Australia by migrants, with a view to using these data to replace some of the current data sources used to estimate the migrants' transfers items in the balance of payments.

18.4 The current methodology used to measure immigrants' transfers is based on the Business Skills Category information supplied by the Department of Immigration and Multicultural Affairs, and the Migrants' Transfers Model for migrants arriving under non-business skills categories. Although the Department's information is considered reliable, there are reservations about data from the SOFUT (see paragraph 5.38), an important input into the Migrants' Transfers Model.

18.5 The work on the Longitudinal Survey of Immigrants is expected to be completed during 1999 and the results of the survey may be used in a revised Migrants' Transfers Model.

Portfolio investment in securities issued in Australia

18.6 Chapter 13 explained in some detail the complex methods used to measure foreign portfolio investment in shares, bonds and notes, and money market instruments issued in Australia. As pointed out there, the resident issuer generally does not know who holds the share or debt security issued. Therefore the ABS must approach the custodians as the primary data source so that the levels, financial flows and stock of investment can be estimated.

18.7 Currently, some of the larger custodians supply annual data on a security by security basis which provides the paid up and face value of securities held by non-residents at year end; a separate line is reported for the value held by residents of each partner country. Other custodians report the lines security by security on a quarterly basis. These data are supplemented by annual and quarterly aggregate data (i.e. not security by security). The data become the basis of the data models described in Chapter 13. However, data models' ability to approximate real world activity is limited by the information that is currently reported, and the ABS has been consulting custodians for some time on ways to extend quarterly reporting and improve these data. Broadly the objective is to have all custodians report quarterly data on a security by security basis, with a separate line being reported for each partner country. Data to be reported would include the market value of security held, and the financial transactions in securities. The system would be extended to include holdings of financial derivatives issued by residents and held by non-residents through custodians.

18.8 The new collection methodology, which will be progressively implemented from late 1998, will involve all major custodians reporting quarterly on a security by security basis. On an ongoing basis, the data provider will report gross transactions and levels held at the end of the reference period, of each security line.

18.9 Security by security reporting in the medium term saves custodians from aggregating data to the various classification levels required on collection forms. In the longer term, collection at this level of detail will minimise the impact on data providers of future changes in statistical requirements. From an estimation perspective the individual security information allows the ABS to apply classification variables (such as institutional sector and maturity) more accurately, and facilitates a more flexible approach to estimation of aggregates such as accrued income.

NEW CHALLENGES

Globalisation statistics

18.10 Globalisation refers to the phenomena that more and more businesses conduct their activities on an international rather than on a local, or even national level; that world markets are becoming increasingly integrated, and increasingly transcend national borders in their production, sales of goods and services and international financial activities; and that rapid changes in communication, computer and transport technology facilitate these global changes.

18.11 Existing statistics can provide some insights into the globalisation phenomena. For example, ABS international trade, balance of payments, and international investment statistics provide extensive data on transactions between Australian residents and the rest of the world. The concept of *direct investment* highlights the importance of global businesses in a balance of payments and international investment position context. International investment position statistics also provide measures of foreign ownership of Australian businesses and Australian ownership of businesses abroad, as well as information on the stock of other foreign assets and liabilities, such as foreign debt. The ABS has regular collections of agriculture, mining, manufacturing and service industries supplemented by the economy wide surveys. Data from these collections greatly assist the understanding of economic activity and therefore global phenomena. Some of these collections have also, in recent times, included some broad questions on foreign ownership. However, statistics produced from these surveys are generally not classified in terms of foreign and Australian owned businesses.

18.12 Therefore, while a broad range of Australian economic statistics sheds some light on the globalisation phenomenon, economists argue that existing statistics do not go far enough. There is an emerging requirement for economic statistics on global businesses and their impact on Australia.

18.13 A few countries have, so far, developed statistics on globalisation. The US Bureau of Economic Analysis collects extensive data on foreign-owned businesses in the United States and on United States-owned businesses abroad. The Bureau of Economic Analysis also provides some data on the sales of goods and services by foreign owned businesses, and their imports and exports of goods and services. Statistics Canada collects data on the operations of foreign controlled businesses in Canada, while the Ministry of International Trade and Industry in Japan collects data on Japanese owned businesses abroad. Each country adopts a somewhat different approach, although common elements are evident. As well, the United Nations Commission on Trade and Development compiles global data on trans-national corporations.

Globalisation statistics *continued*

18.14 Australia has collected these types of data in the past. From the 1960s to the 1980s, the ABS conducted a number of foreign participation studies measuring foreign ownership and control of Australian economic activity. Recent studies have been conducted by bodies including the Committee for the Economic Development of Australia, the Business Council of Australia, the former Industry Commission, the Australian Manufacturing Council, the Department of Foreign Affairs and Trade, and Austrade, into specific aspects of globalisation, and there has been a parliamentary inquiry into Australia's services exports.

18.15 In recent years a number of international statistical initiatives have encouraged national statisticians to provide data on globalisation. These include *BPM5*, which acknowledges that data on the activities of direct investment enterprises (such as their total assets and liabilities, employment, value added, etc.) would be useful; *SNA93*, which suggests that national accounts could usefully be sectored, inter alia, to show foreign controlled companies separately; and the OECD Statistics Working Group of the Industry Committee, which is considering the development of a manual on globalisation indicators.

18.16 The ABS is canvassing user views on the need for and priority of globalisation statistics. To provide a focus, the ABS released a discussion paper *Options for Australian Globalisation Statistics* in September 1997, with the aim of raising issues for discussion and assessment. Two broad globalisation initiatives are considered in the paper. The first is to identify the foreign ownership characteristics of Australian businesses by conducting a survey of shareholdings, with the results linked to the ABS business register; as a consequence it would be a relatively simple task to classify businesses in business register based surveys, and the resulting economic statistics, as either foreign, joint or Australian owned. For collections not based on the business register, an additional matching step is required to link the collection and the business register. For example, to measure foreign ownership characteristics of businesses in international trade statistics or financial surveys would require additional matching. The second initiative is to institute a survey of Australian owned businesses abroad and collect data on their business accounts, economic activity, financial activity and the trade with their foreign affiliates. These initiatives may not meet all requirements for globalisation statistics, but would fill in some important gaps.

18.17 An obstacle to the development of globalisation statistics is that there is no consensus among official statisticians about the nature and measurement of these statistics. As mentioned above, few countries have comprehensive data collections in place, and each has developed somewhat different measurement and collection practices. International statistical standards and recommendations can best be described as embryonic.

Globalisation statistics *continued*

18.18 Although the ABS has prepared preliminary estimates of the costs of implementing these proposed initiatives, they have not been included in its forward work program, and any implementation would depend on assessment of the relative importance of globalisation statistics to users, and resolution of funding issues. The earliest possible date for the collection of comprehensive data on foreign ownership of Australian businesses and on Australian owned businesses abroad would be after the turn of the millennium.

Internet commerce

18.19 Business has been conducted electronically over computer networks for around 20 years. The growth of the use of the internet in recent years has provided a new impetus, and it will change the nature of business, encouraging both large and small business to become involved in international trade through internet commerce.

18.20 An important statistical issue is whether existing ABS collections will be able to compile the required data if businesses conduct transactions over the internet. In theory, at least, it does not matter how the international transaction is conducted, i.e. over the internet, by phone, by fax or in person. The business survey forms that collect data for the balance of payments and international investment position require information on the types of transactions, rather than on how payments were made or services delivered. Therefore the ABS considers that, in the short term, internet commerce does not pose any great threat to the quality and accuracy of Australia's economic and trade statistics. While a number of particular measurement issues have arisen for some series, these are not significantly different from other changes to market structures, in terms of the statistical responses required, and they will be addressed through the normal ABS work program.

18.21 If internet commerce were to increase substantially, existing compilation difficulties for the ABS in some areas may be exacerbated, and some methodologies may require adjustment. For example, internet commerce may make it easier for households to maintain overseas bank accounts and use these accounts in the settlement of transactions, both domestically and with non-residents. What is already a difficult area to measure in Australia's international investment position may become both more significant and more difficult. Current investigations, into using partner country information in collecting and sharing statistical data on cross-border financial claims, have not yet identified any significant coverage deficiency in this area. The increased pace of global co-operation here may help to plug any developing gap in coverage sources.

Trade and Investment Data Review Project

18.22 The Trade and Investment Data Review Working Group, of which the ABS is an active member, was one of a number of projects established by Asia Pacific Economic Cooperation (APEC) senior officials in 1990. The project's basic aims are to gather statistics on goods and services trade and international investment between APEC economies, in order to minimise the discrepancies between national statistics and maximise the utility of these data. For example, one member's exports to a trading partner should in theory equal the latter's corresponding measure of imports. However, for a variety of reasons, this rarely occurs in practice. Discrepancies in trade and investment data between APEC members, when unresolved, may lead to incorrect analyses of economic conditions and inappropriate policy and commercial responses. As an initial step, the project has attempted to standardise merchandise trade so that partner country data are near-comparable (some differences remain due to insufficient data in APEC economies to make the necessary adjustments). Services and international investment data have proved more problematic as many members do not have comprehensive statistics in this area. A focus has therefore developed on sharing experiences to improve data collection in these areas.

Bilateral comparisons

18.23 Bilateral comparisons can also be used to improve the quality of a country's balance of payments data. Australia has already carried out bilateral comparisons of merchandise trade data with the United States, Japan and New Zealand and is working on a comparison with Indonesia. So far these studies have shown Australian data to be of a high standard and to not require methodological change. However, some data comparisons have led to countries using another country's bilateral data rather than redevelop an existing methodology, if the data compilation methods of the latter are superior to a country's own. As well as improving the quality of data, the use of bilateral data saves resources and, with increasing interest in bilateral data comparisons through APEC projects such as the Trade and Investment Data Review, bilateral data may be more widely used in the future. Currently, some APEC countries use Australian data on education-related travel credits to measure their debits component.

Co-ordinated Portfolio Investment Survey

18.24 The IMF Committee on Balance of Payments Statistics has been co-ordinating arrangements, primarily among the major industrial countries, for the conduct of the Coordinated Portfolio Investment Survey, comprising coordinated national surveys of cross-border portfolio investment assets (and where feasible, liabilities) in respect of 31 December 1997. The objectives of the survey were:

(i) to collect comprehensive information, with geographical detail, on the stock of cross-border equities and long term bonds and notes for use in the compilation or improvement of international investment position statistics on portfolio investment finance. The international investment position statistics, in turn, can provide information to check the coverage of recorded estimates of portfolio investment flows and associated investment income transactions recorded in the balance of payments; and

(ii) to exchange the bilateral data aggregates. With the results of the survey now becoming available, the participating countries, with the assistance of the IMF, plan to exchange these data among themselves and with other countries. By exchanging comparable data (as far as confidentiality constraints allow), participating countries should be able to improve their estimates of non-resident holdings of their portfolio investment liabilities as well as associated capital flows and investment income data.

18.25 Over thirty countries, including Australia, are participating in this project, and results are expected to be published by the IMF in late 1999.

APPENDIX 1 DATA SOURCES USED IN THE COMPILATION OF BALANCE OF PAYMENTS COMPONENTS

(Including Components of and Data Models for the International Investment Position)

The data source is from the ABS, unless specifically attributed to other departments or agencies.

Source	Description	Balance of payments components
	International Trade Statistics	
International Trade Statistics (ITS)	ITS measure the quantity and value of movable goods which cross the national frontier. Entries are submitted to the Australian Customs Service. Data are electronically passed to the ABS for compilation of ITS. ITS are published in ABS publications, e.g. quarterly *International Merchandise Trade (Cat. no. 5422.0).* Data are available in time for the monthly publications *International Merchandise Imports (Cat. no. 5439.0)* and *International Trade in Goods and Services (Cat. no. 5368.0).*	Goods: • General merchandise • Goods for processing • Repairs on goods • Goods procured in ports (credits) • Non-monetary gold Services: • Transportation Data models: • Insurance • Defence finance
	ABS International Business Surveys	
1) Survey of International Trade in Services (SITS)	Quarterly and annual surveys (sample and partial coverage) which collect data on exports and imports of services, sales and purchases of non-produced, non-financial assets, repairs (other than maintenance while in port) on ships and aircraft, goods procured in foreign ports by resident transport operators, and goods acquired in Australian ports by foreign airlines. Data are generally available three months after the end of the period for quarterly surveys and six months for annual surveys, although for some components results are more timely.	Goods: • Goods procured in port • Repairs on goods • Merchanting adjustment to goods debits Services: • Transportation services • Travel • Communications services • Construction services • Insurance services • Financial services • Computer and information services • Royalties and licence fees • Other business services • Personal, cultural and recreational services Capital transactions: • Non-produced, non-financial assets Data models: • Travel by Australian residents • Travel by foreign residents • Insurance • Financial services

2) Survey of International Investment (SII)	Quarterly and annual survey which primarily collects data on financial transactions, investment position and other changes in position (for inclusion in financial accounts and international investment position) and investment income; until 1995–96 data were collected on withholding taxes paid abroad (current transfers debits). The Reserve Bank provides data on gold custody activity to provide measures of non-monetary gold purchases and sales (goods).	Goods: • Non-monetary gold Income: • Investment Income Current transfers: • Other transfers debits Financial account and international investment position: • All components Data models: • Accrued income on debt securities • Portfolio investment in equity liabilities • Portfolio investment in debt securities liabilities
3) Survey of Principal Transport Enterprises (SPTE)	The SPTE provides information on anticipated and actual purchases and sales as well as financial and operational lease transactions involving ships, aircraft and satellites. Data are collected from major transport companies and, where necessary, telecommunications companies.	Goods: • General merchandise (timing adjustment)
4) Survey of Inbound Tour Operators (SITO)	The SITO has provided data for 1992–93 to 1995–96 on the Australian content of pre-paid package tours by non-resident travellers. Results from the survey are released in *Inbound Tour Operators, Australia* (Cat. no. 8690.0).	Data model: • Travel by foreign residents
5) Economic Activity Survey (EAS)	EAS provides data, from 1996–97, on the Australian element of pre-paid package tours by non-resident travellers. EAS also provides data on the implicit commission earnings by resident foreign exchange dealers.	Data models: • Travel by foreign residents • Foreign exchange fees
Collections from Households and Individuals		
1) Overseas Arrivals and Departures (OAD)	OAD statistics are collected by the Department of Immigration and Multicultural Affairs (DIMA) to measure the number of Australian and non-resident persons entering and leaving Australia. The ABS publishes OAD statistics in *Overseas Arrivals and Departures, Australia* (Cat. nos 3401.0, 3402.0 and 3404.0). OAD data can also be found in the DIMA publication *Immigration Update*. OAD statistics are available approximately six weeks after the reference month.	Data models: • Travel by foreign residents • Travel by Australian residents • Migrants' transfers

2) International Visitor Survey (IVS) (ACNielsen McNair on behalf of the Bureau of Tourism Research (BTR))	The IVS is conducted quarterly and collects information from short-term visitors (those with a length of stay less than one year) to Australia, immediately prior to their departure. Data collected, inter alia, include travel expenditure, earnings from employment and other information to adjust passenger fare data. The BTR publishes the results of the IVS in its publication *International Visitor Survey*. Quarterly data are available about five months after the reference quarter.	Data model: • Travel by foreign residents
3) Survey Of Returned Australian Travellers (SORAT)	An ABS collection which obtains information from Australian travellers and persons working abroad for short periods, after they return from abroad, about their expenditure and earnings abroad as well as the sources of funds for financing their trip. SORAT is a four yearly survey and information is available about 12 months after the reference year.	Data model: • Travel by Australian residents
4) Survey of International Students (SIS) (Roy Morgan Research Centre for the Department of Employment, Education, Training and Youth Affairs (DEETYA))	Survey conducted in 1991–92 and 1996–97. It collected data from foreign students in Australia about weekly expenditure on goods and services, sources of finance, etc. Data on foreign students' expenditure are published in the DEETYA publication *Overseas Students Statistics*. Data are available about 12 months after the reference period.	Data model: • Foreign students in Australia
	Other Official Sources	
1) Commonwealth Government Transactions (Ledgers) (Department of Finance)	The Ledgers contain itemised data about Australian Government expenditures and receipts. Data extracted include expenditure by embassies, consulates and military establishments abroad, salaries paid to Australian staff abroad, salaries paid to locally engaged staff abroad, foreign aid payments, loan floatation expenses and interest paid on Australian Government debt abroad, interest receipts on Military Sales Account held in the United States, and withholding tax receipts.	Services: • Financial services debits • Government services n.i.e. debits Income: • Compensation of employees debits Current transfers: • General government Capital transfers: • General government debits Data models: • Accrued income on debt securities • Defence finance
2) Foreign Student Statistics (Department of Employment, Education, Training and Youth Affairs) (DEETYA)	DEETYA assembles annual calendar year data on the numbers of foreign visaed and New Zealand students studying in Australia by course type, and average fees paid by them by course type. Preliminary data are available within one month of end of year and final data within five months.	Data model: • Foreign students in Australia

3) Budget Papers (State Government)	The budget papers contain information on expenditures abroad for State Government Agents-General etc. Data are available annually with a lag of about four months.	Services: • Government services n.i.e. debits
4) Business Skills Category (BSC) information (Department of Immigration and Multicultural Affairs) (DIMA)	Details about the number of immigrants entering Australia under the BSC are provided to the ABS by DIMA on a quarterly basis.	Data model: • Migrants' transfers credits
5) Diplomatic and consular staff in Australia (Department of Foreign Affairs and Trade (DFAT) advice)	The advice provides information on the number of diplomatic and consular staff in Australia by country. Data are available quarterly with a lag of about two months.	Data model: • Foreign embassy expenditure
6) Bases in Australia (Defence Department advices)	Details about expenditure of United States and United Kingdom governments at Pine Gap, Nurrungar and the North West Cape are supplied directly by the Department of Defence on a quarterly basis approximately three months after the reference quarter. Details about expenditure by the Republic of Singapore Air Force on their training facilities in Western Australia are supplied on a quarterly basis directly from the WA facility, two to three months after the reference quarter.	Services: • Government services n.i.e. credits
7) Visiting military personnel (Defence Department advice)	Details about military personnel or visiting military ships are provided by the Department of Defence on a quarterly basis, approximately three months after the end of the quarter.	Data model: • Travel by foreign residents
8) Military equipment imports (Defence Department advice)	The Department provides data on imports of military equipment as required.	Goods: • General merchandise (timing adjustment) Data model: • Defence finance
9) Survey of Insurance Companies and Agents (Australian Prudential Regulation Authority (APRA))	The Survey collects, inter alia, insurance data on premium revenue and claims payable, investment income and commissions for direct and reinsurance business (by Australian insurance companies and agents) in respect of business received from non-resident or placed with non-resident insurance companies.	Data model: • Insurance
10) Reserve Bank Bulletin (Table F8 on Foreign Exchange Turnover)	Table F8 provides data on foreign exchange spot turnover classified by foreign exchange dealers in Australia, banks overseas and customers.	Data model: • Foreign Exchange fees
11) Withholding Tax (Australian Taxation Office)	Annual data reported on withholding taxes on insurance and freight paid by non-residents. Annual data are provided with a lag of six months.	Current transfers: • General government credits
12) Veterans Affairs and Social Security Pensions (Commonwealth Government Budget Papers)	Budget papers provide data on services paid abroad to former Australian residents. Data available by end of financial year.	Current transfers: • General government debits

13) Veterans Pensions Paid to Australian Residents (Department of Veterans Affairs)	Half yearly advice on pensions paid to former New Zealand servicemen now residents of Australia. Available within three months of reference half year.	Current transfers: • Other transfers credits
14) Contributions to International Development Finance Institutions (IDFIs) (Treasury advice)	Monthly data are supplied on contributions to IDFIs.	Current transfers: • General government debits
Miscellaneous Data Sources		
1) Survey of Foreign Unrequited Transfers (SOFUT)	Partial coverage monthly survey of the major banks collecting data on private cash transfers to and from abroad.	Current transfers: • Other transfers Data model: • Migrants' transfers
2) Consumer Price Index (CPI)	The CPI measures quarterly changes in the price of a 'basket' of goods and services purchased by all metropolitan households. It is used in some data models for projection purposes. Data are available from *Consumer Price Index* (Cat. no. 6401.0).	Data models: • Foreign students in Australia • Foreign embassy expenditure
3) Servicemen's Expenditure (United States Navy advice)	Irregular advice on expenditure by United States servicemen on relaxation and recreation leave while visiting Australia.	Data model: • Travel by foreign residents
4) Australian Stock Exchange	The Australian Stock Exchange Datadisk and Journal are used to estimate market valuations of individual shares as part of the data model for portfolio investment in equities.	Data model: • Portfolio investment in equity liabilities
5) Debt Securities Issued in Australia (DSIA)	DSIA provides data on (i) the ratio of market to face value of Commonwealth and State Government debt securities, and (ii) weighted income yields for Commonwealth Government, State Government and Other Sector debt securities.	Data models: • Accrued income on debt securities • Portfolio investment in debt securities liabilities
6) International Bond Yields (Organisation for Economic Cooperation and Development (OECD))	Data are published on bond yields in the OECD publication *Financial Statistics Monthly*. Appropriately weighted international bond yields are then applied to the average stock of debt (reported at market values) in the Survey of International Investment to estimate income accrued on long-term debt securities issued abroad by residents and non-residents.	Data model: • Accrued income on debt securities

APPENDIX 2 SELECTED DATA MODELS USED IN THE COMPILATION OF BALANCE OF PAYMENTS COMPONENTS

(Including Components of the International Investment Position)

Data model title and data source	Estimation methodology	Balance of payments broad level components
1) Travel by Foreign Residents Model Overseas Arrivals and Departures (OAD) International Visitor Survey (IVS) Survey of Inbound Tour Operators (SITO)	This model measures expenditure in Australia by foreign resident travellers and workers, primarily using per capita data on expenditure and earnings applied to OAD data on short-term visitor arrivals. It excludes the expenditure of foreign students studying in Australia on student visas and New Zealand students; these are covered in the Foreign Students in Australia Model. To estimate the per capita expenditure data several sources are used. These primarily include IVS expenditure data (adjusted to exclude on-carriage and prepaid land component) and IVS earnings data, SITS data on on-carriage receipts and SITO data.	Services: • Transportation (passenger services) • Travel credits Income • Compensation of employees debits
Survey of International Trade in Services (SITS)—transportation component Economic Activity Survey (EAS)	SITS (transport component) provides data on cruise fares and on the on-carriage receipts by resident airlines for carrying foreign travellers on domestic transport legs beyond their initial arrival in Australia. SITO provides (until 1995–96) estimates of the earnings by Australian businesses from the prepaid land component of package tours into Australia. From 1996–97 these estimates are derived from the EAS.	
Visiting Military Personnel (VMP) (Department of Defence advice) Service personnel expenditure (United States Navy advice	Other minor components of the model are non-resident transport crews' expenditure in Australia, foreign military crews' expenditure in Australia, and an adjustment to passenger fare earnings. The first is obtained from data reported in the SITS (transportation component). The second comes from the VMP advice which provides quarterly data on the numbers of foreign service personnel visiting Australia, used together with per capita expenditure data supplied irregularly by the United States Navy. The last component is compiled from IVS (see paragraph 5.31 for further detail). Until each of the above sources is available, the individual affected components are extrapolated.	

2) Travel by Australian Residents Model Survey of International Trade in Services (SITS)—travel component	SITS provides a quarterly measure of the expenditure abroad by Australian travellers using credit cards, travellers' cheques, cruise fares and other prepaid packages. SITS is supplemented with data (every four years) from SORAT on the cash taken abroad by Australian travellers and other sources of travel finance such as from earnings abroad.	Services: • Travel credits Income: • Compensation of employees credits
Survey of Returned Australian Travellers (SORAT)	SORAT provides a dissection of average expenditure per traveller by the purpose of travel (business and personal travel), and of income earned abroad by Australian travellers. SORAT is also used to validate the SITS methodology and ensure SITS coverage has been maintained.	
Overseas Arrivals and Departures (OAD)	OAD data are applied to SORAT data by purpose of travel, and are also used for monthly interpolation and extrapolation of quarterly SITS information	
3) Foreign Students in Australia Model Foreign Student Statistics (FSS) (DEETYA)	FSS provide numbers of foreign students in Australia in any calendar year and indicative per capita course fees per student registration. These estimates are combined, after allowing for those short courses that span calendar years, to calculate total fees paid. The model does not cover foreign students (apart from New Zealand citizens) who are not on education visas; foreign students in Australia for less than three months are not required to take out an education visa.	Services: • Travel credits Income: • Compensation of employees debits
Survey of International Students (SIS) Consumer Price Index (CPI)	SIS provides weekly per capita data on expenditure by foreign visaed students on other goods and services (by course type) and earnings. Weekly data are converted to annual using assumptions on period of year when students stay in Australia. Per capita annual data and FSS student numbers are used to derive expenditure on other goods and services. SIS data are interpolated between survey years and extrapolated from most recent survey with reference to CPI.	

4) Insurance Model Survey of Insurance Companies and Agents (Australian Prudential Regulation Authority (APRA)) Survey of International Trade in Services (SITS)–insurance SITS (selected services) International Trade Statistics (ITS)	The model estimates insurance services (insurance service charge) from data on premiums earned (including premium supplements which are offset in other investment income) and claims incurred (averaged over five or twenty years). A description of the model is provided in box 7.5, which also explains the estimation of the freight and other insurance components. Most of the data are sourced from the APRA. SITS (insurance) provides information on insurance placed abroad through resident brokers (including brokers' commissions earned from non-residents), and SITS (selected services) provides information on own risk assets insurance placed directly abroad by the insured. ITS are used in the estimation of freight insurance.	Services: • Insurance services Investment income: • Other income Current transfers: • Non-life insurance transfers
5) Foreign Exchange Fees Model Economic Activity Survey (EAS) Reserve Bank Bulletin (Table F8 on foreign exchange turnover)	The model provides estimates of the implicit fees associated with foreign exchange trading (see paragraph 2.27). While the concept and methodology are somewhat complex, the resulting balance of payments figures are small in Australia's situation. EAS provides estimates of total implicit net fees earned by resident foreign exchange dealers from both resident and non-resident clients, after deducting fees paid to non-resident dealers. The model makes use of estimated buying and selling spreads on foreign exchange turnover (obtained from Table F8), and the counterparty information also shown in Table F8, applied to the EAS measures to provide separate estimates of the earnings from residents and non-residents. The estimated implicit earnings by resident foreign exchange dealers from non-residents are recorded in the balance of payments as the credit component. No adjustment is made to add back implicit fees paid to non-residents (i.e. there is no grossing up credits) and the counterpart on the debits side (there is no grossing up debits). Using a number of assumptions about the implicit fees rates and foreign exchange dealings, similar estimates are compiled for the debits side (non-resident foreign exchange dealers' implicit fees charged to residents, after deducting implicit fees paid to resident dealers).	Services: • Financial

6) Accrued Income on Debt Securities Model Portfolio investment in debt securities liabilities model (PIDSLM) Debt Securities Issued in Australia (DSIA) (ABS Financial Accounts Section) Survey of International Investment (SII) International Bond Yields (Organisation for Economic Cooperation and Development (OECD) publication *Financial Statistics Monthly)*	Income accrued on long-term debt securities (excluding financial derivatives and income on reserves) issued in Australia is estimated by applying DSIA weighted yields (for Commonwealth Government, State Government, and Other Sectors separately) to average PIDSLM opening and closing levels of debt securities issued in Australia and held by non-residents. Income accrued on long-term debt securities issued abroad by residents and non-residents (excluding income and reserves) is estimated by applying appropriately weighted International Bond Yields to the average stock of debt (reported at market values) in SII. Income accrued on short-term debt securities is compiled by smoothing the cash flows reported in SII. Finally, the reported cash flows for interest payable (from SII apart from interest on reserves) are included in the financial account as transaction reductions in investment position, and the estimated accrued income flows are included in the financial account as transaction increases in investment position.	Investment income: • Portfolio income on debt securities Portfolio investment: • Debt securities
7) Migrants' Transfers Model Overseas Arrivals and Departures (OAD) SOFUT Business Skills Category (BSC) (Department of Immigration and Multicultural Affairs (DIMA))	OAD data are used to identify the number of migrants arriving in and leaving Australia. The BSC provides data on the numbers of migrants on the program and the average amount of money they bring to Australia, to estimate total business migrants' transfers. The numbers of other immigrants is multiplied by a per capita transfers estimate (derived from SOFUT) and extrapolated using relevant countries' inflation rates and Australian dollar exchange rates with appropriate currencies.	Capital transfers: • Migrants' transfers
8) Portfolio Investment in Equity Liabilities Model Survey of International Investment (SII) (nominees component) Australian Stock Exchange	Quarterly and annual data models are used to derive the level (position) of foreign investment through nominees in Australian equity securities (at market prices), as well as deriving the transactions and market price changes in investment position in these securities from the paid up values supplied in the SII. Data are compiled on a share by share basis in the annual model. Quarterly data are benchmarked to annual data when they become available.	Portfolio investment: • Liabilities, equity
9) Portfolio Investment in Debt Securities Liabilities Model Survey of International Investment (SII) (nominees component) Debt Securities Issued in Australia (DSIA) (ABS Financial Accounts Section)	Model provides quarterly estimates of transactions in Commonwealth and State Government securities issued in Australia from data on end of period market values of securities reported in SII. For deriving transactions and valuation changes, the model uses the market price change in securities on issue provided in DSIA and derives transactions changes as a residual.	Portfolio investment: • Liabilities, debt

D

U

V

W

SELF-HELP ACCESS TO STATISTICS

PHONE Call 1900 986 400 for the latest statistics on CPI, Labour Force, Earnings, National Accounts, Balance of Payments and other topics. (Call cost is 75c per minute)

INTERNET http://www.abs.gov.au

LIBRARY A range of ABS publications is available from public and tertiary libraries Australia wide. Contact your nearest library to determine whether it has the ABS statistics you require.

WHY NOT SUBSCRIBE?

PHONE +61 1300 366 323

FAX +61 3 9615 7848

CONTACTING THE ABS

ABS provides a range of services, including: a telephone inquiry service; information consultancy tailored to your needs; survey, sample and questionnaire design; survey evaluation and methodological reviews; and statistical training.

INQUIRIES

	By phone	*By fax*
Canberra	02 6252 6627	02 6253 1404
Sydney	02 9268 4611	02 9268 4668
Melbourne	03 9615 7755	03 9615 7798
Brisbane	07 3222 6351	07 3222 6283
Perth	08 9360 5140	08 9360 5955
Adelaide	08 8237 7400	08 8237 7566
Hobart	03 6222 5800	03 6222 5995
Darwin	08 8943 2111	08 8981 1218

POST Client Services, ABS, PO Box 10, Belconnen, ACT 2616

EMAIL client.services@abs.gov.au