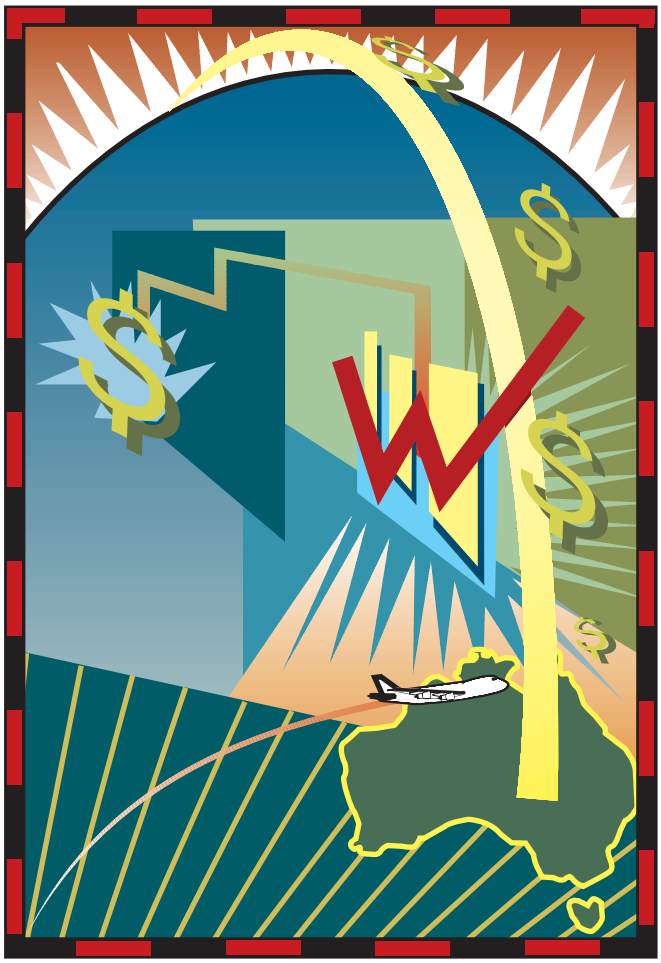
Australian Bureau of Statistics

1360.0

Measuring Australia's Economy

Edition 5



MEASURING AUSTRALIA'S ECONOMY

EDITION 5

W. McLennan
Australian Statistician

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INQUIRIES

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Contents

Preface

The fifth edition of *Measuring Australia's Economy* provides national statistics, definitions and references to further reading for over 50 major economic indicators used by analysts and the media today. Most importantly, to make this information available to all readers, particularly those without a background in economics, it is written in non-technical, simple English.

Measuring Australia's Economy includes the latest economic indicators measured by the Australian Bureau of Statistics along with indicators from other organisations and international comparisons for 11 key indicators.

Included in this edition are details of the new concepts relating to balance of payments data and sections on input-output and financial accounts.

Measuring Australia's Economy was developed in response to a need expressed by teachers, lecturers and other educators for a single, comprehensive source of economic indicator information. It has been designed as an information resource for students, analysts or anyone wishing to gain an understanding of economic indicators used to measure the performance of the Australian economy. It will enable the reader to understand exactly what an indicator is measuring, how this relates to economic activity, to look at data for an indicator over a period of time and to reference more detailed statistics or explanations if required.

ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

I trust that this publication will assist the reader to understand the Australian economy and the changes going on within it.

W. McLennan
Australian Statistician

February 1998

Relevance to Curriculum Frameworks

Measuring Australia's Economy supports the national curriculum frameworks now being applied in varying ways within schools by the State and Territory curriculum authorities. At the higher levels of the Studies of Society and Environment statements and profiles, in particular, there are requirements for students to describe and explain features of the Australian economic system and its relationship with the international economy. There is also emphasis on issues concerning Australian economic restructuring of recent years.

The material presented in Summary Measures of Economic Activity (Section 2.1), Domestic Consumption and Investment (2.3), Production (2.4), Prices and Income (2.5), Labour Force and Demography (2.6) and Financial Markets (2.7) provides concise treatment of key Australian economic features. Australia's relationship with the international economy is analysed in International Accounts (2.2) and in International Comparisons (Chapter 3). Important issues relevant to economic restructuring can be identified throughout the book.

Statistical material is presented extensively in the book and will serve well modern curriculum objectives of promoting numerical and statistical competencies amongst students.

General Information

The ABS

The Australian Bureau of Statistics (ABS) is the central statistical authority for the Australian Government and, by arrangements with the Governments of the States, provides statistical services for those Governments. It is the central agency which collects, compiles, analyses, and distributes statistics and related information. The ABS has a responsibility to provide information which supports decision making and informs the community generally.

This Publication

General inquiries concerning this publication should be referred to the Manager, Client Support, on Brisbane, (07) 3222 6155.

Comments on ways to improve this publication are welcome and should be directed to The Editor, *Measuring Australia's Economy*, Australian Bureau of Statistics, GPO Box 9817, Brisbane Qld 4001.

Graph and Table Contents

The statistics presented are the latest available at November 1997.

The statistics are generally presented in the graphs as time series for the last 10 years of monthly or quarterly data.

The tables generally present the last 3 or 6 years of annual data along with data for the latest 7 quarters or 15 months of sub-annual data.

Data Sources

The tables contain mainly ABS data, although data from non-ABS sources are also included. For ABS data, the name of the source publication and its catalogue number are included in the footnotes of the graphs and tables. If the data are from other sources, the source organisation's name is included in the footnotes.

Seasonally Adjusted and Trend Estimates

Data series in this publication include original, seasonally adjusted and trend series. Seasonally adjusted and trend series are clearly labelled. All other series are original series. Care should be taken in interpreting data for the most recent months and quarters. Some of the original and all of the seasonally adjusted and trend series are subject to revision. The ABS is increasingly placing emphasis on trend series, which are seasonally adjusted series smoothed to diminish the impact of irregular components.

It is not uncommon for movements in the original time series data to differ from those in seasonally adjusted and trend time series. Movements in a time series of original data may reflect several factors, including:

- long-term changes in the item being measured (i.e. trend movements);
- short-term irregular changes;

Seasonally Adjusted and Trend Estimates *continued*

- regular seasonal influences;
- normal 'trading', 'working' or 'pay' day patterns; and
- systematic holiday effects.

Seasonal adjustment and trend estimates help the user identify the effect of these influences on the time series. Seasonal adjustment removes the effect of the last three listed influences from the data, leaving only the trend and short-term irregular movements. Trend estimates are then obtained by removing the effects of the short-term irregularities.

Constant Price Estimates

Constant price estimates in this publication refer to estimates in 1989–90 dollar terms and measure values expressed at the average prices that prevailed that year. Period-to-period movements in constant price estimates provide what are often called 'changes in real terms'.

Explanatory Notes

ABS publications generally contain explanatory notes which describe the collection methodology and data items contained therein. Because *Measuring Australia's Economy* contains statistics from numerous sources, collection methodologies and data item descriptions have not been included. Readers are directed to the explanatory notes contained in the appropriate ABS publications for such descriptions. Explanatory Notes in *Measuring Australia's Economy* describe each economic indicator.

Further Reading

Further reading references for each indicator are generally ABS publications. The ABS uses a catalogue numbering system to describe its publications and products. The catalogue number appears in brackets after each publication, for example, *Balance of Payments and International Investment Position, Australia* (5302.0). A description of the catalogue numbering system can be found in the *Catalogue of Publications and Products* (1101.0). The origins of publications not from the ABS are also indicated.

ABS Library Extension Program

ABS data are available at a variety of libraries.

The ABS Library Extension Program (LEP) makes ABS publications freely accessible to the community via public, State, Technical and Further Education and university libraries. Many school libraries also hold ABS publications. Please contact your library to establish its opening hours and to determine whether it has the ABS data you require.

Basic ABS statistics are also freely available to the public via the Internet. The ABS StatSite contains ABS data across a range of subjects, including key economic indicators and also includes a full address list of LEP libraries across Australia.

The ABS StatSite address is http://www.abs.gov.au

ABS Library Extension Program *continued*

University students — providing that your university is a subscriber — you can obtain a more extensive range of ABS data via the Internet — the ABS Time Series Service. Contact your university librarian for assistance.

Abbreviations, Symbols and Other Usages

Symbols and Other Usages

In all tables the following symbols mean:

n.a.	not available
n.y.a.	not yet available
p	preliminary
—	nil or rounded to zero

Yearly periods shown as, e.g. 1996–97, refer to the fiscal year ended 30 June. Where figures have been rounded, discrepancies may occur between totals and the sums of the component items.

Abbreviations

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ASX	Australian Stock Exchange
c.i.f.	cost insurance freight
CLI	Composite Leading Indicator
CPI	Consumer Price Index
f.o.b.	free on board
GDP	Gross Domestic Product
GDP(A)	Gross Domestic Product (Average)
GDP(E)	Gross Domestic Product (Expenditure)
GDP(I)	Gross Domestic Product (Income)
GDP(P)	Gross Domestic Product (Production)
GNE	Gross National Expenditure
GOS	Gross Operation Surplus
ICLS	International Conference of Labour Statisticians
ILO	International Labour Organisation
IPD	Implicit Price Deflator
LEP	Library Extension Program
MFP	Multifactor Productivity
OECD	Organisation for Economic Cooperation and Development
PFCE	Private Final Consumption Expenditure
RBA	Reserve Bank of Australia
SNA	System of National Accounts
SNA(93)	System of National Accounts 1993
TWI	Trade-weighted Index

Chapter

CHAPTER 1
MEASURING ECONOMIC ACTIVITY

A large amount of the information collected and published by the ABS records economic activity. This information is collected mainly by surveys and censuses, while some is a by-product of administrative activities, for instance, information about motor vehicles registered is regularly acquired by the ABS from State motor vehicle registration authorities.

The information collected from surveys, censuses and as administrative by-products is put together to form separate measures of activity in the economy. For instance, the turnover of retailers is compiled from a survey conducted by the ABS and the number of people employed is compiled from the ABS Labour Force Survey. These measures are also referred to as *economic indicators*, which can be thought of as economic variables which change in a predictable way in relation to overall economic activity. Economic analysts use indicators along with other information to help explain what is happening in the economy and then use this knowledge to try to predict future events.

What the National Accounts Measure

There is a wide range of data series available to anyone who wishes to describe the performance of various components of the economy over time. For example, we could look at the number of houses being built, the number of cars produced, whether employment is rising or falling, the composition of exports and so on.

While these and many other statistical series produced by the ABS and other organisations are important in their own right, it is obvious that none of them in isolation can provide a complete picture of the state of the economy. The main advantage of the *national accounts* is that they provide a framework within which data from the wide variety of sources available can be combined and presented to describe the overall economic position of the nation.

In addition, the accounts provide details of the contributions of different types of economic activity to the total within a particular period. For example, we can see from the national accounts how much of our national income is derived from exports, or how much of the national production is contributed by the manufacturing sector.

Gross Domestic Product (GDP)

The summary measure of the nation's economic position provided in the national accounts is *gross domestic product*, or *GDP*. GDP may be defined as the income generated by production taking place within Australia's domestic territory. The term *gross* in GDP indicates that no deduction has been made for the consumption of fixed capital (also known as depreciation); in other words, the gradual using up of capital equipment through wear and tear is not accounted for when measuring GDP.

GDP and Social Wellbeing

It is important to recognise that the 'performance' of the economy, as represented in national accounting measures such as growth of the national income or GDP, is not an end in itself. Movements in GDP at constant prices are an important measure of economic growth, but there is no single indicator which can describe all aspects of the wellbeing of a country's citizens.

There are significant aspects of the 'quality of life' which cannot be comprehended in a system of economic accounts, just as there are significant aspects of an individual's wellbeing which are not measured in the conventional concept (or any other concept) of that individual's income.

Notwithstanding their limitations, especially in relation to uses for which they were never designed, the national accounts provide vital information for a range of important purposes. The conventions which are followed in compiling them are fully articulated. They have been developed and refined in the course of the past half-century, by experts who understand that there are many questions which cannot be answered by any system which relies solely on the measuring rod of money (even though techniques are available for removing the effects of changes in the value of money). The system of national accounts also provides a framework or structure which can be, and has been, adapted and extended to facilitate the examination of various economic and social policy issues.

Chapter

CHAPTER 2
ECONOMIC INDICATORS

It is possible to get a picture of the Australian economy by reading newspapers, journals, economic texts, academic reports and government publications.

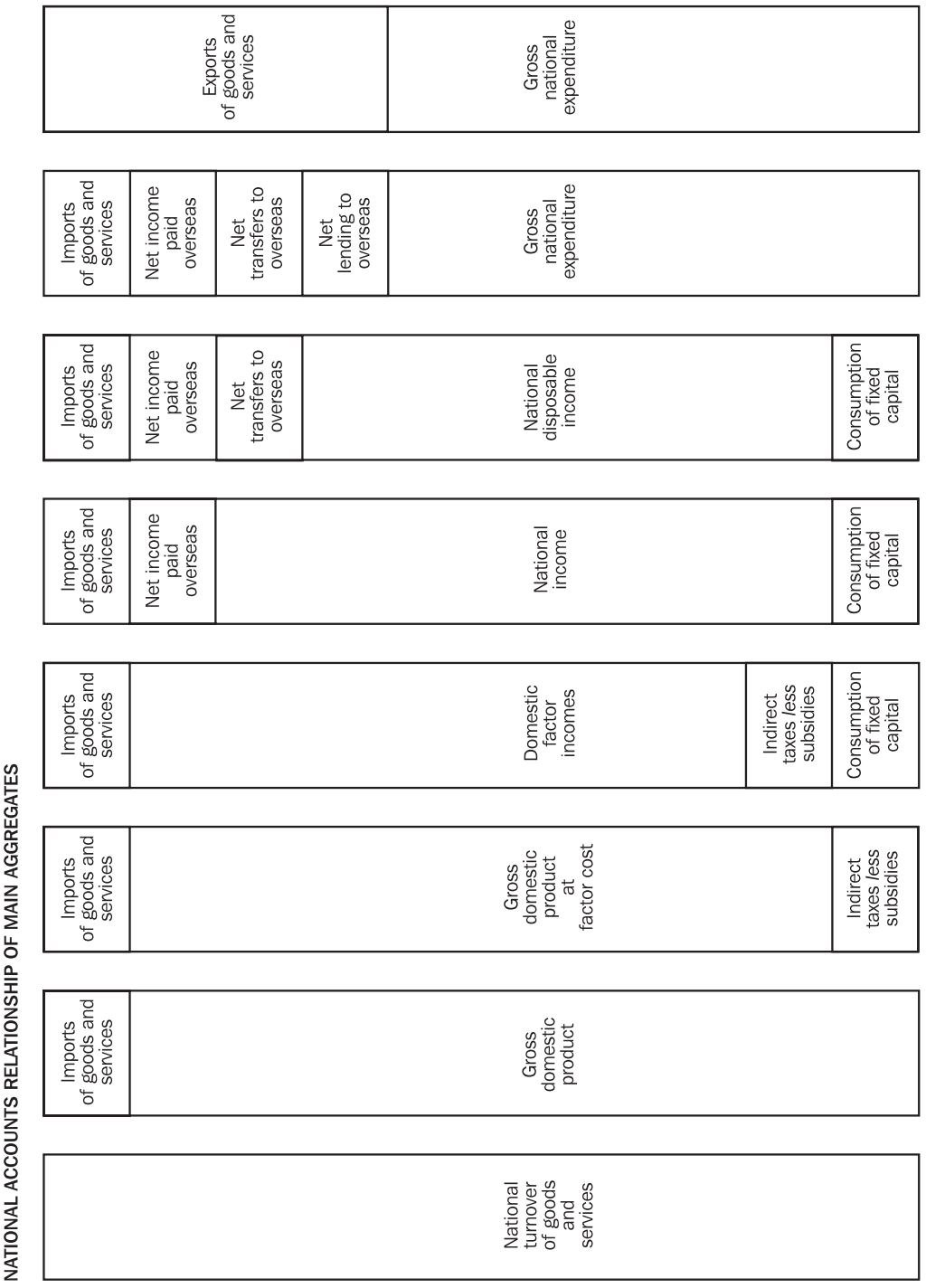
Analysis of the economy should be based on the major economic indicators. A combination of a knowledge of economic indicators and an understanding of the social and political environment will help to assess why the economy has changed over time.

Whenever the economy is analysed, arguments should be backed up using relevant economic and other data.

Economic indicators in this publication can be used to see how the economy has changed over the last 10 years.

Section 2.1
Summary Measures of Economic Activity

2.1.1 National Accounts



Explanatory Notes

The essential function of the national accounts is to provide a systematic summary of national economic activity. The structure of the national income and expenditure accounts provides an economically meaningful aggregation of the wide range of diverse transactions occurring in the economy and the various entities (transactors) involved in those transactions.

The basic structure of the national accounts is determined by the classification of transactors into institutional sectors and the classification of transactions. The four domestic institutional sectors grouped according to their roles, (with the emphasis being on the differences in their financial behaviour in the economy) are: corporate trading enterprises; financial enterprises; households; and general government.

The types of accounts reflect the major economic processes occurring in the economy, namely production, the distribution of incomes, consumption, saving and investment. Accordingly, they reflect the key economic flows of the Keynesian system. The national income and expenditure accounts are composed of three major types of accounts: production accounts; income and outlay accounts; and capital accounts. A fourth account, the overseas transactions account, records transactions between the domestic economy and the rest of the world.

Each of these accounts is produced for the nation as a whole and these four accounts form the consolidated summary accounts. An important feature of the accounts is that they are a double entry system, and therefore are fully balanced. Every entry has a counterpart entry, i.e. every outgoing reappears elsewhere as an incoming, reflecting the circularity of the economic process.

The diagram on the facing page shows how the various national accounting aggregates are related to each other. National turnover can be viewed as the total supply of goods and services to the market, free of duplication, in a given period. In other words, it is the total supply available in Australia to final buyers.

The first block views national turnover as the sum of all final expenditures on goods and services in the same given period. These final expenditures are defined to include increases in stocks and exports, which are considered to be final expenditures from the point of view of the domestic economy. The supply and expenditure views do not quite represent the same physical goods because goods produced in the current period may pass through stock holdings before being included in consumer and capital expenditures or in exports in subsequent periods. On the other hand, the views do represent the same services, because services are supplied and used simultaneously.

Further Reading

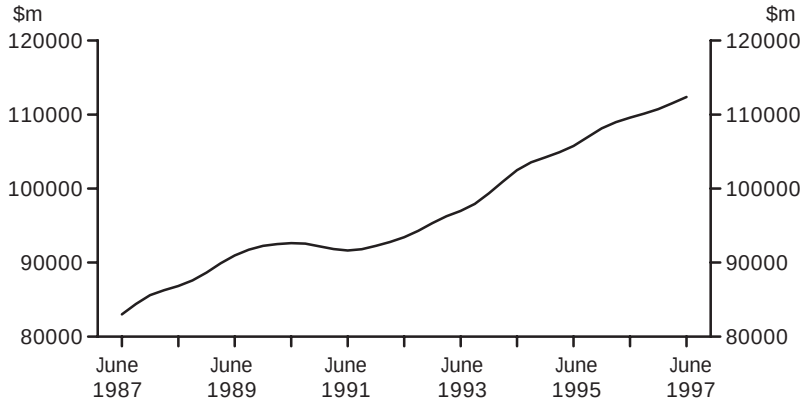
Australian National Accounts: Concepts, Sources and Methods (5216.0)
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

2.1.2 Gross Domestic Product

Comment

The Australian economy experienced growth through the late 1980s and early 1990s. This was followed by a sustained decline in economic activity (a recession) from September quarter 1990 to June quarter 1991 with 4 quarterly decreases in GDP(A), lasting longer than the 1982–83 recession. Since then, continued growth in GDP(A) has been recorded. Most recently, growth has increased from 0.6% in June quarter 1996 to 0.8% in June quarter 1997.

GDP(A) AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

MEASURES OF GROSS PRODUCT AT AVERAGE 1989–90 PRICES

Period	*GDP(I) income based* $m	*GDP(E) expenditure based* $m	*GDP(P) production based* $m	*GDP(A) average* $m
		ANNUAL		
1991–92	368 938	372 482	369 254	370 224
1992–93	381 046	386 276	381 388	382 903
1993–94	399 557	402 622	399 392	400 523
1994–95	418 830	416 856	418 208	417 964
1995–96	433 892	433 322	433 854	433 688
1996–97	445 922	442 397	445 605	444 641
		QUARTERLY (TREND)		
1995–96				
December	108 216	107 869	108 282	108 122
March	109 050	108 831	109 028	108 970
June	109 786	109 542	109 416	109 581
1996–97				
September	110 517	109 922	109 914	110 118
December	111 180	110 208	110 808	110 732
March	111 875	110 774	111 900	111 516
June	112 600	111 576	112 901	112 359

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

Gross domestic product (GDP) is an aggregate measure of the value of economic production in Australia in a given period.

Three independent measures of GDP at average 1989–90 prices are produced each quarter. They are the sum of goods and services produced at each stage of production less the costs of production, GDP(P); the sum of incomes generated by production, GDP(I); and the sum of final expenditure on goods and services produced, plus exports minus imports, GDP(E). A fourth measure of GDP, calculated as the average of the above three, is referred to as GDP(A).

Analysis has shown that constant price GDP(A) has provided the most satisfactory indicator of short-term seasonally adjusted or trend growth in GDP.

Since a current price measure of GDP(P) is not produced, the preferred current price measure of GDP is GDP(I).

Further Reading

A Guide to the Australian National Accounts (5235.0)
Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

Australian Economic Indicators (1350.0)
See feature article in the May 1994 issue, 'Real Estimates in the National Accounts'.

Australian National Accounts: Concepts, Sources and Methods (5216.0).
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

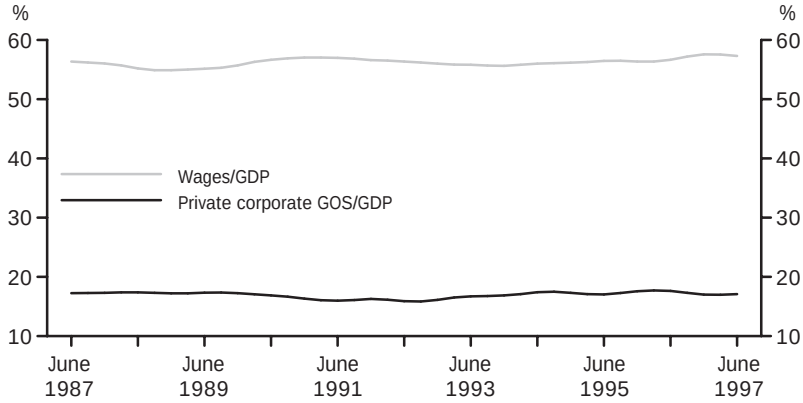
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Provides detailed presentation of quarterly national accounts at both current prices and average 1989–90 prices in original, seasonally adjusted and trend terms.

2.1.3 National Accounts Domestic Production Account

Comment

The ratio of wages, salaries and supplements to GDP at factor cost, decreased for 11 consecutive quarters from June quarter 1991 to December quarter 1993, at which latter point the ratio stood at 55.6%. However, by December quarter 1996 the ratio had risen to 57.6%, the highest level since September quarter 1986. Movement in the ratio of gross operating surplus to GDP at factor cost or income of corporate trading enterprises from production, tends to display an inverse relationship to the cost of production.

WAGES, SALARIES AND SUPPLEMENTS, AND PRIVATE CORPORATE GOS TO GDP AT FACTOR COST, TREND



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

DOMESTIC PRODUCTION ACCOUNT(a)

Particulars	*1991–92* $m	*1992–93* $m	*1993–94* $m	*1994–95* $m	*1995–96* $m	*1996–97* $m
Final consumption expenditure	313 702	328 890	344 244	363 475	386 941	400 888
Gross fixed capital expenditure						
Private	56 758	62 932	70 082	77 048	78 622	84 745
Public enterprises & general government	20 591	19 372	18 184	20 422	19 509	18 642
Increase in stocks	–2 043	593	1 272	2 785	3 047	–1 357
Gross national expenditure	*389 008*	*411 787*	*433 782*	*463 730*	*487 763*	*502 918*
Net exports	2 234	–855	–818	–8 589	–766	2818
Gross domestic product (GDP(E))	**391 242**	**410 932**	**432 964**	**455 141**	**486 997**	**505 736**
Statistical discrepancy	–3 713	–5 557	–3 284	2 153	628	4 036
Gross domestic product (GDP(I))	**387 529**	**405 375**	**429 680**	**457 294**	**487 625**	**509 772**
Wages, salaries and supplements	194 245	201 273	211 648	225 452	240 724	256 209
Gross operating surplus	148 989	158 382	167 141	175 505	186 059	189 955
Gross domestic product at factor cost	*343 234*	*359 655*	*378 789*	*400 957*	*426 783*	*446 164*
Indirect taxes less subsidies	44 295	45 720	50 891	56 337	60 842	63 608
Gross domestic product (GDP(I))	**387 529**	**405 375**	**429 680**	**457 294**	**487 625**	**509 772**

(a) Data are available and published quarterly.

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

The domestic production account is a consolidated summary account of all the production activity which takes place in Australia. This account records the incomes generated in the production process and the value of final goods and services produced.

On the expenditure side the domestic production account (GDP(E)) records receipts from sales of goods and services (including goods produced for own use) to final domestic consumers, increases in stocks and exports minus imports.

On the income side of the production account (GDP(I)) are recorded the costs of production including factor incomes, i.e. wages, salaries and supplements, gross operating surplus (the income of enterprises from production) and net indirect taxes paid to government.

Conceptually, GDP(I) is equivalent to GDP(E). However, in practice, the statistical discrepancy, reflecting net errors and omissions, is the difference between these two totals. When compiling the national income and expenditure accounts it is necessary to show the statistical discrepancy as a contraentry in one of the other summary accounts. It has been included in the capital account since the Australian national accounts were first compiled in their current form.

The domestic production account is analogous to accounts used in business accounting and is, in effect, a consolidation of the trading accounts of individual enterprises from all sectors.

Further Reading

A Guide to the Australian National Accounts (5235.0)
Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

Australian National Accounts: Concepts, Sources and Methods (5216.0).
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

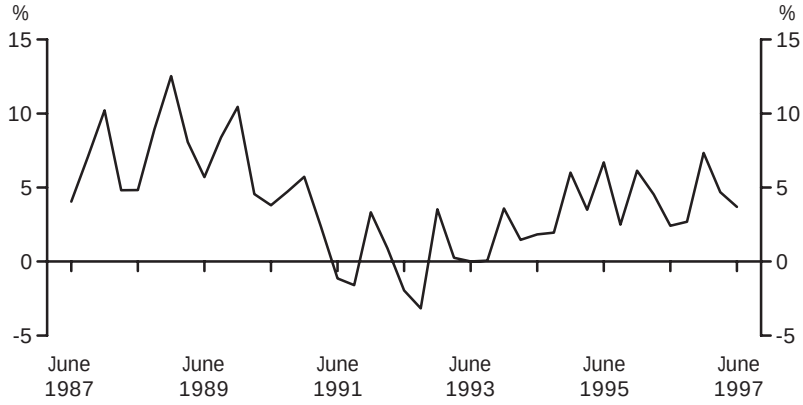
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Detailed presentation of quarterly national accounts at both current prices and average 1989–90 prices in original, seasonally adjusted and trend terms.

2.1.4 National Accounts Income and Outlay Account

Comment

The ratio of national saving to national disposable income in original terms, fluctuates from quarter to quarter with peaks recorded in every December quarter between 1987 and 1996. The ratio peaked in December quarter 1988 and then decreased to a low in September quarter 1992 before generally increasing again.

PROPORTION OF NATIONAL SAVING TO NATIONAL DISPOSABLE INCOME



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

NATIONAL INCOME AND OUTLAY ACCOUNT

	1991–92	*1992–93*	*1993–94*	*1994–95*	*1995–96*	*1996–97*
Particulars	$m	$m	$m	$m	$m	$m
Wages, salaries and supplements	194 245	201 273	211 648	225 452	240 724	256 209
Net operating surplus	89 175	95 603	101 975	108 706	116 529	117 881
Domestic factor incomes	*283 420*	*296 876*	*313 623*	*334 158*	*357 253*	*374 090*
Less Net income paid overseas(a)	15 443	13 420	13 642	15 895	16 736	18 451
Plus Indirect taxes	50 299	52 048	57 343	62 547	67 003	70 462
Less Subsidies	6 004	6 328	6 452	6 210	6 161	6 854
National income	*312 272*	*329 176*	*350 872*	*374 600*	*401 359*	*419 247*
Less Net unrequited transfers to overseas	–2 097	–542	–66	–393	–1 043	–1 205
National disposable income	**314 369**	**329 718**	**350 938**	**374 993**	**402 402**	**420 452**
Final consumption expenditure						
Private	242 253	254 447	267 063	283 655	302 644	314 289
Government	71 449	74 443	77 181	79 819	83 941	86 599
Saving	667	828	6 694	11 519	15 817	19 564
Disposal of income	**314 369**	**329 718**	**350 938**	**374 993**	**402 402**	**420 452**

(a) Including property income, labour income and extraordinary insurance claims from overseas.

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

The national income and outlay account is a consolidated account which describes the distribution of incomes in the economy. The account shows how much of the national income is spent on final consumption. That part of income which is not spent in this way is saving.

The national income and outlay account records wages, salaries and supplements, net operating surplus and indirect taxes less subsidies. From this income are deducted net payments of income and miscellaneous transfers to overseas to yield national disposable income.

The outlay or disbursements side of the account shows this disposable income as being used for final consumption expenditure with the balance being the nation's saving — a source of finance for gross capital formation.

Further Reading

A Guide to the Australian National Accounts (5235.0)
Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

Australian National Accounts: Concepts, Sources and Methods (5216.0)
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

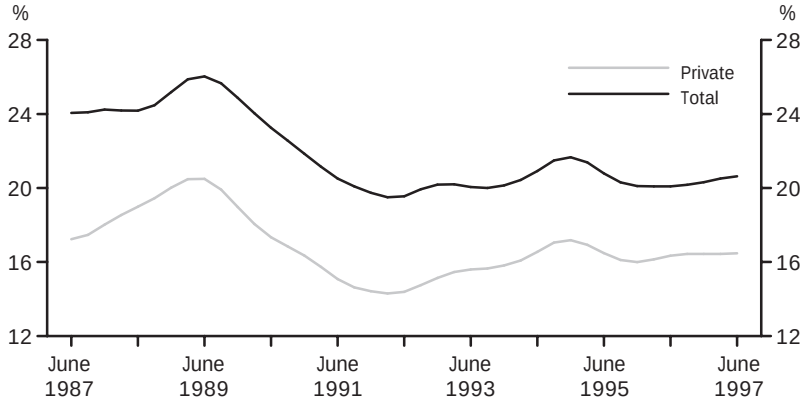
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Contains quarterly data for the last 9 quarters for the national income and outlay accounts including quarterly national income and outlay accounts for households and general government.

2.1.5 National Accounts Capital Account

Comment

The proportion of private gross fixed capital expenditure to GDP(E) fell from 20.5% in June quarter 1989 to a low of 14.3% in March quarter 1992 but has subsequently recovered, reaching 16.4% in June quarter 1997. The proportion of total gross fixed capital expenditure to GDP(E) reflects the movements in the private sector.

PROPORTION OF PRIVATE AND TOTAL FIXED CAPITAL EXPENDITURE TO GDP(E) AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

NATIONAL CAPITAL ACCOUNT

	1991–92	*1992–93*	*1993–94*	*1994–95*	*1995–96*	*1996–97*
Particulars	$m	$m	$m	$m	$m	$m
Consumption of fixed capital	59 814	62 779	65 166	66 799	69 530	72 074
Other saving(a)	40	6 631	12 149	9 816	7 197	1 120
Household saving	11 901	9 990	9 010	11 228	12 950	16 027
General government surplus on current transactions	–11 274	–15 793	–14 465	–9 526	–4 330	2 417
Finance of gross accumulation	**60 481**	**63 607**	**71 860**	**78 317**	**85 347**	**91 638**
Gross fixed capital expenditure						
Private						
Dwellings	17 504	20 073	23 054	24 466	21 655	21 729
Non-dwelling construction	11 335	10 241	10 701	11 822	14 833	17 606
Equipment	23 256	27 710	30 542	35 197	36 656	39 297
Real estate transfer expenses	4 663	4 908	5 785	5 563	5 478	6 113
Public enterprises	11 784	10 184	9 573	11 412	10 737	9 070
General government	8 807	9 188	8 611	9 010	8 772	9 572
Total	*77 349*	*82 304*	*88 266*	*97 470*	*98 131*	*103 387*
Increase in stocks	–2 043	593	1 272	2 785	3 047	–1 357
Statistical discrepancy	–3 713	–5 557	–3 284	2 153	628	4 036
Net lending to overseas	–11 112	–13 733	–14 394	–24 091	–16 459	–14 428
Gross accumulation	**60 481**	**63 607**	**71 860**	**78 317**	**85 347**	**91 638**

(a) Increase in income tax provisions, undistributed income and extraordinary insurance claims paid.

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

The national capital account shows how saving and consumption of fixed capital are used to finance the gross accumulation of capital. This account thus shows the saving and investment flows taking place in the economy.

If, as is currently the case in Australia, the nation's saving is not sufficient to pay for all the capital equipment needed for Australian production, the shortfall must be borrowed from overseas. The amount borrowed from overseas is shown in the national capital account as a negative entry for net lending to overseas.

The national capital account shows, on the receipts side, consumption of fixed capital transferred from the capital account and saving, transferred from the national income and outlay account.

On the payments side are purchases by all sectors of capital goods, the increase in stocks of all sectors and a balance described as net lending to overseas.

In principle, the sum of net lending for all domestic sectors is equal to the nation's net lending to overseas. However, in practice, net lending for each sector is derived as a balancing item and therefore includes each sector's share of the statistical discrepancy, which represents net errors and omissions in the accounts.

Further Reading

A Guide to the Australian National Accounts (5235.0)
Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

Australian National Accounts: Concepts, Sources and Methods (5216.0)
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

Australian National Accounts: Financial Accounts (5232.0)
Contains information on the level (stock) of financial assets and liabilities of each sector of the economy and transactions (flow of funds) between the sectors.

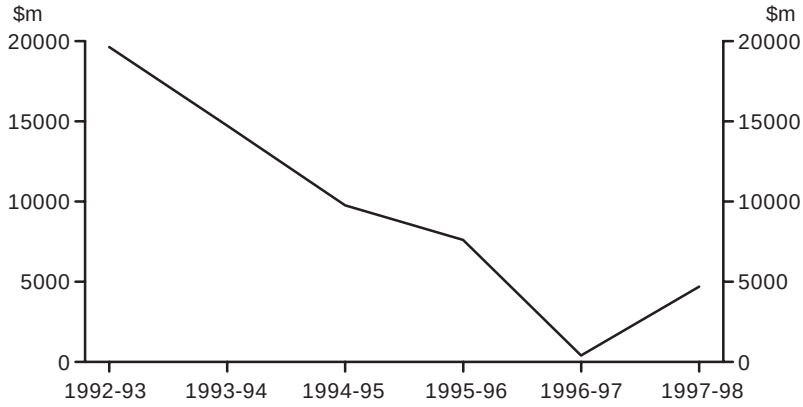
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Contains quarterly data for the last 9 quarters for the national capital account as well as other national accounting aggregates.

2.1.6 Government Financial Estimates

Comment

The adjusted deficit (adjusted for net advances) for all levels of governments combined is expected to rise from $403m in 1996–97 to $4,688m in 1997–98. The adjusted deficit excludes the effects of most asset sales and debt refinancing.

ADJUSTED DEFICIT OF COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS COMBINED



Source: ABS, Government Financial Estimates, Australia (5501.0), Annual data.

ECONOMIC TRANSACTIONS OF COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENT COMBINED

	Total current outlays	*Total capital outlays*	*Total outlays*	*Total revenue*	*Total financing(a)*	*Deficit (adjusted for net advances)(b)*
Period	$m	$m	$m	$m	$m	$m
1992–93	144 948	19 108	164 055	139 434	24 621	19 635
1993–94	152 276	13 538	165 814	149 551	16 263	14 728
1994–95	158 481	18 740	177 221	161 014	16 207	9 761
1995–96	168 203	7 494	175 697	174 005	1 692	7 606
1996–97	172 773	9 532	185 609	185 609	–3 304	403
1997–98(c)	179 079	11 647	190 726	190 119	607	4 688

(a) Financing is the difference between total outlays, and revenue and grants received. (b) Deficit/surplus comprises financing less increase in provisions. (c) Forward estimate.

Source: ABS, Government Financial Estimates, Australia (5501.0).

Explanatory Notes

Government financial estimates provide forecasts of outlays and revenue for the forward financial year (the budget year), preliminary estimates for the financial year just completed and actual expenditure and revenue for the four previous years. The estimates cover both government organisations mainly funded from taxation (called general government) and government enterprises providing goods and services for the market (public trading enterprises).

The estimates are compiled from Commonwealth and State government budgets which are usually presented in May to September each year, and from estimates supplied by individual authorities not funded directly from the budget (e.g. electricity authorities, public transport authorities, statutory authorities and local government authorities).

Government finance statistics can be used to monitor fiscal policy. When government increases its spending on pensions and benefits paid to households, for example, there is a tendency for aggregate demand to rise. A similar effect can be obtained by reducing taxation so that more money remains in the hands of private consumers. Conversely, government can reduce expenditure or increase taxes in an attempt to reduce demand.

Financing is a measure of the means by which governments fund any shortfall of receipts over payments. This financing will affect the level of government debt. The deficit (surplus) is a broad indication of the level of financing required. The ABS uses the adjusted deficit to remove the effects of most asset sales, (i.e. sales of equity) and the repayment of State debt to the Commonwealth.

Further Reading

Government Finance Statistics, Australia (5512.0)
Provides final annual data of the financial transactions of the non-financial public sector for all levels of government, particularly details of the purposes of public sector spending.

Government Financial Estimates, Australia (5501.0)
Contains outlays, revenue and financing transactions for all levels of government covering the forward (or budget) year and the previous five years.

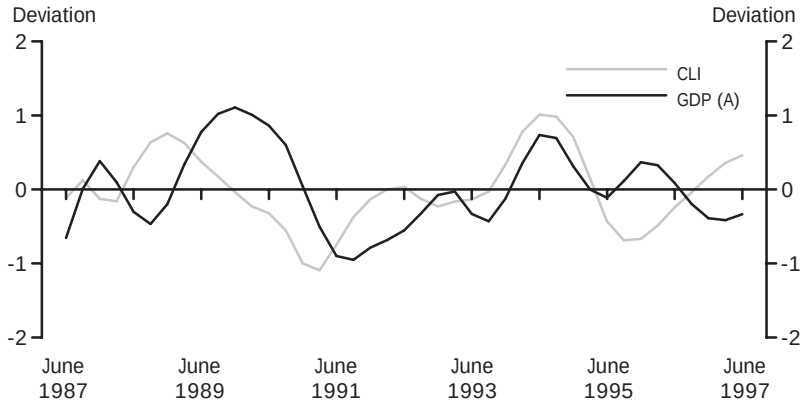
Public Sector Financial Assets and Liabilities, Australia (5513.0)
Contains annual statistics on the financial assets and liabilities of the Australian non-financial public sector.

2.1.7 Composite Leading Indicator

Comment

On average during the 1970s and 1980s, the experimental Composite Leading Indicator (CLI) led turning points in the business cycle in GDP(A) by around 2 quarters, but the lead time for the peaks and troughs can vary considerably. Currently, the last turning point in the CLI is a trough in the September quarter 1995, which lagged the corresponding trough in the business cycle in GDP(A) (the reference series) by one quarter. The latest cycle in the reference series was largely attributable to the effects of a good farm season in 1995–96. Since the CLI does not include a farm component, it is not unusual for it to lag the reference series during a farm cycle. Research showed that the CLI continues to lead the non-farm component of the reference series. In the June quarter 1997, the CLI rose 0.10%.

CLI AND GDP(A) DEVIATION FROM LONG-TERM TREND



Source: ABS, Australian Economic Indicators (1350.0), Quarterly data.

CLI AND GDP(A) DEVIATION FROM LONG-TERM TREND

Quarter	*CLI deviation from long-term trend* %	*CLI change from previous quarter* %	*GDP(A) deviation from long-term trend* %	*GDP(A) change from previous quarter* %
1995–96				
December	–0.67	0.02	0.37	0.26
March	–0.49	0.18	0.33	–0.04
June	–0.24	0.25	0.09	–0.24
1996–97				
September	–0.04	0.20	–0.20	–0.29
December	0.17	0.21	–0.39	–0.19
March	0.36	0.19	–0.41	–0.02
June	0.46	0.10	–0.33	0.08

Source: ABS, Australian Economic Indicators (1350.0).

Explanatory Notes

The ABS has developed an experimental Composite Leading Indicator (CLI) to help in the detection of turning points between successive expansions and slowdowns in economic activity.

The CLI is a single time series produced by aggregating the business cycles in eight economic indicators, which had typically shown turning points ahead of the business cycle in constant price GDP(A) from the early 1970s to the early 1990s. These components provide a balanced coverage of several aspects of economic activity, which include monetary policy (real interest rate), an early measure of terms of trade (ratio of commodity prices to import prices), external demand (United States real GDP), pressures on production capacity (job vacancies), internal demand (housing finance commitments), market confidence (the All Industrials Index), and entrepreneurs' expectations on business prospects and future production.

The expansion and contraction phases identified in a business cycle are periods of rise and fall in economic activity relative to the historical long-term trend. Constant price GDP(A) is the reference measure of economic activity used by most decision makers in Australia.

The CLI is designed so that the direction of its growth indicates the likelihood of an expansion or a slowdown relative to the historical long-term trend of constant price GDP(A) in the next 1 to 6 quarters. The mean lead time of the CLI is about 2 quarters.

The CLI is used to detect turning points in the business cycle in GDP(A), not to forecast the level of any measure of economic activity.

The ABS conducts a survey of business expectations to give a short and medium-term, quantitative measure of the expected change of a number of business performance indicators. Results are available in *Australian Business Expectations* (5250.0), described in the Further Reading section below.

Further Reading

Australian Business Expectations (5250.0)
Contains estimates of future economic activity based on the business expectations of 3,000 businesses operating in Australia. Estimates, by industry, of the expected changes are presented for a range of performance indicators covering trading performance, stocks, capital expenditure, employment, operating expenses and international trade.

Australian Economic Indicators (1350.0)
The CLI is released every quarter and is published in *Australian Economic Indicators*.

Information Paper: An Experimental Composite Leading Indicator of Australian Economic Activity (1347.0)
This information paper describes the nature and construction of the experimental CLI.

2.1.8 Input-Output Tables

Comment

Input-output tables describe the supply and disposition of the products of an entire economic system for a particular period. Tables may be compiled for industries or commodities. The ABS compiles industry by industry tables. A row in the table shows the disposition of the output of an industry and a column shows the origin of the inputs into an industry. Since the output of an industry must be equal to the sum of its inputs (including gross operating surplus), the row total for an industry must be equal to the corresponding column total. They are two sides of an accounting statement. This is illustrated in the table below where:

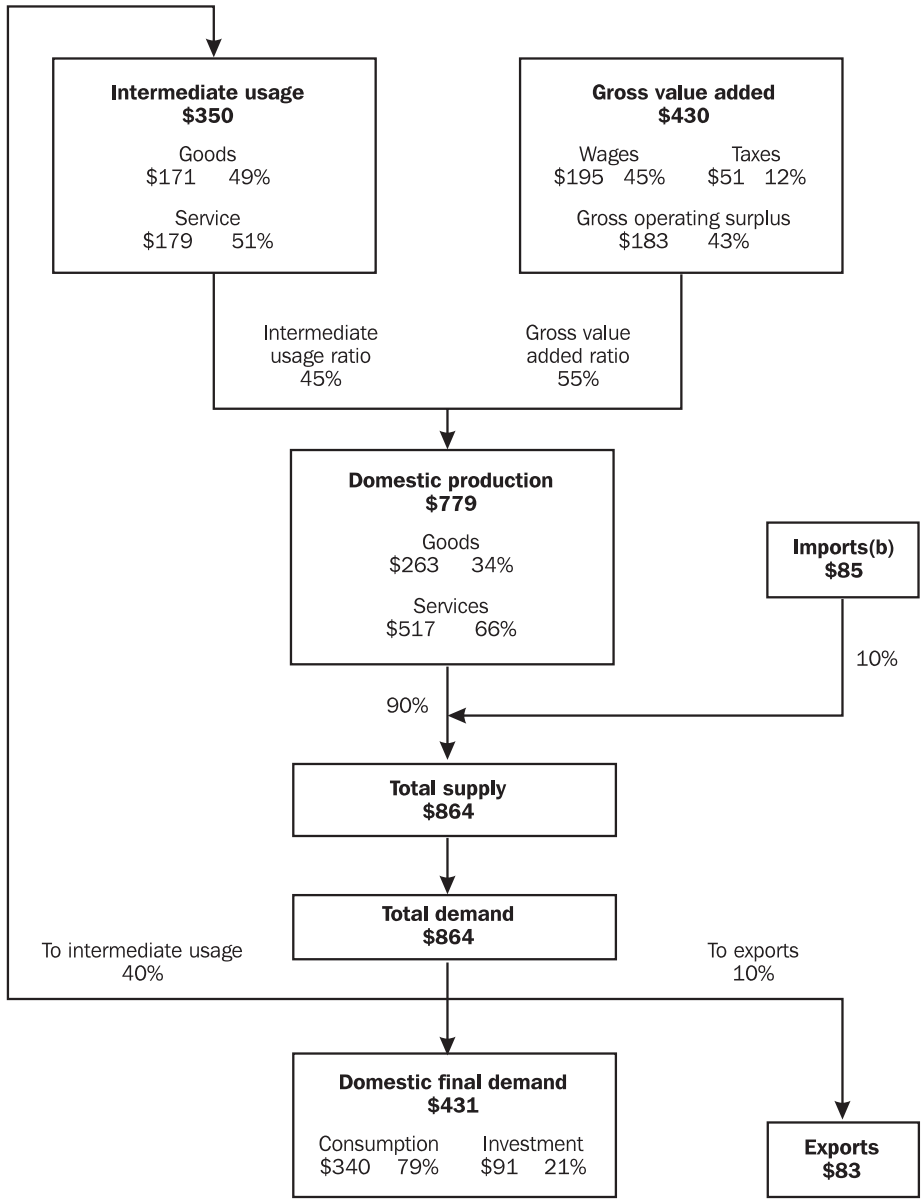
- The total of column (1) Goods is equal to the total of row (1) Goods.
- The sum of column (4) Domestic consumption and column (5) Exports (which equals column (6) Final demand) is equal to the sum of row (4) Wages, salaries and supplements, row (5) Gross operating surplus, row (6) Taxes, row (7) Sales by final buyers and row (8) Imports.
- Column (7) Total supply is equal to row (9) Australian production.

INDUSTRY BY INDUSTRY FLOW MATRIX, BASIC VALUES, 1993–94

	Use						
Supply	*Goods (1)* $'000m	*Services (2)* $'000m	*Intermediate usage (3) = (1)+(2)* $'000m	*Domestic consumption (4)* $'000m	*Exports (5)* $'000m	*Final demand (6) = (4) + (5)* $'000m	**Total supply (7) = (3) + (6)** **$'000m**
Goods(1)	81	49	130	60	53	113	**243**
Services(2)	41	132	173	322	19	341	**514**
Intermediate usage(3)	*121*	*181*	*303*	*381*	*73*	*454*	***757***
Wages, salaries and supplements(4)	38	157	195	—	—	—	**195**
Gross operating surplus(5)	50	134	183	—	—	—	**183**
Taxes(6)	7	22	29	22	1	23	**51**
Sales by final buyers(7)	1	—	1	–1	—	–1	**—**
Imports(8)	25	20	46	29	10	39	**85**
Australian production(9)	**243**	**514**	**757**	**431**	**83**	**514**	**1 271**

Source: ABS, Australian National Accounts: Input-Output Tables (5209.0).

THE AUSTRALIAN ECONOMY FLOW OF GOODS AND SERVICES, 1993–94(a) ($'000m)



(a) Flows are based on 1993–94 input-output tables.
(b) Including re-exports.

Source: Derived from Australian National Accounts: Input-Output Tables (5209.0)

Input-output table for two industry sectors

The links between the table and the diagram are explained by working through the following formulas.

Intermediate usage ($350,000m) in the diagram is derived by summing from column 3 of the table: Intermediate usage ($303,000m); Sales by final buyers ($1,000m); and Imports ($46,000m).

Gross value added ($430,000m) in the diagram is derived by summing from column 7 of the table: Wages, salaries and supplements ($195,000m); Gross operating surplus ($183,000m); and taxes ($51,000m).

Domestic production ($779,000m) in the diagram is derived by summing: Intermediate usage from column 3 of the table ($303,000m); total final demand at basic values from column 6 ($454,000m); and the taxes payable on those final demand items (see column 6) ($23,000m).

Imports ($85,000m) in the diagram is total imports, column 7, in the table.

Total supply ($864,000m), which must equal total demand, is the sum of Domestic production ($779,000m) and Imports ($85,000m).

Domestic final demand ($431,000m) in the diagram is derived from the table by subtracting total Exports ($83,000m), column 5, from total Final demand ($514,000m), column 6.

Exports ($83,000m) in the diagram is total exports, column 5, in the table.

Total demand ($864,000m), which must equal total supply, is the sum of Domestic final demand ($431,000m), Intermediate usage ($350,000m), and Exports ($83,000m).

Explanatory Notes

Input-output tables show the structure of a country's entire production system for a particular period, usually one year. They show which goods and services are produced by each industry and how they are used (e.g., some goods, such as cars, are sold to final consumers while others, such as steel, are used as inputs by other industries in producing more goods and services). The tables are based on the principle that the value of the output of each industry can be expressed as the sum of the values of all the inputs to that industry plus any profits made. All the goods and services produced in a period are identified as being used as inputs by industries in their production process, being sold to final users of the goods and services (either in Australia, or overseas as exports), or contributing to the change in stocks (an increase in stocks if more goods are produced than purchased or a run-down in stocks if purchases exceed production). For the production system as a whole, the sum of all outputs must equal the sum of all inputs and, for the economy as a whole, total supply must equal total demand (stocks provide the mechanism which balances supply and demand).

Input-output tables can be directly related to the domestic production account. The income side of the domestic production account shows the amount of income generated in the economy accruing to labour (in the form of wages, salaries and supplements) and to capital (as profits or, in national accounting terms, gross operating surplus). The expenditure side of the account shows the value of goods and services entering into the various categories of final demand.

The input-output tables provide a much more detailed disaggregation of the domestic production account than is available in the national income, expenditure and product accounts. The latter only supply details of the end results of economic activity, whereas the input-output tables provide a means of tracing flows of goods and services step by step through the production process. The extra detail provided by the input-output tables is essential for many analyses.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0)
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).

Australian National Accounts: Input-Output Tables (5209.0)
Shows input by industry and output by commodity group; industry-by-industry flow matrices; direct and total requirement coefficient matrices, employment by industry and multipliers. Also provides detailed definitions and explanations of the concepts and structure of Australian input-output tables; appendixes show relationship of input-output and national income and expenditure concepts and aggregates, input-output classification in terms of ANZSIC, a key between input-output industries and industry groups used in detailed and aggregated tables.

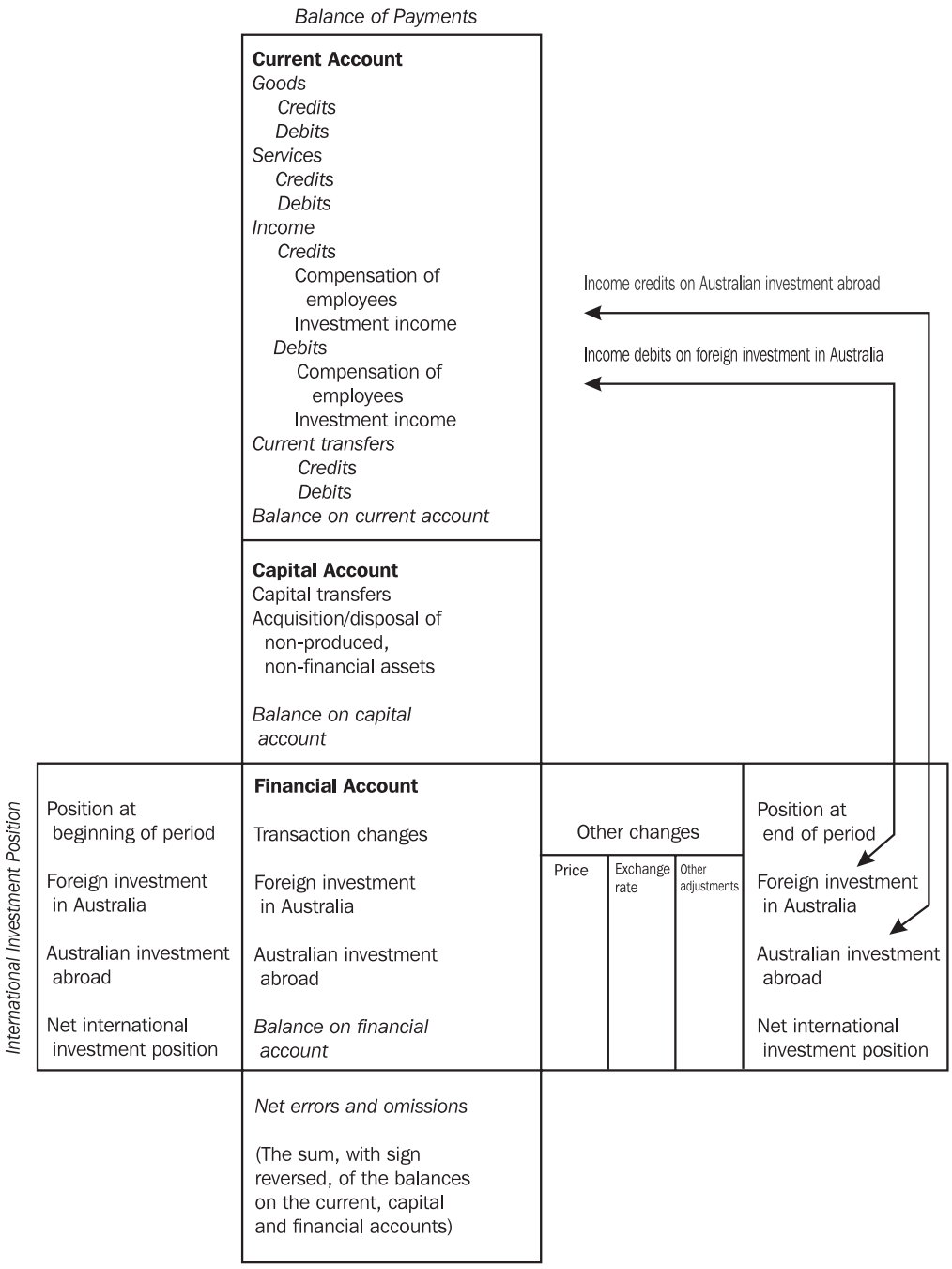
Australian National Accounts: Input-Output Tables, Commodity Details (5215.0)
Provides detailed information about the Input-Output Commodity Classification. Also shows the value of Australian production, imports and exports for over 1,000 commodities classified to the industry from which each originates, such as agriculture, manufacturing, business services and personal services.

Information Paper: Australian National Accounts: Introduction to Input-Output Multipliers (5246.0)
Contains information about the compilation and interpretation of input-output multipliers. Output, income and employment multipliers provide, respectively, a measure of the effects of an exogenous change in final demand on: output of industries in the economy, income earned by households because of new outputs, and employment that is expected to be generated because of new outputs. Import multipliers provide a measure of the effects on usage of imports by all industries of the economy resulting from a change in final demand for the output of a given industry.

Section 2.2
International Accounts

2.2.1 Balance of Payments and International Investment Position

RELATIONSHIP BETWEEN THE BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATEMENTS



Explanatory Notes

International accounts statistics cover the closely related and integrated statistics on Australia's balance of payments and international investment position. Transaction changes measured in the financial account of the balance of payments are identical to the transactions measured in the international investment position. Australia's international accounts statistics are compiled in accordance with the Fifth Edition of the International Monetary Fund's *Balance of Payments Manual*.

Australia's balance of payments provides a statistical statement that systematically summarises the economic transactions between residents of Australia and residents of other countries. Transactions cover the provision (changes in ownership) of goods, services, income, and financial claims on and liabilities to the rest of the world. Most transactions are exchanges i.e. real resources, (e.g., wheat) provided in exchange for financial claims (e.g., foreign exchange), and the system reflects the double entry of these offsetting transactions. However, not all transactions are exchanges, so the system also includes offset entries (such as for gifts) which are classified as transfers. These entries offset the provision of real and financial resources when nothing is provided in exchange.

Statistics about Australia's international investment position provide the balance sheet of the stock of foreign financial assets and liabilities of Australian residents. They integrate the balance sheet positions with information on increases and decreases in the levels of these assets and liabilities as a result of the changes due to both transactions as shown in the financial account of the balance of payments, and other non-transaction changes that affect the volume and value of the stock of financial assets and liabilities without any transaction taking place.

Further Reading

Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0).
Expected to be released in 1998, will provide a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

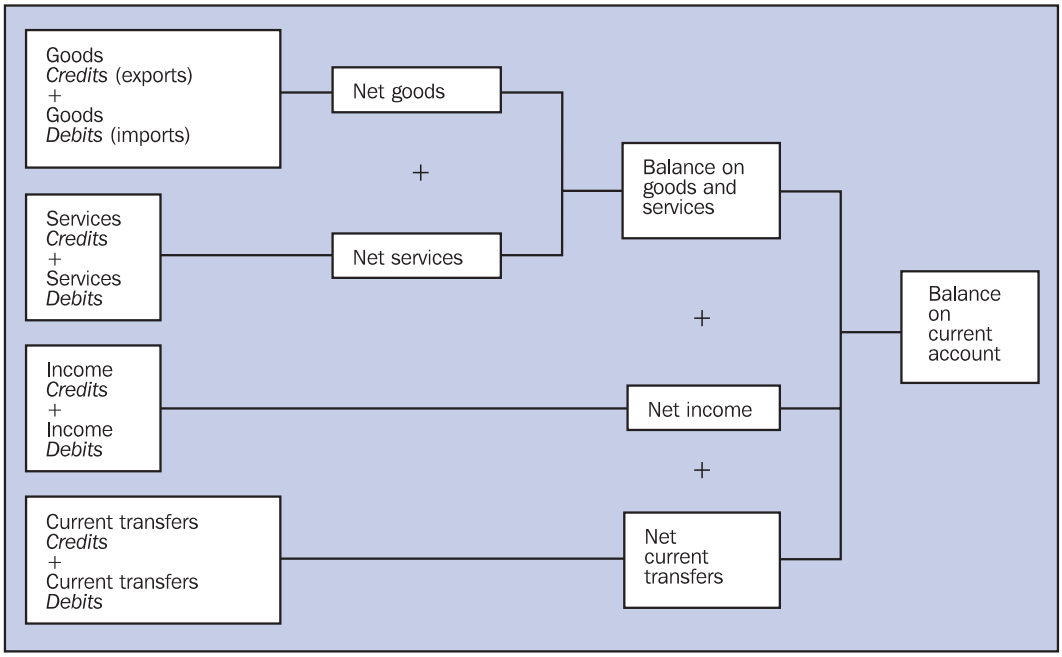
Balance of Payments Manual, 5th edition, 1993
Contains international standards issued by the International Monetary Fund for the compilation of balance of payments and related data on the international investment position.

Information Paper: Implementing New International Statistical Standards in ABS International Accounts Statistics, 1997 (5364.0)
Details implementation of new international standards in ABS international accounts statistics. It includes a brief description of the new statistical framework, a comparison with former frameworks, and details of the changes made in balance of payments and international investment statistics.

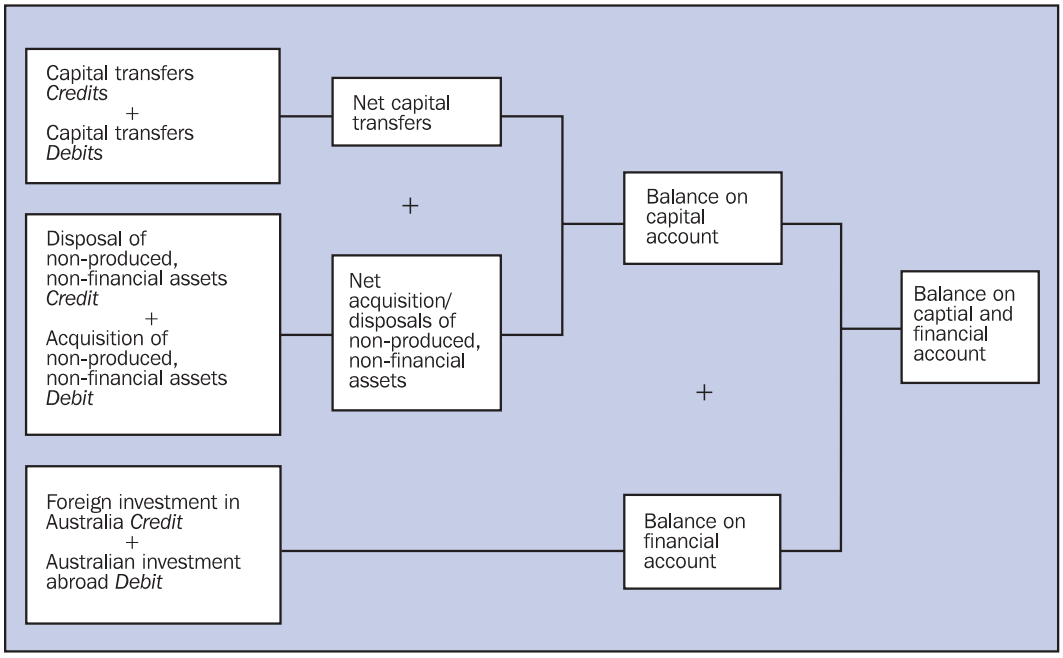
Information Paper: Upgraded Balance of Payments and International Investment Position Statistics, 1997 (5365.0)
Contains details of the changes made to balance of payments and international investment position statistics resulting from the implementation of new international statistical standards.

2.2.2 Balance of Payments

CURRENT ACCOUNT



CAPITAL AND FINANCIAL ACCOUNTS



Explanatory Notes

Australia's economic transactions with the rest of the world are entered in a set of double entry accounts which make up the balance of payments. It is the use of the double entry system that enables balances to be derived, but the balance of payments cannot be summarised in just a single balance.

The *current account* measures exports and imports of *goods and services*, Australia's *income* earned by and from the rest of the world as well as *current transfers* (counterpart in the double entry system for one-sided transactions).

The *capital account* records *capital transfers* (such as migrants' transfers and debt forgiveness) and the acquisition/disposal of non-produced, non-financial assets (such as sales of embassy land or copyrights) between residents and non-residents.

The *financial account* records transactions in *financial assets and liabilities* (such as shares, bonds, loans, etc.) between residents and non-residents.

In principle, the deficit (or surplus) on the current account should be matched by a surplus (or deficit) on the capital and financial account. In practice, this is not the case. The balances on the capital and financial account and the current account are reconciled by the item *Net errors and omissions*. This is the sum of net errors (transactions not measured accurately) and omissions (transactions not measured at all).

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0)
Expected to be released in 1998, will provide a comprehensive description of the concepts and structure of the Australian balance of payments and international investment position and of the data sources and methods used to compile those statistics.

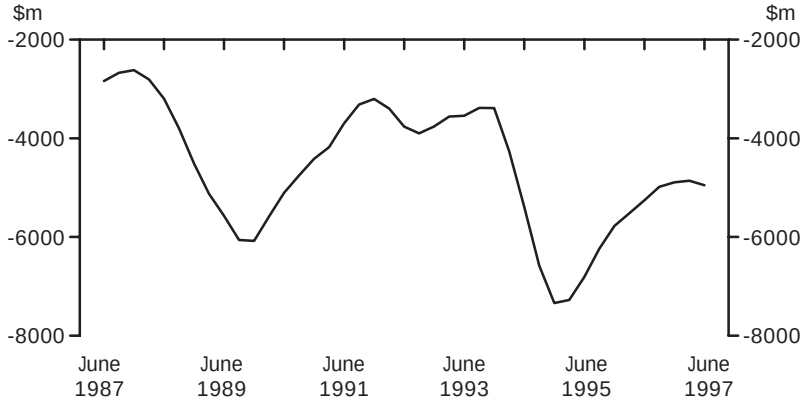
Balance of Payments Manual, 5th edition, 1993
Contains international standards issued by the International Monetary Fund for the compilation of balance of payments and related data on the international investment position.

2.2.3 Balance of Payments Current Account

Comment

In trend estimate terms, Australia's balance on current account declined to a low of –$7,339m in December quarter 1994. During the 9 quarters following this, the balance improved and in June quarter 1997 stood at –$4,951m.

BALANCE ON CURRENT ACCOUNT, TREND



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0) Quarterly data.

BALANCE OF PAYMENTS, CURRENT ACCOUNT

Period	*Balance on current account* $m
ANNUAL	
1991–92	–13 384
1992–93	–15 282
1993–94	–16 539
1994–95	–28 904
1995–96	–22 075
1996–97	–17 875
QUARTERLY (TREND)	
1995–96	
December	–5 779
March	–5 519
June	–5 261
1996–97	
September	–4 984
December	–4 893
March	–4 859
June	–4 951

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

The balance on current account is the sum of the balances on goods trade, services trade, income and current transfers. The balances are derived by calculating the difference of credit entries, which are shown without sign, and debit entries, which have a negative sign. If the sum of the balances is negative, a nation has a current account deficit, while if the figure is positive, a nation has a current account surplus.

The balance on current account consists of:

- Balance on goods and services: the difference between the total credit (export) value and the total debit (import) value of goods and services. Within the balance on goods and services there is a net services balance and a net goods balance which provide an analytically useful division between services and goods.

- Net income: the difference between the value of income, such as dividends and interest earned by residents from non-residents (credits) and that earned by non-residents from residents (debits).

- Net current transfers: the difference between current transfer credits and debits. A current transfer is recorded when real or financial resources are provided without something of economic value being received in return. For example, Australia's foreign aid abroad requires a debit entry while pensions received by residents from foreign governments adds a credit entry to current transfers.

Australia has had a current account deficit since the mid-1970s. This indicates that the nation as a whole has been consuming and investing more than the available national income and savings levels. To fund this shortfall, Australia has had to acquire finance and other capital from non-residents. These capital and financial inflows are measured in the capital and financial account of the balance of payments. The balance on the capital and financial account in a period is, in principle, equal and offsetting to the deficit on the current account of the balance of payments in that period.

The continued financial account surpluses have contributed to Australia's net foreign debt. Interest repayments on this debt are the major cause of Australia's large net income deficits, which represent a substantial component of Australia's current account deficits.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

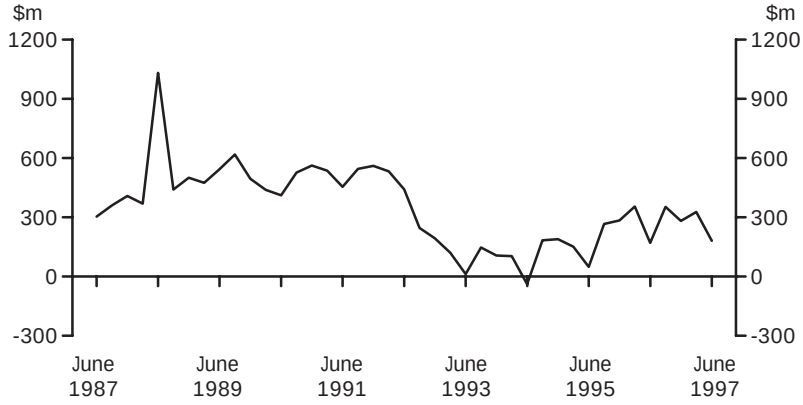
Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.4 Balance of Payments Capital Account

Comment

The balance on capital account, in original terms, usually records a surplus, but can vary markedly from quarter to quarter. During the late 1980s and early 1990s the annual surplus was consistently about $2,000m. The capital account surplus decreased to a low of $317m in 1993–94 when migrants' transfers credits fell to their lowest level in 9 years. Since then, the balance on the capital account has increased to a surplus of $1,142m in 1996–97.

BALANCE ON CAPITAL ACCOUNT



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

BALANCE OF PAYMENTS, CAPITAL ACCOUNT

Period	*Balance on capital account* $m
ANNUAL	
1991–92	2 079
1992–93	571
1993–94	317
1994–95	572
1995–96	1 074
1996–97	1 142
QUARTERLY	
1995–96	
December	284
March	354
June	170
1996–97	
September	353
December	281
March	327
June	181

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

The balance on capital account is the sum of net capital transfers and net acquisition/disposal of non-produced, non-financial assets.

Capital transfers include migrants' transfers and certain aid flows related to fixed capital formation.

The acquisition (less disposal) of non-produced, non-financial assets relates to the sale (or purchase) of intangible assets such as patents, copyrights, trademarks, franchises, etc. as well as certain transactions in embassy land (tangible assets).

Historically, Australia has recorded a surplus (net inflow) on the capital account, largely the result of net immigration.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

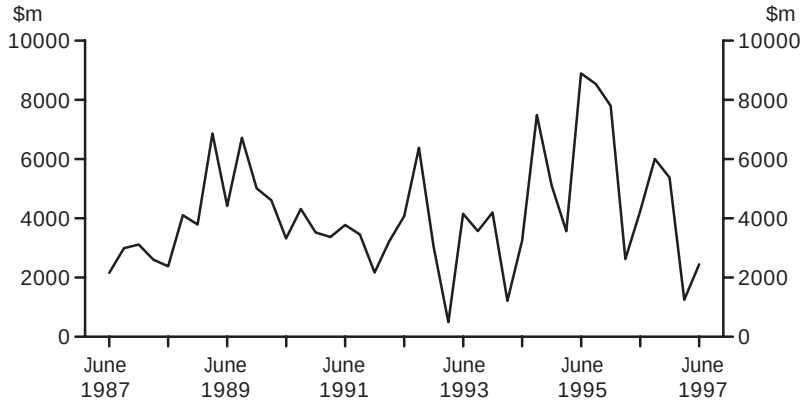
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0).
Expected to be released in 1998, will provide a comprehensive description of the concepts and structure of the Australian balance of payments and international investment position and of the data sources and methods used to compile those statistics.

2.2.5 Balance of Payments Financial Account

Comment

The balance on the financial account, in original terms, changes markedly from quarter to quarter. This volatility reflects, in part, the huge gross flows which underlie the balance on financial account and the difficulties associated with recording them in the correct time period. This in turn, is reflected in the volatility and size of the net errors and omissions item. The balance on the financial account usually records a surplus, and reached its highest ever quarterly level in June quarter 1995. In June quarter 1997 the balance on the financial account had fallen to a much lower level in line with a smaller current account deficit.

BALANCE ON FINANCIAL ACCOUNT



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

BALANCE OF PAYMENTS, FINANCIAL ACCOUNT

Period	*Balance on financial account* $m
ANNUAL	
1991–92	12 911
1992–93	14 050
1993–94	12 221
1994–95	25 055
1995–96	23 191
1996–97	15 067
QUARTERLY	
1995–96	
December	7 802
March	2 622
June	4 232
1996–97	
September	6 003
December	5 373
March	1 249
June	2 442

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

The financial account provides information on transactions in Australia's foreign financial assets and liabilities, such as equity investments, the issuing and buying of bonds and other debt securities, and loans and other liabilities such as trade credit.

Credit entries in the financial account are net inflows, resulting from a reduction in Australian investment abroad and/or an increase in foreign investment in Australia. Debit entries are net outflows and reflect the reverse situation. Like the current and capital accounts, credit entries are shown without sign while debit entries have a negative sign.

A positive financial account balance (a net inflow) occurs when the increase in Australia's liabilities to foreign countries (or the reduction in claims on foreign countries) in a period exceeds the increase in Australia's claims on foreign countries (or the reduction in liabilities to foreign countries).

In principle, such a net financial inflow occurs when a country has a deficit on its combined current and capital accounts. In other words, to finance the deficit, it draws on savings from the rest of the world.

A negative financial account balance (a net outflow) occurs when the increase in Australia's claims on foreign countries (or the reduction in liabilities to foreign countries) in a period exceeds the increase in its liabilities to foreign countries (or the reduction in claims on foreign countries).

In principle, such a net financial outflow occurs when a country has a surplus on its combined current and capital accounts. In other words, the net outflow for countries with such a surplus represents the extent to which they provide their domestic savings to the rest of the world.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

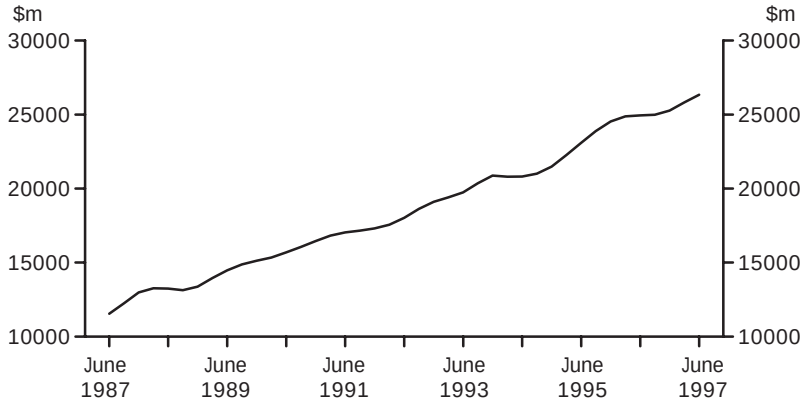
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0).
Expected to be released in 1998, will provide a comprehensive description of the concepts and structure of the Australian balance of payments and international investment position and of the data sources and methods used to compile those statistics.

2.2.6 Goods and Services Credits

Comment

In trend terms, Australia's total goods and services credits (exports) increased during most of the period since 1987. Overall, the major contributing factors to this increase were travel services credits and machinery and other manufactures within goods credits. Falls in total goods and services credits were recorded in September quarter 1988 and March quarter 1994. Since then, exports have recorded an upward trend.

GOODS AND SERVICES CREDITS AT CURRENT PRICES, TREND



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

GOODS AND SERVICES CREDITS AT CURRENT PRICES

Period	*Goods credits* $m	*Services credits* $m	*Total* $m
	ANNUAL		
1991–92	55 427	14 566	69 993
1992–93	60 634	16 170	76 804
1993–94	64 419	18 452	82 871
1994–95	67 000	20 501	87 501
1995–96	75 806	22 921	98 727
1996–97	80 682	24 127	104 809
	QUARTERLY (TREND)		
1995–96			
December	18 847	5 685	24 532
March	19 109	5 771	24 880
June	19 079	5 857	24 937
1996–97			
September	19 046	5 935	24 981
December	19 275	5 994	25 269
March	19 738	6 075	25 813
June	20 188	6 148	26 337

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

Goods and services credits (exports) are real resources that are provided to foreign residents. In the balance of payments they appear as credit items on the current account and are presented separately to assist analysis.

The term goods credits refers to all movable goods which change ownership from residents to non-residents. These are valued in free on board (f.o.b.) terms which means that transportation and insurance costs are excluded. In ABS balance of payments publications, goods credits are categorised into general merchandise and other goods. General merchandise is classified into rural and non-rural goods, with each of these classifications containing a more specific break-up so that the trading performance of different commodity groups can be monitored. Other goods includes goods for processing and repair, goods procured in ports by carriers (mainly fuel) and non-monetary gold.

Services credits measure those services provided by Australian residents to non-residents. These are shown in the balance of payments categorised into groups such as transportation, travel, communication, construction, insurance, financial, computer and information, royalties and licence fees, other business, personal, etc. and government not elsewhere included. More detailed breakdowns are provided under many of these categories.

The export of goods and services provides domestic producers with a wider market and allows the economy, as a whole, to share in the gains from trade. Export levels are dependent in part on supply constraints but also on the demand for Australian products and services in the world market. Export demand, in turn, in part depends on the price charged for those goods and services, but can alter if there are fluctuations in the exchange rate of the Australian dollar. If the Australian dollar depreciates (falls in value), Australian exports will generally become cheaper for foreign residents and consequently they may demand more Australian goods and services.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Presents detailed quarterly data on exports of goods and services in original and seasonally adjusted terms at current and constant prices.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides annual information on exports of goods and services, including detailed breakdown of services exports by commodity and partner country.

International Merchandise Trade, Australia (5422.0)
Provides quarterly information on the value of exports of goods with selected countries and country groups classified by commodity and details of exports by State. Historical data for the latest 12 years are also included.

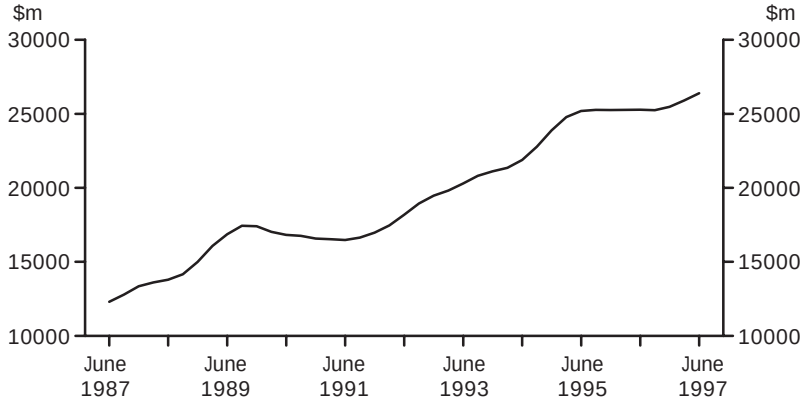
International Trade in Goods and Services, Australia (5368.0)
Provides monthly tables of the major aggregates for, and the balance on, international trade in goods and services in original, seasonally adjusted and trend estimates terms.

2.2.7 Goods and Services Debits

Comment

In trend terms, total goods and services debits rose over the period June quarter 1987 to September quarter 1989. From December quarter 1989, goods and services debits slightly declined until June quarter 1991. Since then, they have been increasing steadily apart from decreases in the December quarter 1995 and September quarter 1996.

GOODS AND SERVICES DEBITS AT CURRENT PRICES, TREND



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

GOODS AND SERVICES DEBITS AT CURRENT PRICES

Period	*Goods debits* $m	*Services debits* $m	*Total* $m
	ANNUAL		
1991–92	–51 469	–17 510	–68 979
1992–93	–59 934	–18 999	–78 933
1993–94	–64 863	–20 364	–85 227
1994–95	–75 218	–22 236	–97 454
1995–96	–77 635	–23 234	–100 869
1996–97	–79 246	–24 128	–103 374
	QUARTERLY (TREND)		
1995–96			
December	–19 458	–5 797	–25 256
March	–19 428	–5 834	–25 262
June	–19 386	–5 893	–25 279
1996–97			
September	–19 299	–5 946	–25 245
December	–19 454	–6 012	–25 466
March	–19 832	–6 076	–25 908
June	–20 262	–6 129	–26 391

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

Goods and services debits (imports) are real resources acquired from foreign residents. Other things being equal, an increase in imports will increase a current account deficit or reduce a current account surplus.

In balance of payments publications, goods debits include all movable goods that change ownership from non-residents to residents. These imports are valued in free on board (f.o.b.) terms, which excludes the transportation and insurance costs (considered to be services) of bringing the goods to Australia. Goods debits are categorised into general merchandise and other goods. General merchandise imports are classified into three end use categories: consumption goods, capital goods, and intermediate and other goods, which in turn are broken down into broad commodity groups such as food, chemicals, textiles, metals and metal manufactures, machinery, transport equipment, other manufactures and other imports. Other goods includes goods for processing and repair, goods procured in ports by carriers (mostly fuels) and non-monetary gold.

Services debits cover those services provided by non-residents to Australian residents. These are shown in the balance of payments categorised into groups such as transportation, travel, communication, construction, insurance, financial, computer and information, royalties and licence fees, other business, personal, cultural and recreational and government not elsewhere included. More detailed breakdowns are provided under many of these categories.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed quarterly balance of payments and international investment position statistics (including foreign debt) for the latest six quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides annual information on exports of goods and services, including detailed breakdown of services exports by commodity and partner country.

International Merchandise Imports, Australia (5439.0)
Provides total imports (international trade basis) for the reference month only, together with commodity aggregates at the one-digit level of the Standard International Trade Classification (Revision 3).

International Merchandise Trade, Australia (5422.0)
Provides quarterly information on the value of imports of goods with selected countries and country groups classified by commodity and details of imports by State. Historical data for the latest 12 years are also included.

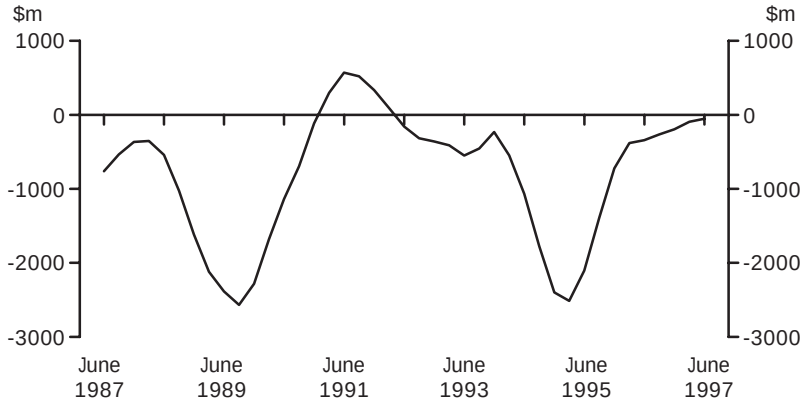
International Trade in Goods and Services, Australia (5368.0)
Provides monthly tables of the major aggregates for, and the balance on, international trade in goods and services in original, seasonally adjusted and trend estimates terms.

2.2.8 Balance on Goods and Services

Comment

Australia's balance on goods and services, in trend terms, deteriorated rapidly from March quarter 1988 to reach a deficit of $2,568m in September quarter 1989. A strong improvement in the balance of goods and services was recorded after September quarter 1989, eventually reaching a surplus of $569m in June quarter 1991. From December quarter 1993, the balance of goods and services again deteriorated rapidly and by March quarter 1995 had reached a deficit of $2,514m. Since then the deficit has been improving and stands at $54m in June quarter 1997.

BALANCE ON GOODS AND SERVICES AT CURRENT PRICES, TREND



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

BALANCE ON GOODS AND SERVICES AT CURRENT PRICES

Period	*Net goods* $m	*Net services* $m	*Balance on goods and services* $m
	ANNUAL		
1991–92	3 958	–2 944	1 014
1992–93	700	–2 829	–2 129
1993–94	–444	–1 912	–2 356
1994–95	–8 218	–1 735	–9 953
1995–96	–1 829	–313	–2 142
1996–97	1 436	–1	1 435
	QUARTERLY (TREND)		
1995–96			
December	–611	–113	–724
March	–319	–63	–382
June	–307	–35	–342
1996–97			
September	–253	–11	–264
December	–178	–18	–196
March	–94	–1	–94
June	–73	19	–54

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

The balance on goods and services refers to the net sum of goods and services credits (exports) and debits (imports). It is a useful and immediate indicator of a nation's overall trading position and appears in the current account section of the balance of payments.

A net debit (–) figure is referred to as a goods and services deficit and indicates that total imports of goods and services exceed total exports of goods and services. A surplus on the balance of goods and services appears as a credit item and indicates that total exports of goods and services exceed total imports of goods and services.

Within the balance on goods and services two other balances are presented, reflecting the division between goods and services.

Net goods is the net sum of goods credits (exports) and goods debits (imports). A net goods surplus indicates that exports of goods exceeded imports of goods in the reference period and is shown as a credit in the balance of payments. A goods deficit is shown as a debit (–) and means that goods imports have exceeded goods exports.

Net services is the net sum of services credits (exports) and debits (imports) and identifies the extent of any surplus or deficit (–) in the trade of services.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

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Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0).
Expected to be released in 1998, will provide a comprehensive description of the concepts and structure of the Australian balance of payments and international investment position and of the data sources and methods used to compile those statistics.

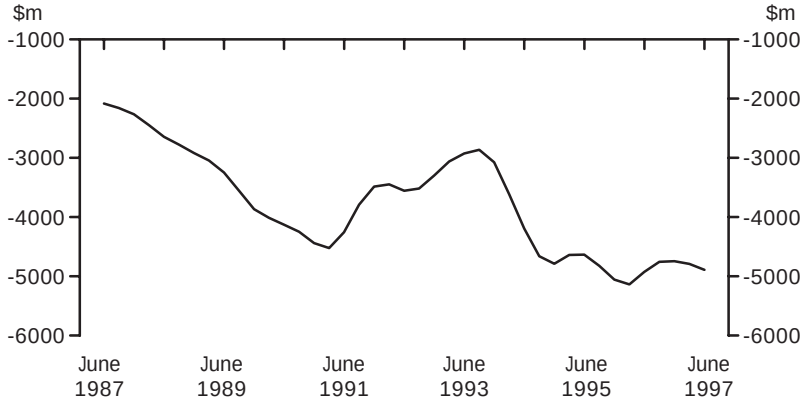
International Trade in Goods and Services, Australia (5368.0)
Provides monthly tables of the major aggregates for, and the balance on, international trade in goods and services in original, seasonally adjusted and trend estimates terms.

2.2.9 Net Income

Comment

Australia's net income deficit, in trend estimate terms, increased significantly up to the early 1990s, reaching $4,525m in March quarter 1991. From June quarter 1991 the net income deficit decreased substantially reflecting both rapidly improving profits on Australia's direct equity investment abroad and lower profits earned by non-residents on their direct equity investments in Australia. By September quarter 1993 the income deficit had declined to $2,864m. Since then, the net income deficit has increased, reaching $5,137m in March quarter 1996, decreasing slightly to $4,891m in June quarter 1997 in line with falling interest rates.

NET INCOME, TREND



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

NET INCOME

Period	*Income credits* $m	*Income debits* $m	*Net income* $m
	ANNUAL		
1991–92	4 465	–18 729	–14 264
1992–93	6 106	–18 909	–12 803
1993–94	5 807	–19 651	–13 844
1994–95	6 954	–25 377	–18 423
1995–96	7 162	–27 069	–19 907
1996–97	8 320	–27 756	–19 436
	QUARTERLY (TREND)		
1995–96			
December	1 789	–6 846	–5 057
March	1 732	–6 870	–5 137
June	1 836	–6 764	–4 928
1996–97			
September	1 965	–6 721	–4 756
December	2 069	–6 813	–4 745
March	2 151	–6 945	–4 793
June	2 196	–7 087	–4 891

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

The income item of the balance of payments covers income earned by Australian residents from non-residents (credits) and income earned by non-residents from Australian residents (debits). In broad terms, income relates to the return to the owner of a factor resource (i.e. labour or capital) from the use of that resource by either the owner or another economic entity.

In the balance of payments current account, income is divided into two categories: investment income (for the use of capital) and compensation of employees (for the use of labour).

Investment income refers to the earnings by owners of financial assets and commonly includes such items as dividends and interest. Earnings by Australian residents from the ownership of foreign financial assets are shown as credits and the earnings by non-residents from their ownership of Australian financial assets are shown as debits.

Compensation of employees refers to wages and salaries earned by residents from non-resident employers (credits) or wages and salaries earned by non-residents from resident employers (debits).

The sum of the income debits with the income credits gives net income. Where income debits exceed income credits (the usual case for a debtor nation such as Australia using the financial capital of the rest of the world), a net income deficit occurs. Where income credits exceed income debits, a net income surplus occurs.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

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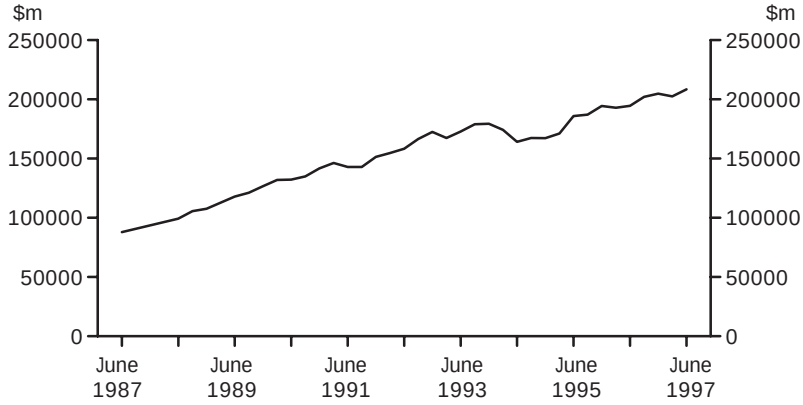
2.2.10 Foreign Debt

Comment

Australia's net foreign debt generally increased from 1987 to 1997. After reaching a peak of $179,000m at 31 December 1993, a substantial decrease of $164,000m was recorded at 30 June 1994. Subsequent growth saw Australia's level of net foreign debt reach a new high of $208,000m at 30 June 1997.

NET FOREIGN DEBT AT END OF PERIOD



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

LEVELS OF FOREIGN DEBT AT END OF PERIOD AND SELECTED RATIOS

Period	*Debt liabilities(a)* $m	*Reserve assets* $m	*Other debt assets* $m	*Net foreign debt(a)(b)* $m	*Ratio of net foreign debt to GDP(I)(c)* %	*Ratio of net interest to goods and services credits(d)* %
			ANNUAL			
1991–92	213 270	–22 240	–32 727	158 303	40.8	–15.6
1992–93	233 162	–20 823	–39 703	172 636	42.6	–12.4
1993–94	240 692	–20 661	–55 984	164 047	38.2	–11.2
1994–95	264 067	–20 184	–58 099	185 784	40.6	–12.7
1995–96	275 602	–19 059	–62 027	194 516	39.9	–11.8
1996–97	302 234	–22 836	–71 010	208 388	40.9	–11.4
			QUARTERLY			
1995–96						
December	274 461	–20 067	–60 061	194 333	41.1	–12.0
March	271 012	–17 935	–60 304	192 773	40.1	–11.7
June	275 602	–19 059	–62 027	194 516	39.9	–11.8
1996–97						
September	287 404	–21 921	–63 501	201 982	41.0	–11.7
December	292 212	–21 848	–65 646	204 718	41.1	–11.7
March	297 001	–21 770	–72 754	202 477	40.2	–11.8
June	302 234	–22 836	–71 010	208 388	40.9	–11.4

(a) Levels from December quarter 1991 are not strictly comparable with levels from earlier periods, due to change in methodology. (b) Equals debt liabilities less reserve assets and other debt assets. (c) Ratio derived by expressing net debt at a particular date as a percentage of current price original GDP(I) for the year preceding this date. (d) Ratio derived by expressing net interest on debt as a percentage of exports of goods and services for the year preceding this date.

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

Foreign debt is the amount borrowed from non-residents by residents of a country. It is distinguished from equity investment by the obligation to pay interest and/or repay principal.

Gross foreign debt is the total amount borrowed from non-residents. Net foreign debt is equal to gross foreign debt minus lending by residents of Australia to non-residents, including reserve assets.

A country borrows from overseas in order to spend more than it earns. The funds can be used to increase investment or consumption.

The level of debt is often expressed as a percentage of the national accounting measure of domestic production, Gross Domestic Product (GDP). This is done to place the extent of foreign debt in context and to enable valid comparisons over time and between countries. Movements in this ratio are an indication of the changing significance of foreign debt.

An economy's capacity to pay the costs associated with debt are portrayed by its debt service ratio. The debt service ratio shows the percentage of goods and services credits (export earnings) being used to meet interest obligations on debt. The higher the proportion of export earnings used to service the debt, the lesser the economy's capacity to pay.

The level of foreign debt has several important effects on the balance of payments. First, the financial account entries reflect how much Australia has had to borrow to finance the net acquisition of real resources (goods, services and income) and other financial resources (net equity). Secondly, the interest obligations on debt owing to non-residents add directly to the current account deficit.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

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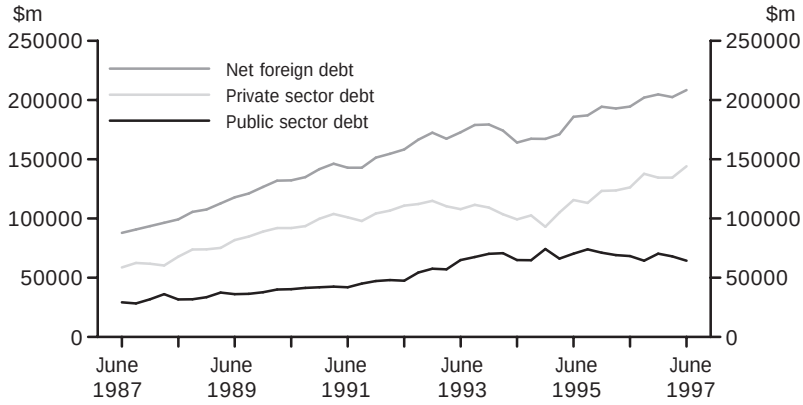
2.2.11 Composition of Net Foreign Debt

Comment

Over the period from June 1987 to June 1992 public sector debt represented approximately 30% of net foreign debt, except on 31 March 1988 when a 1 quarter rise in public sector debt levels pushed the public sector share to 37%. It returned to the 30% share in June quarter 1988. From September quarter 1992, public sector debt steadily increased its share of total debt peaking at 44% at 31 December 1994. Since that time the public sector share of total debt has generally decreased, and stood at 31% at the end of June quarter 1997.

LEVELS OF NET FOREIGN DEBT AT END OF PERIOD



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

LEVELS OF FOREIGN DEBT AT END OF PERIOD

	Public sector debt	*Private sector debt*	*Net foreign debt(a)*
Period	$m	$m	$m
	ANNUAL		
1991–92	47 478	110 825	158 303
1992–93	64 818	107 818	172 636
1993–94	64 849	99 198	164 047
1994–95	70 306	115 478	185 784
1995–96	68 234	126 282	194 516
1996–97	64 284	144 104	208 388
	QUARTERLY		
1995–96			
December	71 032	123 301	194 333
March	69 072	123 701	192 773
June	68 234	126 282	194 516
1996–97			
September	64 311	137 671	201 982
December	70 298	134 420	204 718
March	68 035	134 442	202 477
June	64 284	144 104	208 388

(a) Equals debt liabilities less reserve assets and other debt assets. Levels from December quarter 1991 are not strictly comparable with levels from earlier periods, due to change in methodology.

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

Australia's net foreign debt includes debt incurred by both the private and public sectors.

Net public sector debt is the gross debt of the Commonwealth Government, State and local governments (general government) and government business enterprises (including financial corporations) less reserve assets and other foreign debt assets held by these resident entities.

Public sector debt makes up the smaller share of Australia's net foreign debt. Much of the public sector debt consists of domestically issued government securities in which non-residents choose to invest At 30 June 1997, non-residents held $44,000m in domestically issued Australian government securities. The larger share of net foreign debt is owed by the private sector and is the result of foreign borrowing by firms or individuals substantially exceeding their lending abroad.

Statistics on the composition of foreign debt are used to analyse the nature of Australia's foreign debt. For example, having debt concentrated in the private sector is considered by many as more desirable than having it issued by the public sector, since it is assumed that the private sector is more likely to borrow to finance investment rather than consumption.

The composition of foreign debt may also be examined by industry, country, currency and maturity structure.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

Balance of Payments and International Investment Position, Australia (5363.0)
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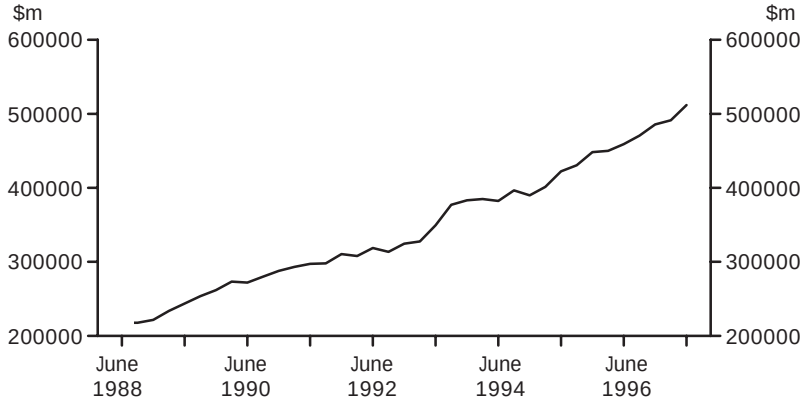
2.2.12 Foreign Investment in Australia

Comment

The level of foreign investment in Australia generally increased from the late 1980s to the present. The level of foreign investment in Australia increased sharply in mid-1989 and again in 1993, reflecting, in part, exchange rate and other price effects on the level of foreign investment. By 30 June 1997 the level of foreign investment in Australia had reached $511,861m.

LEVEL OF TOTAL FOREIGN INVESTMENT IN AUSTRALIA AT END OF PERIOD



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

LEVEL OF FOREIGN INVESTMENT IN AUSTRALIA AT END OF PERIOD

	Direct	*Portfolio*	*Other*	*Total*
Period	$m	$m	$m	$m
		ANNUAL		
1991–92	101 436	162 535	54 656	318 627
1992–93	107 322	182 979	59 036	349 337
1993–94	119 306	199 942	63 038	382 286
1994–95	123 404	235 205	63 595	422 204
1995–96	137 973	261 300	59 683	458 956
1996–97	154 401	295 357	62 103	511 861
		QUARTERLY		
1995–96				
December	136 306	249 026	62 881	448 213
March	136 952	254 153	58 802	449 907
June	137 973	261 300	59 683	458 956
1996–97				
September	147 086	267 015	56 280	470 381
December	149 468	280 497	55 642	485 607
March	148 869	284 530	57 858	491 257
June	154 401	295 357	62 103	511 861

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

Foreign investment in Australia generally refers to the stock of Australian liabilities owed to non-residents; and to the financial transactions and other changes which change this stock.

Foreign investment can take many forms and involves both public and private sectors of the Australian economy. The type of investment (direct, portfolio or other) will affect the amount of influence or control the foreign investor has over Australian physical assets. For example, foreign investment in government securities does not result in foreign control of Australian physical assets, while equity investment in companies may involve the transfer of control.

Direct investment is a category of international investment that reflects the objective of obtaining a lasting interest by a resident in one economy in an enterprise in another economy, and implies a significant degree of influence by the investor on the management of the enterprise. A direct investment relationship is generally deemed to be established when a direct investor, who is a resident in one economy, holds 10% or more of the ordinary shares or voting stock of an enterprise in another economy. All financial transactions and positions between entities in a direct investment relationship (excluding certain interbank positions) are classified to direct investment.

The portfolio investment category covers investment in equity and debt securities (other than direct investment) while other investment covers the remaining kinds of investments such as trade credits, loans, currency and deposits.

The level and composition of foreign investment in Australia are important in their own right in assessing, for example, changing finance patterns and relationships with other countries. They are also important in terms of their impact on the balance of payments.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

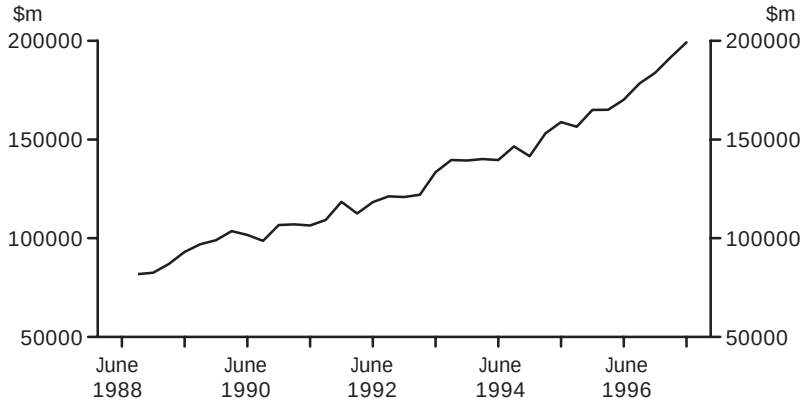
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0).
Expected to be released in 1998, will provide a comprehensive description of the concepts and structure of the Australian balance of payments and international investment position and of the data sources and methods used to compile those statistics.

2.2.13 Australian Investment Abroad

Comment

The overall level of Australian investment abroad increased from the late 1980s to the present, with regular falls being more than offset by increases in subsequent quarters. The highest sustained levels of growth were recorded in the period from March quarter 1992 to September quarter 1993 which was followed by a fairly flat period to June quarter 1994. In the period from December quarter 1995 to June quarter 1997, the rate of growth has again increased and the level of Australian investment abroad stands at $199,194m at 30 June 1997.

LEVEL OF AUSTRALIAN INVESTMENT ABROAD AT END OF PERIOD, TOTAL



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

LEVEL OF AUSTRALIAN INVESTMENT ABROAD AT END OF PERIOD

Period	*Direct* $m	*Portfolio* $m	*Other* $m	*Reserve assets* $m	*Total* $m
			ANNUAL		
1991–92	–43 893	–28 974	–23 141	–22 240	–118 248
1992–93	–48 220	–39 361	–25 026	–20 823	–133 430
1993–94	–48 742	–42 199	–28 032	–20 661	–139 634
1994–95	–53 425	–56 285	–28 908	–20 184	–158 802
1995–96	–57 304	–57 516	–36 260	–19 059	–170 139
1996–97	–67 955	–67 814	–40 589	–22 836	–199 194
			QUARTERLY		
1995–96					
December	–55 189	–57 347	–32 364	–20 067	–164 967
March	–56 938	–56 696	–33 519	–17 935	–165 088
June	–57 304	–57 516	–36 260	–19 059	–170 139
1996–97					
September	–64 140	–57 518	–34 800	–21 921	–178 379
December	–65 867	–59 525	–36 577	–21 848	–183 817
March	–66 135	–62 537	–41 317	–21 770	–191 759
June	–67 955	–67 814	–40 589	–22 836	–199 194

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0).

Explanatory Notes

Australian investment abroad generally refers to the stock of foreign financial assets (claims on non-residents) owned by Australian residents; and to the capital transactions and other changes which increase or decrease this stock.

Australian investment abroad has four types of investment, the three categories also in foreign investment in Australia (direct, portfolio and other) as well as reserve assets. Because of the netting of assets and liabilities between enterprises in a direct investment relationship Australian investment abroad is less than the total foreign financial claims held by Australia.

Reserve assets are foreign financial assets available to, and controlled by, the monetary authorities (principally the Reserve Bank of Australia) for financing or regulating payments imbalances and other purposes.

Australians invest in foreign countries for a variety of reasons including: the securing and maintenance of market share, sales promotion, effective marketing, avoidance of tariffs and import restrictions, securing of raw materials and to take advantage of cheaper inputs or higher rates of return on investments or to spread their risk.

Earnings from Australian investment abroad form a component of the current account of the balance of payments. The income earned by Australia's investments abroad increases a current account surplus or reduces a current account deficit.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Provides detailed balance of payments and international investment position statistics (including foreign debt) for the latest 6 quarters, including original, seasonally adjusted and trend series as well as current and constant price estimates of the current account.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

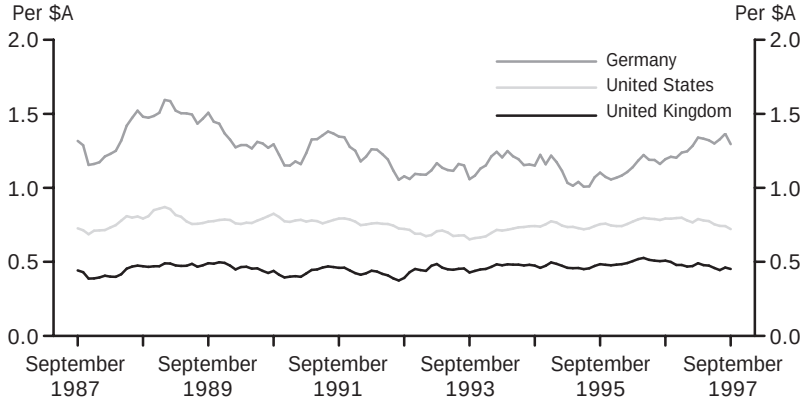
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0).
Expected to be released in 1998, will provide a comprehensive description of the concepts and structure of the Australian balance of payments and international investment position and of the data sources and methods used to compile those statistics.

2.2.14 Exchange Rates

Comment

The value of the Australian dollar ($A) generally declined against the United States dollar ($US) from February 1989 to $0.65 in September 1993. The $A then appreciated against the $US, reaching a high of $0.80 in December 1986. Since then, a downturn in the value of the $A against the $US has been recorded, falling to $0.72 in September 1997.

SELECTED EXCHANGE RATES PER AUSTRALIAN DOLLAR



Source: ABS, International Trade in Goods and Services, Australia (5368.0) and Reserve Bank of Australia, Monthly data.

EXCHANGE RATES: CURRENCY PER AUSTRALIAN DOLLAR(a)

Period	*United States dollar*	*United Kingdom pound*	*German mark*	*Japanese yen*
		ANNUAL		
1994–95	0.74	0.47	1.12	70.35
1995–96	0.76	0.49	1.11	77.66
1996–97	0.78	0.49	1.25	90.51
		MONTHLY		
1996–97				
July	0.79	0.51	1.19	86.27
August	0.78	0.51	1.16	84.43
September	0.79	0.51	1.19	87.06
October	0.79	0.50	1.21	88.93
November	0.80	0.48	1.20	89.40
December	0.80	0.48	1.24	90.82
January	0.78	0.47	1.25	91.69
February	0.77	0.47	1.28	94.34
March	0.79	0.49	1.34	96.67
April	0.78	0.48	1.33	97.82
May	0.78	0.47	1.32	92.50
June	0.75	0.46	1.30	86.17
1997–98				
July	0.74	0.44	1.33	85.49
August	0.74	0.46	1.37	87.39
September	0.72	0.45	1.30	87.42

(a) Rates are averages for the reference period.

Source: Source: ABS, International Trade in Goods and Services, Australia (5368.0) and Reserve Bank of Australia.

Explanatory Notes

The price of one currency against another is known as the exchange rate. For example, at the end of September 1997 one Australian dollar would purchase 0.72 United States dollars, 0.45 United Kingdom pounds and 87.42 Japanese yen. Similarly, 0.72 United States dollars would purchase one Australian dollar. Therefore, the exchange rate can be used as a measure of a currency's value.

Exchange rates vary over time. When the exchange rate for the Australian dollar against another currency rises (appreciates) it will buy more of the foreign currency.

Exchange markets in which currencies are bought and sold are not only trading in the financial risk associated with those currencies but facilitate world trade by providing markets in which to clear the proceeds of that trading. When selling goods and services abroad Australian residents often receive foreign currencies and will purchase foreign currencies when making payment for imports of goods and services.

The value of the exchange rate affects the price that Australia receives for its exports and pays for its imports. Generally when the exchange rate for a country's currency appreciates the price residents pay for imports declines, while for non-residents our exports become more expensive. Alternatively, a currency depreciation will cause the price of imports into Australia to rise and lower the international price of our exports. These changes can affect the demand for imports and exports and change the Australian dollar equivalent of servicing our foreign liabilities, and, hence, the balance of payments.

Further Reading

Average Monthly Exchange Rates (5654.0)
Available by subscription. Contains averages of daily exchange rates for approximately 35 currencies, including both the buying and selling rates and final day trading values against major currencies.

Balance of Payments and International Investment Position, Australia (5302.0)
Contains quarterly average and end of quarter exchange rates of the major currencies.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes annual average and end of year exchange rates of the major currencies.

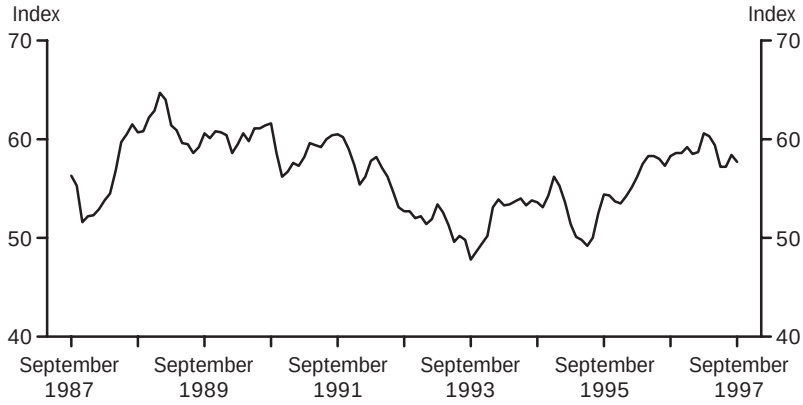
International Trade in Goods and Services, Australia (5368.0)
Contains monthly average exchange rates of the major currencies.

2.2.15 Trade-weighted Index

Comment

The value of the Australian dollar, as measured against other currencies in the trade-weighted index, recorded a volatile decade from the late 1980s. The index rose overall from a low of 51.6 in November 1987 to 64.7 in January 1989 then declined to 47.8 in September 1993. Since then, it has risen, reaching 60.6 in March 1997, but turning around again in April and falling to 57.7 by September 1997.

TRADE-WEIGHTED INDEX (MAY 1970 = 100.0)



Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0), Quarterly data.

TRADE-WEIGHTED INDEX AND UNITED STATES DOLLAR EXCHANGE RATE(a)

Period	*Trade-weighted index(b)*	*$US(per $A)*
	ANNUAL	
1994–95	52.8	0.74
1995–96	54.8	0.76
1996–97	58.7	0.78
	MONTHLY	
1996–97		
July	58.0	0.79
August	57.3	0.78
September	58.3	0.79
October	58.6	0.79
November	58.6	0.80
December	59.2	0.80
January	58.5	0.78
February	58.7	0.77
March	60.6	0.79
April	60.3	0.78
May	59.4	0.78
June	57.2	0.75
1997–98		
July	57.2	0.74
August	58.4	0.74
September	57.7	0.72

(a) Rates are averages for the reference period. (b) May 1970 = 100.0.

Source: ABS, Balance of Payments and International Investment Position, Australia (5302.0) and Reserve Bank of Australia Bulletin.

Explanatory Notes

The Australian exchange rate is often quoted in terms of its exchange with the United States dollar.

However, to get a more comprehensive indication of Australia's exchange rate a trade-weighted index (TWI) is used. The TWI measures changes in the Australian currency relative to the currencies of our main trading partners. The relative importance of trade occurring between each country and Australia is taken into account. Over time, international trade patterns tend to alter, making it necessary to modify the weights to reflect the new trade patterns. The last update by the Reserve Bank of Australia (RBA) occurred in 1996.

The RBA's TWI includes 25 countries that account for at least 90% of Australia's two-way trade.

The TWI is an absolute number and does not express the price of any one currency in another. Calculation of the TWI is based on the exchange rates for the Australian dollar against the chosen currencies at 4 p.m. for each trading day.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)
Contains quarterly average and end of quarter exchange rates of the major currencies.

Balance of Payments and International Investment Position, Australia (5363.0)
Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes annual average and end of year exchange rates of the major currencies.

International Trade in Goods and Services, Australia (5368.0)
Contains monthly average exchange rates of the major currencies.

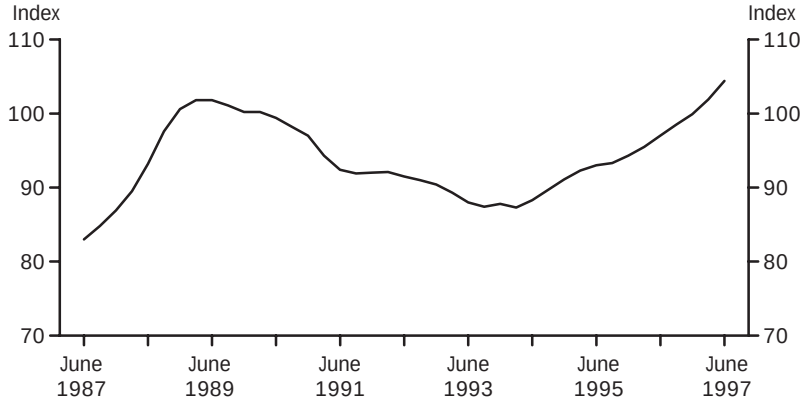
Reserve Bank of Australia Bulletin
Contains information on interest rates for the money market, exchange rates, trade-weighted index, capital market, banks and other financial institutions.

2.2.16 Terms of Trade and Indexes of Competitiveness

Comment

Australia's terms of trade for goods and services, in trend estimate terms, rose sharply from September quarter 1987 to peak in March quarter 1989 before falling until March quarter 1994. Since then, Australia's terms of trade have been on an upward trend.

TERMS OF TRADE FOR GOODS AND SERVICES, TREND (1989–90 = 100.0)



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

TERMS OF TRADE AND INDEXES OF COMPETITIVENESS

Period	*Terms of trade(a)(b)*	*Index of relative domestic prices (c)*	*Index of adjusted CPI(a)(d)*	*Index of adjusted GDP deflator(a)(d)*	*Index of adjusted unit labour costs(a)(d)*
			ANNUAL		
1991–92	92.1	118.1	93.7	92.2	94.2
1992–93	89.2	111.8	82.0	80.6	81.8
1993–94	87.4	115.7	78.4	76.6	77.3
1994–95	91.2	123.8	80.3	77.5	78.4
1995–96	95.4	132.6	87.1	83.2	84.9
1996–97	100.6	149.1	93.3	90.0	94.0
			QUARTERLY (ORIGINAL UNLESS FOOTNOTED)		
1995–96					
December	94.3	130.1	85.6	81.3	83.5
March	95.5	133.8	87.8	83.9	85.1
June	97.0	141.1	93.0	88.9	91.2
1996–97					
September	98.5	143.9	92.6	88.6	92.5
December	99.9	147.9	93.9	90.2	94.7
March	101.9	150.9	94.5	91.1	95.4
June	104.4	153.7	92.3	90.3	93.6

(a) Base year 1989–90 = 100.0. (b) Trend for quarterly data. (c) Base year 1970 = 100.0 (d) Adjusted for exchange rate changes. See Explanatory Notes for further details.

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0) and Australian Economic Indicators (1350.0).

Explanatory Notes

A country's terms of trade shows a country's export prices relative to its import prices. It is expressed as an index, which is calculated by dividing an index of prices received for exports by an index of prices paid for imports.

A rise in the index implies an improvement in a country's terms of trade, so it becomes possible to purchase more imports with the same amount of exports. Improvement in a country's terms of trade occurs when export prices rise, when import prices fall or when export prices rise at a faster rate than import prices, or when export prices fall at a slower rate than import prices.

A fall in the index occurs when a country's terms of trade deteriorates. It is necessary to export more to purchase the same amount of imports. A deterioration occurs when import prices rise, when export prices fall or when import prices rise at a faster rate than export prices, or when import prices fall at a slower rate than export prices.

The index of relative domestic prices is the relative domestic price of non-traded goods compared with imported goods. The relative domestic price index can be used to indicate possible resource flows between the domestic traded and non-traded goods sectors in a small economy that engages in international trade. A decrease in the price of non-traded goods relative to imported goods in the domestic economy (a fall in the relative domestic price) encourages a flow of resources into the traded goods sector, thereby encouraging additional exports and import replacement.

The adjusted Consumer Price Index (CPI) is the ratio of the Australian CPI to the weighted geometric average of the exchange rate adjusted consumer price indexes of Australia's four major trading partners.

The adjusted GDP deflator index is the ratio of the GDP deflator for Australia to the weighted geometric average of the exchange rate adjusted GDP deflators of Australia's four major trading partners.

The adjusted unit labour cost index is the ratio of unit labour costs in the non-farm sector of the Australian economy to the weighted geometric average of the exchange rate adjusted unit labour cost indexes estimated for the business sectors of Australia's four major trading partners.

Further Reading

Australian Economic Indicators (1350.0)
Provides time series covering terms of trade and indexes of competitiveness for the latest 9 years and data for the last 9 quarters.

Australian National Accounts: National Income, Expenditure and Product (5206.0)
Provides estimates of the terms of trade.

Balance of Payments and International Investment Position, Australia (5302.0)
Provides estimates of the price indexes of exports and imports and also a measure of terms of trade.

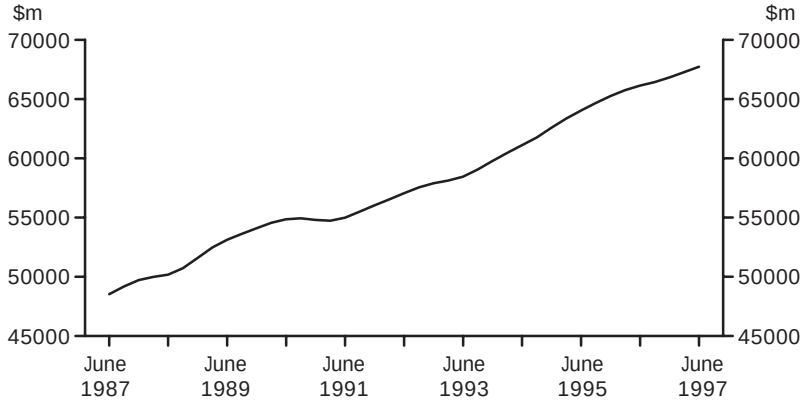
Section 2.3
Domestic Consumption and Investment

2.3.1 Private Final Consumption Expenditure

Comment

Private final consumption expenditure (PFCE) in trend estimate constant price terms has shown steady growth from the late 1980s. From June quarter 1987 to June quarter 1997, PFCE grew at an average annual rate of 3.4%, experiencing a decrease only from September quarter 1990 to March quarter 1991.

TOTAL PRIVATE FINAL CONSUMPTION EXPENDITURE AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

SELECTED COMPONENTS OF PRIVATE FINAL CONSUMPTION EXPENDITURE AT AVERAGE 1989–90 PRICES

Period	*Food* $m	*Clothing, fabrics and footwear* $m	*Health* $m	*Dwelling rent* $m	*Total* $m
			ANNUAL		
1991–92	32 347	13 049	16 022	41 613	224 930
1992–93	34 292	13 147	16 790	42 870	231 851
1993–94	35 469	13 486	17 594	44 304	239 883
1994–95	37 552	14 051	18 238	45 901	251 718
1995–96	39 661	14 379	18 893	47 291	261 615
1996–97	39 740	13 978	19 106	48 597	267 653
			QUARTERLY TREND		
1995–96					
December	9 903	3 614	4 692	11 786	65 255
March	9 971	3 601	4 743	11 861	65 754
June	9 973	3 576	4 805	11 937	66 133
1996–97					
September	9 946	3 544	4 828	12 017	66 434
December	9 943	3 509	4 803	12 103	66 828
March	9 953	3 473	4 762	12 191	67 272
June	9 970	3 443	4 731	12 279	67 724

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

Private final consumption expenditure (PFCE) measures current expenditure by households, and producers of private non-profit services to households, such as charities, clubs, trade unions and private schools. The outlays covered include expenditure on consumer durables such as cars, furniture and long-lasting household appliances; consumer semi-durables such as clothing and other appliances; single use goods such as food; and services of all kinds, for example, hairdressing and public transport.

PFCE makes up over half of GDP(E) and is the largest component of aggregate demand. Consequently, changes in PFCE from one period to another have a significant impact on overall changes in GDP(E). A fall in demand for consumer goods and services will be reflected in falling PFCE. On the other hand, a rise in demand for consumer goods and services will be reflected in increasing PFCE.

The level of PFCE is dependent on a number of factors including: present and anticipated future levels of income, expenditure and saving habits, relative price levels and the rate of inflation.

Economic policy makers may attempt to influence the level of PFCE to dampen or stimulate the economy by altering the level of household disposable income through taxation or wages policy.

Further Reading

Australian National Accounts, Concepts, Sources and Methods (5216.0)
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

Australian National Accounts: National Income, Expenditure and Product (5204.0)
Contains annual data for the last 12 years for private final consumption expenditure.

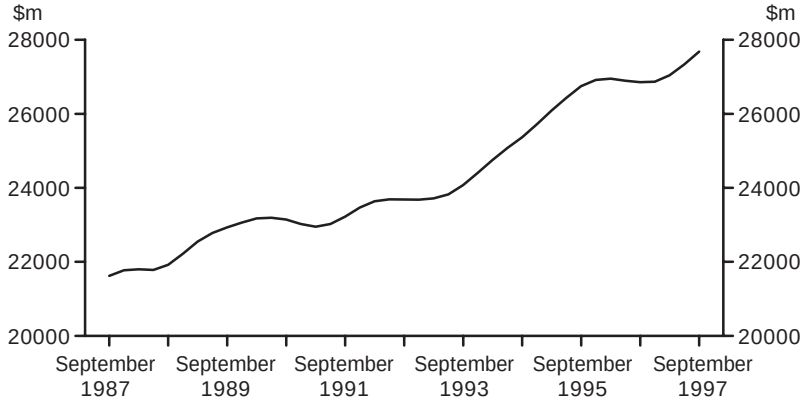
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Contains quarterly data for private final consumption expenditure.

2.3.2 Retail Turnover

Comment

From September 1987 to September 1997, real growth in retail and selected service turnover has averaged 2.8% growth per year (or 0.7% per quarter). The quarterly series shows a sustained strong period of growth between the September quarters 1993 and 1995. Recent results indicate that 1996 was a period of flat growth and that a recovery has taken place over the first 3 quarters of 1997.

TURNOVER OF RETAIL ESTABLISHMENTS AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Retail Trade, Australia (8501.0), Quarterly data.

TURNOVER OF RETAIL ESTABLISHMENTS AT AVERAGE 1989–90 PRICES

Period	*Total* $m
ANNUAL (ORIGINAL)	
1991–92	94 326
1992–93	94 933
1993–94	98 215
1994–95	103 739
1995–96	107 744
1996–97	107 794
QUARTERLY (TREND)	
1995–96	
March	26 951
June	26 893
1996–97	
September	26 856
December	26 866
March	27 039
June	27 333
1997–98	
September	27 681

Source: ABS, Retail Trade, Australia (8501.0).

Explanatory Notes

The retail trade series presents monthly estimates of turnover at current prices for retail (i.e. grocers, clothing stores, department stores, etc.) and selected service businesses (such as cafes and restaurants, hotels and licensed clubs, etc.) for each State and Territory.

Turnover includes retail sales, wholesale sales, takings from repairs, meals and hiring of goods (except for rent, leasing and hiring of land and buildings) and commissions from agency activity (e.g. commissions received from collecting dry cleaning) and net takings from gaming machines. In recent years, there has been an increased interest in the gaming or gambling component of turnover as analysts attempt to quantify the effect of increased gambling on traditional retailing.

The data are provided in original, seasonally adjusted and trend terms. More information is provided on seasonal adjustment in Chapter 4 on page 157.

To enable the analysis of retail activity in 'real terms', estimates of retail turnover at constant (average 1989–90) prices are compiled each quarter. This removes the effects of price increases over time. Retail turnover in current prices are also compiled.

The retail trade series dates back to 1962 and is one of the main economic indicator series of the ABS. The series can be used in conjunction with other economic indicators to help assess current Australian economic performance. In addition, the retail trade quarterly results are fed into the calculation of private final consumption expenditure (PFCE). The contribution is in the order of 40%, making it an important component of Gross Domestic Product (GDP).

Further Reading

Australian Economic Indicators (1350.0)
See the feature article in the December 1996 publication for a time series decomposition of retail trade.

Retail Industry: Commodity Sales, Australia (8624.0)
Contains details of retail sales by commodity item by industry by State.

Retail Industry, State and Territory Summary (8625.0)
Contains performance data on income and expenditure, profit and other performance measures by retail sector.

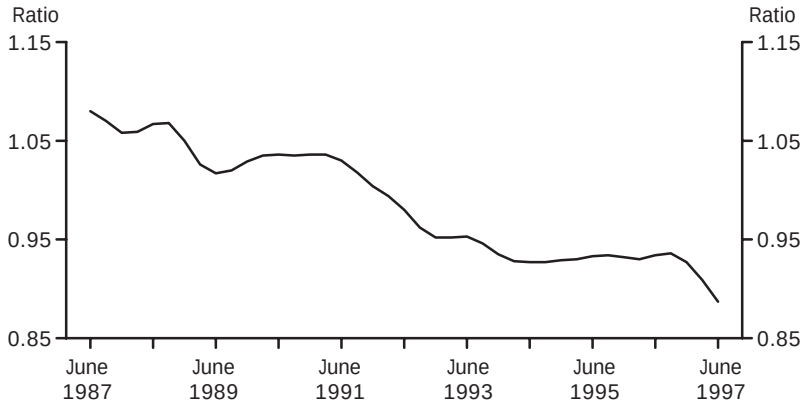
Retail Trade, Australia (8501.0)
Contains monthly estimates of turnover for retail businesses for Australia, each State and Territory and by industry. See October 1996 issue for contribution of gambling to monthly retail trade estimates.

2.3.3 Private Non-farm Stocks to Sales Ratio

Comment

The trend private non-farm stocks to sales ratio has generally declined between June quarter 1987 and June quarter 1997. In June quarter 1997 the ratio was 0.905, the lowest level ever recorded. Possible factors behind the general decrease in the non-farm stocks to sales ratio are the adoption by businesses of more cost-effective stock management systems and the decreasing contribution to GDP from the major stock holding industries — manufacturing, wholesale and retail trade, and mining.

PRIVATE NON-FARM STOCKS TO SALES RATIO, TREND



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

PRIVATE NON-FARM STOCKS TO SALES RATIO(a)

Period	*Private non-farm stock levels* $m	*Sales (derived)* $m	*Private non-farm stocks to sales ratio* Ratio
	ANNUAL		
1991–92	59 441	238 576	0.999
1992–93	60 540	253 435	0.955
1993–94	62 401	267 758	0.934
1994–95	67 162	289 151	0.930
1995–96	71 244	306 163	0.932
1996–97	72 670	317 589	0.914
	QUARTERLY (TREND)		
1995–96			
December	71 098	76 298	0.932
March	71 510	76 875	0.930
June	72 013	77 132	0.934
1996–97			
September	72 406	77 467	0.935
December	72 587	78 226	0.928
March	72 690	79 348	0.916
June	72 814	80 478	0.905

(a) Annual derived from simple average of original quarterly ratios.

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0) and Stocks and Sales, Selected Industries, Australia (5629.0).

Explanatory Notes

The private non-farm stocks to sales ratio gives the indication of the value of stocks (or inventories) held by private sector businesses other than those in farming, compared with sales in a given period of time.

Private non-farm stocks are defined to include goods for sale (either of own production or purchased for resale), work in progress, raw materials and stores of all non-farm industries. All private non-farm industries are covered, with the major stock-holding industries being manufacturing, wholesale trade, retail trade and mining. Sales are defined as private final consumption expenditure (PFCE) on goods plus PFCE on dwellings, non-dwelling construction and equipment plus public gross fixed capital expenditure plus exports of non-rural goods.

Private non-farm stock levels may fluctuate significantly with changes in economic activity. Such periodic fluctuations in the level of non-farm stocks are often referred to as the 'stocks cycle'. It should be noted that there has been a general decline in the private non-farm stocks to sales ratio since the early 1980s. This decline could possibly be attributable to businesses adopting more cost-effective stock management systems and/or the decreasing contribution to GDP from the major stock holding industries — manufacturing, wholesale and retail trade, and mining.

The private non-farm stocks to sales ratio is an important indicator of future business intentions. An increase in the ratio may indicate that businesses have decided to build up stocks in anticipation of increased sales. On the other hand, the ratio may fall as businesses decide to run down their stocks if sales are expected to weaken.

Of course, at times there will also be some unplanned stock build-ups or run-downs. If sales are higher than expected, stock levels will be less than planned. Conversely, if sales are lower than anticipated, there will be an increase in stock holdings in the short term. In this way, stocks act as the buffer between changes in demand and the supply of goods available to meet that demand.

Further Reading

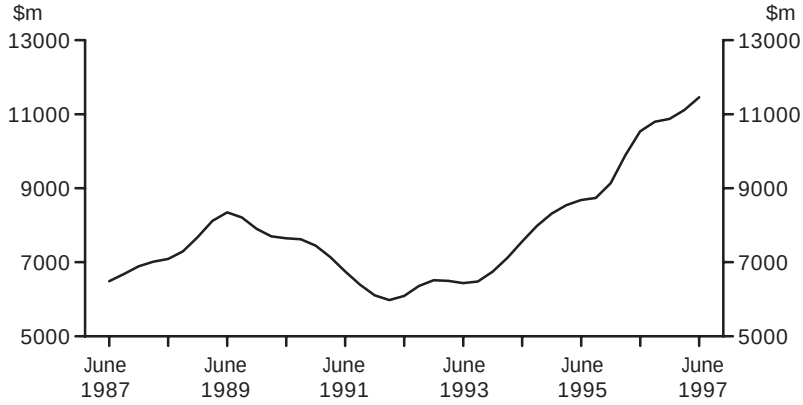
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Contains stocks to sales ratio in 1989–90 seasonally adjusted and trend terms.

2.3.4 Private New Capital Expenditure

Comment

Business investment grew strongly during the late 1980s with actual new private capital expenditure in constant price trend terms increasing to peak at $8,347m in June quarter 1989. Following this peak, expenditure decreased to $5,978m in March quarter 1992. The series has recorded a significant upward trend from September 1993, slowing only briefly in September and December 1993 and 1996, to reach $11,457m in June 1997.

ACTUAL PRIVATE NEW CAPITAL EXPENDITURE AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Private New Captial Expenditure and Expected Expenditure, Australia (5625.0), Quarterly data.

ACTUAL PRIVATE NEW CAPTIAL EXPENDITURE AT AVERAGE 1989–90 PRICES

Period	*Building and structures* $m	*Equipment, plant and machinery* $m	*Total* $m
	ANNUAL (ORIGINAL)		
1991–92	8 367	16 201	24 568
1992–93	8 245	17 566	25 811
1993–94	8 346	19 661	28 007
1994–95	9 021	24 670	33 691
1995–96	11 989	26 578	38 567
1996–97	13 686	30 206	43 892
	QUARTERLY (TREND)		
1995–96			
December	2 757	6 378	9 135
March	3 036	6 854	9 889
June	3 296	7 241	10 537
1996–97			
September	3 525	7 271	10 796
December	3 565	7 307	10 872
March	3 480	7 632	11 112
June	3 387	8 070	11 457

Source: ABS, Private New Captial Expenditure and Expected Expenditure, Australia (5625.0).

Explanatory Notes

Private new capital expenditure refers to the acquisition of new tangible assets either on own account or under a finance lease and includes major improvements, alterations and additions. In general, this is expenditure charged to fixed tangible assets accounts excluding expenditure on second-hand assets unless these are imported for the first time. The quarterly ABS survey also produces data by industry and by State.

Investment spending is classified into two types of assets: buildings and structures; and equipment, plant and machinery. The level of investment in these assets has a major impact on the future productive capacity of the economy.

In the Australian national accounts, the measure of fixed investment used in the expenditure-based method of determining gross domestic product is referred to as gross fixed capital expenditure. This is equal to new capital expenditure plus acquisitions of second-hand assets, minus disposals of second-hand assets.

As well as details of actual expenditure, the ABS publishes data from businesses on expected capital expenditure for periods up to 18 months in advance.

Investment is largely a reflection of the level of business confidence about future demand. Capital expenditure may be for assets which will increase production, increase efficiency or replace old equipment.

Businesses need to take into account many factors when planning their investment. Data analysts therefore see this series as a very useful summary indicator.

Further Reading

Private New Capital Expenditure and Expected Expenditure, Australia (5625.0)
Contains estimates of actual and expected new capital expenditure by type of asset and selected industry.

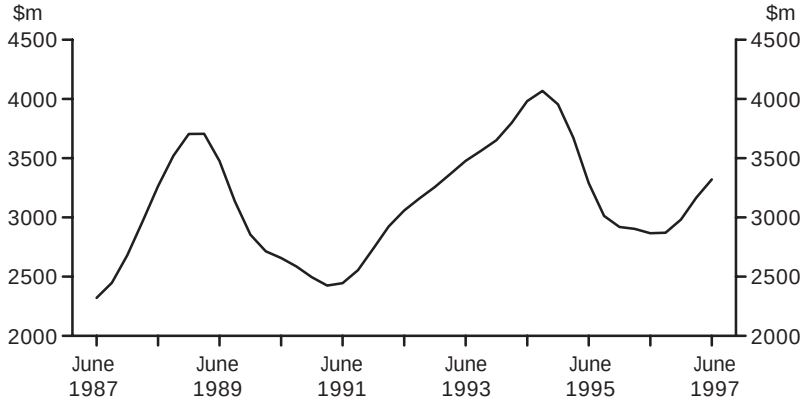
State Estimates of Private New Capital Expenditure (5646.0)
Contains a break-up by State of the Australian estimates contained in the above publication (5625.0).

2.3.5 Residential Building Activity

Comment

In constant price trend terms, the value of new residential building commencements increased to peak in March quarter 1989. After a rapid decline from March 1989 to March 1991 quarters, the value of new residential building commencements increased to reach its highest level recorded of $4,068m in September quarter 1994. Since then, the series recorded a sharp decline, falling to $2,867m in June quarter 1996, then steadily grew to record $3,320m in June quarter 1997.

VALUE OF NEW RESIDENTIAL BUILDING COMMENCEMENTS AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Building Activity, Australia (8752.0), Quarterly data.

RESIDENTIAL BUILDING APPROVALS AND COMMENCEMENTS, AT AVERAGE 1989–90 PRICES

Period	*Approvals* no.	*Value of approvals* $m(a)	*Commencements* no.	*Value of building work commenced* $m(a)
		ANNUAL		
1991–92	151 544	11 790	141 437	11 316
1992–93	172 271	13 872	163 089	13 213
1993–94	188 844	15 175	181 820	14 915
1994–95	171 084	14 716	170 072	15 113
1995–96	124 711	11 310	124 684	11 737
1996–97	136 632	12 809	127 392	12 154
		QUARTERLY (TREND — UNLESS INDICATED OTHERWISE)		
1995–96				
December	(b)30 936	2 790	31 079	2 919
March	(b)30 555	2 747	30 364	2 903
June	(b)31 323	2 799	30 027	2 867
1996–97				
September	(b)31 483	2 928	30 352	2 870
December	(b)33 858	3 116	31 443	2 982
March	(b)35 816	3 329	32 882	3 166
June	(b)36 473	3 548	34 138	3 320

(a) Data for the number of approvals includes dwelling units created as part of alterations or additions to, or conversions of exisiting buildings, as well as new houses and new other residential dwellings. Data on the value of approvals includes new houses and new other residential buildings and dwellings only. Refer to ABS catalogue numbers 8731.0 and 8752.0 for more information. (b) Seasonally adjusted data.

Source: Building Approvals, Australia (8731.0) and Building Activity, Australia (8752.0).

Explanatory Notes

A residential building is defined as a building which is predominantly used for long-term residential purposes, and can contain one dwelling unit (e.g. house) or more than one dwelling unit (e.g. flats).

Residential building construction depends on the demand that exists for new places of residence. When the population is expanding rapidly the level of residential construction needs to be increased in order to meet the demand for new homes.

The willingness of individuals and investors to undertake residential building construction is affected by the interest rate and the economic climate. During times of economic expansion, individuals and investors are more willing to invest in residential construction than during periods of economic decline.

When construction is being financed by borrowed funds the interest rate affects the cost of investing. When interest rates are high, investors and developers need to determine whether the return on their investment will make it viable to proceed with construction. Measures of the return on their investment are house prices (for those who sell) and the level of rents (for those who rent dwellings). Other factors which affect investment are the cost of land, labour and building materials. All of these are affected by the prevailing economic climate.

Residential construction statistics are used by government and private organisations. One of these organisations is the Indicative Planning Council for the housing industry which uses building statistics to assist in forecasting the demand and supply of new housing. The Government uses the Council's forecasts as one input to determine future policy regarding residential construction in the overall economic context.

The housing sector is seen to be a leading indicator of the general state of the economy. Because housing is seen as a basic requirement for all Australians, there has been a continuing demand for more houses as the population has grown. As economic conditions become more favourable, the housing sector is one of the first areas to strengthen as it meets the pent-up demand which generally occurs.

Further Reading

Building Activity, Australia (8752.0)
Provides quarterly estimates on number of dwelling units and value of residential buildings, value of alterations and additions to residential buildings and value of non-residential building by class of building, and stage of construction, value of work done during period, value of work yet to be done; for each State and Territory and for private and public sectors for Australia.

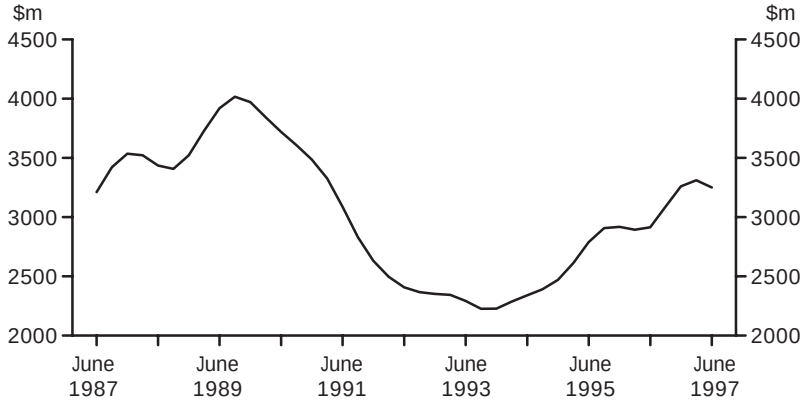
Building Approvals, Australia (8731.0)
Contains monthly information on the number of dwelling units and the value of residential building approved for the private and public sectors.

2.3.6 Non-residential Building Activity

Comment

The value of work done in constant price trend terms recorded variable movement with an underlying upward trend which peaked at $4,016m in September quarter 1989. Value of work done in non-residential building declined rapidly to $2,226m in September quarter 1993. Since then, the series has shown growth to reach $3,249m in June quarter 1997.

VALUE OF NON-RESIDENTIAL BUILDING WORK DONE AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Building Activity, Australia (8752.0), Quarterly data.

NON-RESIDENTIAL BUILDING ACTIVITY AT AVERAGE 1989–90 PRICES

	Private sector	*Total*
Period	$m	$m
ANNUAL		
1991–92	6 945	10 386
1992–93	6 159	9 285
1993–94	5 985	9 112
1994–95	7 104	10 216
1995–96	8 493	11 616
1996–97	9 524	12 823
QUARTERLY (TREND)		
1995–96		
December	2 118	2 917
March	2 131	2 894
June	2 159	2 914
1996–97		
September	2 301	3 088
December	2 436	3 260
March	2 475	3 311
June	2 421	3 249

Source: ABS, Building Activity, Australia (8752.0).

Explanatory Notes

Non-residential buildings are defined as buildings other than residential buildings and include hotels, shops, factories, offices, etc. The level of non-residential building construction is an indicator of the level of investment and activity occurring in the economy. Non-residential buildings are used by businesses (both private and public) who participate in economic activity and services (hospitals, schools, etc.) which are essential for the community.

Construction of non-residential buildings varies with the demand for particular types of buildings and with the level of economic activity. While overall economic conditions generally determine whether the return on an investment will be greater than the costs of investment, the demand for particular types of buildings varies considerably.

Thus the demand for construction of new hotels depends on the perceived level of future tourism activity, the demand for factories on the state of the manufacturing industry and the demand for shops and offices on the current (over or under) supply of these buildings and some feel for future demand. The demand for construction of community and public services (hospitals, schools, etc.) tends to be more constant and more affected by government budget considerations.

The level of non-residential building is used by public and private sector bodies as a measure of economic activity and an indicator of business confidence and growth.

Further Reading

Building Activity, Australia (8752.0)
Provides quarterly estimates on number of dwelling units and value of residential buildings, value of alterations and additions to residential buildings and value of non-residential building by class of building, by stage of construction, value of work done during period, value of work yet to be done; for each State and Territory and for private and public sectors for Australia.

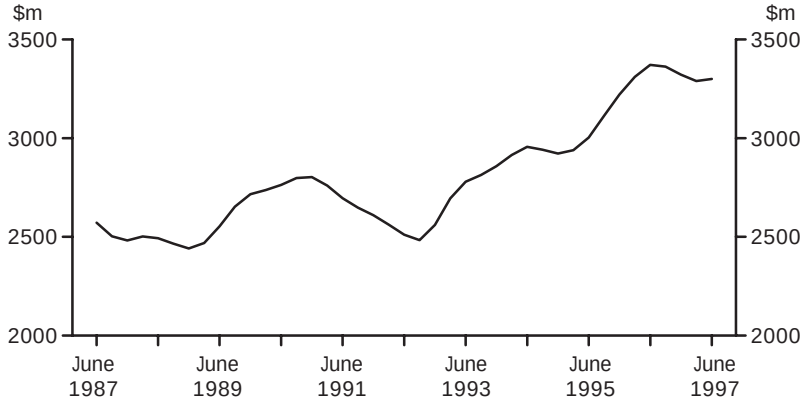
Building Approvals, Australia (8731.0)
Contains monthly information on the number and value of non-residential building by class of building approved.

2.3.7 Engineering Construction

Comment

The value of engineering construction work done in constant price trend terms increased from $2,441m in December quarter 1988 to $2,803m in December quarter 1990. Activity then decreased, falling to $2,483m in September quarter 1992. Subsequent rapid growth saw the value of engineering construction work done rise to $2,956m in June quarter 1994, and the series then remained at about this level until mid-1995. The value of work done then grew in the second half of 1995, reaching $3,371m in June 1996, and had fallen back slightly from that level by June 1997.

ENGINEERING CONSTRUCTION ACTIVITY, VALUE OF WORK DONE AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Australian Economic Indicators (1350), Quarterly data.

ENGINEERING CONSTRUCTION ACTIVITY, VALUE OF WORK DONE AT AVERAGE 1989–90 PRICES

Period	*Total private sector* $m	*Total* $m
ANNUAL		
1990–91	2 991	11 128
1991–92	2 936	10 337
1992–93	2 761	10 626
1993–94	3 449	11 509
1994–95	3 527	11 791
1995–96	4 575	12 920
1996–97	5 017	13 348
QUARTERLY (TREND)		
1995–96		
December	1 097	3 221
March	1 194	3 310
June	1 267	3 371
1996–97		
September	1 278	3 362
December	1 244	3 322
March	1 224	3 289
June	1 238	3 300

Source: ABS, Australian Economic Indicators (1350.0).

Explanatory Notes

Engineering construction is defined as infrastructure construction. It includes construction other than buildings, e.g. roads, bridges, railways, telecommunications, water and sewerage, electricity generation and distribution facilities.

The level of engineering construction gives an indication of the economy's capability to grow and expand in the future. A modern economy needs a highly efficient infrastructure to ensure that the economy can operate to its capacity and that the needs of the population are adequately serviced.

Before September 1986, data on engineering construction were limited to projects valued at $100,000 or more undertaken by private contractors only. From September 1986, the collection was expanded to include all engineering construction work undertaken by both the private and public sectors, irrespective of the value of the individual projects.

A significant proportion of engineering construction is funded by government although much of the work is contracted out to private sector firms.

Further Reading

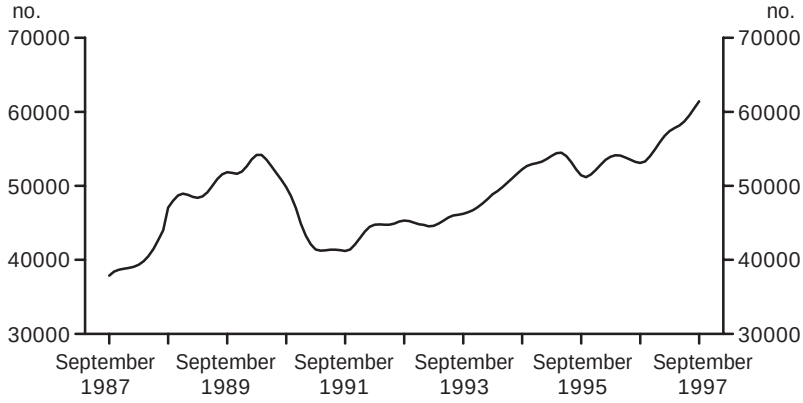
Engineering Construction Activity, Australia (8762.0)
Provides value of engineering construction work done, value of commencements and value of work yet to be done classified by State or Territory, commodity (roads, bridges, pipelines, etc.), sector undertaking work and sector for whom the work is done.

2.3.8 New Motor Vehicle Registrations

Comment

In trend estimate terms, new motor vehicle registrations follow broadly the same pattern as the overall economy. There were significant troughs in new registrations around June 1987 and September 1991, with a small drop in September 1995. There were peaks in registrations in March 1990 and March 1995. The recent trend has been for quite strong growth in registrations.

NEW MOTOR VEHICLE REGISTRATIONS, TREND



Source: ABS, New Motor Vehicle Registrations, Australia (9301.0), Monthly data.

NEW MOTOR VEHICLE REGISTRATIONS

Period	*Passenger vehicles*	*Other vehicles(a)*	*Total vehicles(a)*
	ANNUAL		
1993–94	475 981	98 288	574 269
1994–95	528 501	110 408	638 909
1995–96	531 778	104 751	636 529
	MONTHLY (TREND)		
1995–96			
July	44 626	8 915	53 541
August	44 407	8 845	53 252
September	44 338	8 745	53 083
October	44 610	8 668	53 278
November	45 314	8 663	53 977
December	46 167	8 714	54 881
January	47 059	8 812	55 871
February	47 823	8 917	56 740
March	48 392	9 012	57 404
April	48 769	9 051	57 820
May	49 131	9 058	58 189
June	49 635	9 080	58 714
1996–97			
July	50 303	9 120	59 423
August	51 021	9 159	60 180
September	51 748	9 213	60 960

(a) Excluding motor cycles, tractors, plant and equipment, caravans and trailers.

Source: ABS, New Motor Vehicle Registrations, Australia (9301.0).

Explanatory Notes

When a new motor vehicle is purchased and intended for use on a public road, it must be registered with the relevant motor vehicle registration authority. Some vehicles are not required to be registered, e.g. those solely used on a farm or mine. Statistics on registrations give an indication of the number of new motor vehicle sales.

A significant part of consumer spending is on buying new motor vehicles. Since consumer spending is an early indicator of trends in the economy, new motor vehicle registrations are an early indicator of the level of economic activity.

Both Commonwealth and State Government Treasury offices and other policy departments use registration statistics for economic planning. The statistics are also used by motor vehicle manufacturers and distributors for market research and by financial institutions in setting lending policies.

Further Reading

Motor Vehicle Census, Australia (9309.0)
Contains counts of all motor vehicles registered in Australia, by data items such as body type, make and year of manufacture.

Motor Vehicles in Australia (9311.0)
A compendium source book that brings together and analyses a range of motor vehicle related data. Motor vehicle statistics are presented under several headings: motor vehicle census counts, annual new motor vehicle registration data, information relating to the physical attributes of vehicles, demographic data, financial aspects of vehicle ownership, and vehicle manufacturing, retailing and trade data.

New Motor Vehicles Registrations, Australia, Preliminary (9301.0)
Contains monthly registrations in each State and Territory of new passenger vehicles and other vehicles.

Survey of Motor Vehicle Use, Australia (9208.0)
Contains statistics by State or Territory of registration or area of operation, for private and commercial vehicles registered at 30 September, for number of vehicles, total and average kilometres travelled, driver characteristics, vehicle usage, fuel consumption and load carried.

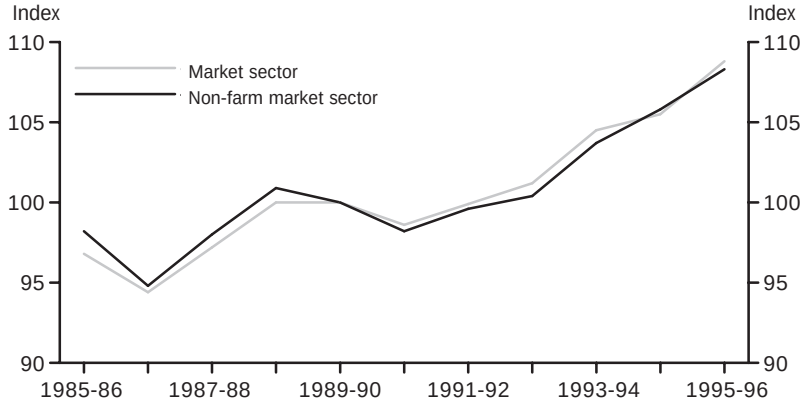
Section 2.4
Production

2.4.1 Productivity

Comment

Productivity, as measured by the multifactor productivity (MFP) indexes, experienced an overall increase from 1985–86 to 1995–96 for the market sector (96.8 to 108.8) and non-farm market sector (98.2 to 108.3). Declines for both these indexes were experienced in 1986–87 and 1990–91. The market sector grew by more (12.4%) over this period than the non-farm market sector (10.3%).

MULTIFACTOR PRODUCTIVITY INDEXES, MARKET SECTOR AND NON-FARM MARKET SECTOR (1989–90 = 100.0)



Source: ABS, Australian National Accounts: Multifactor Productivity (5234.0), Annual data.

PRODUCTIVITY INDEXES (1989–90 = 100)

	Market sector			*Non-farm market sector*		
Period	*Labour(a)*	*Capital(b)*	*Multifactor(c)*	*Labour(a)*	*Capital(b)*	*Multifactor(c)*
1990–91	100.5	95.1	98.6	100.3	94.0	98.2
1991–92	103.6	93.5	99.9	103.4	92.2	99.6
1992–93	105.0	94.8	101.2	104.3	92.9	100.4
1993–94	108.2	98.2	104.5	107.6	96.1	103.7
1994–95	108.8	100.0	105.5	109.3	99.1	105.8
1995–96	113.1	101.5	108.8	112.9	99.6	108.3

(a) Constant price gross product per hour worked. (b) Constant price gross product per unit of capital stock. (c) Constant price gross product per combined unit of labour and capital.

Source: ABS, Australian National Accounts: Multifactor Productivity (5234.0).

Explanatory Notes

Productivity is the relationship between the output of an economic unit and the inputs, such as labour and capital, which have gone into producing that output. Productivity can be increased through better utilisation of resources.

Multifactor productivity (MFP) is a measure of the efficiency of the production process considering a number of inputs (factors). It is expressed as a ratio of output to a combined measure of two or more factor inputs (e.g. capital and labour).

The ABS measures MFP as the ratio of gross product to a combined measure of capital stock and hours worked. Growth in MFP can arise from technical progress, improvements in the work force, improvement in management practices, economies of scale and so on.

Labour productivity is usually measured as the amount produced per hour worked. Quite clearly, this can be affected by technological changes and changes in other inputs (e.g. capital), as well as changes in labour efficiency.

Capital productivity is measured as the amount of output produced per unit of capital employed. Equipment, structures, land and inventories are forms of capital goods used in the production of goods and services.

Productivity measures are used by both government and private organisations to gauge the effect of changes in work practices, technology, education and training.

Further Reading

Australian National Accounts: Multifactor Productivity (5234.0)
This annual publication contains indexes of MFP for the market and non-farm market sectors. It also includes associated indexes such as labour productivity, capital productivity and the capital-labour ratio.

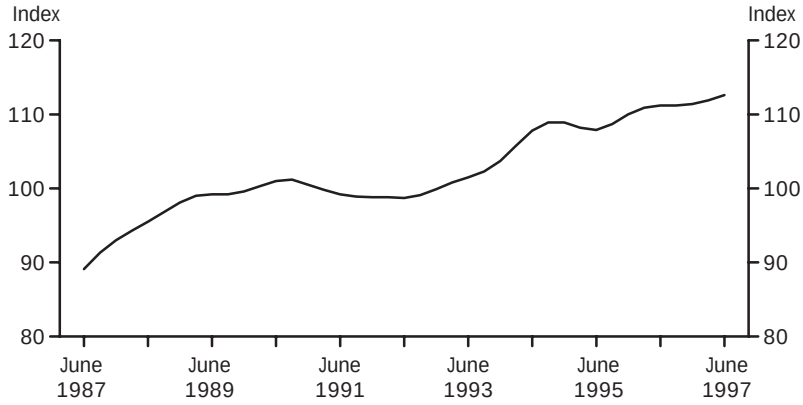
Occasional Paper: Estimates of Multifactor Productivity, Australia (5233.0)
This paper describes what the ABS indexes of MFP actually measure and provides full details of the methods used to derive them. It also examines the limitations of the indexes and attempts to quantify them. Alternative measures of MFP are described briefly.

2.4.2 Indexes of Industrial Production

Comment

The index of industrial production (by goods-producing industries), in trend constant price terms, has generally increased over the 10-year period to June 1997 apart from two periods. From September quarter 1990 when it stood at 101.2, the index fell in six of the next seven quarters to 98.7 in June quarter 1992 before rising to 108.9 in December quarter 1994. This was followed by two small quarterly decreases to 107.9 in June quarter 1995. Since June quarter 1995, the index has continually increased reaching 112.6 in June quarter 1997 which is 26% higher than 10 years earlier.

INDEX OF INDUSTRIAL PRODUCTION AT AVERAGE 1989–90 PRICES, TREND



Source: ABS, Indexes of Industrial Production, Australia (8125.0), Quarterly data.

INDEXES OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1989–90 PRICES (1989–90 = 100.0)

Period	*Mining (excluding services to mining)*	*Manufacturing*	*Electricity, gas and water*	*Total*
		ANNUAL		
1991–92	106.9	95.8	103.3	98.9
1992–93	107.6	97.4	105.2	100.4
1993–94	109.2	102.3	108.9	104.5
1994–95	113.2	106.2	112.1	108.3
1995–96	118.9	107.4	112.3	110.2
1996–97	121.7	108.9	114.1	111.8
		QUARTERLY (TREND)		
1995–96				
December	117.8	107.3	112.4	110.0
March	120.3	108.0	112.6	110.9
June	122.1	108.0	112.7	111.2
1996–97				
September	122.4	107.9	112.9	111.2
December	121.6	108.1	113.6	111.4
March	121.3	108.8	114.9	111.9
June	121.6	109.5	116.2	112.6

Source: ABS, Indexes of Industrial Production, Australia (8125.0).

Explanatory Notes

The indexes of industrial production provide estimates of the rises and falls in production by the mining; manufacturing; and electricity, gas and water industries. Quarterly information is presented in trend terms.

The indexes are expressed in terms of constant prices. By eliminating the effects of price increases, the change in the real volume of production from industry groups can be determined.

Analysts in the public and private sectors use the indexes to determine the level of economic activity at both an overall and broad industry level.

Further Reading

Australian Mining Industry (8414.0)
Contains annual estimates of the structure and performance of Australia's mining industry.

Australian National Accounts: National Income, Expenditure and Product (5206.0)
Contains quarterly estimates of production at constant prices for all major industries.

Indexes of Industrial Production, Australia (8125.0)
Presents indexes of gross product at constant prices for the industrial sector and each of its major component industries, i.e. mining; manufacturing; and electricity, gas and water. Also presents indexes for individual manufacturing subdivisions.

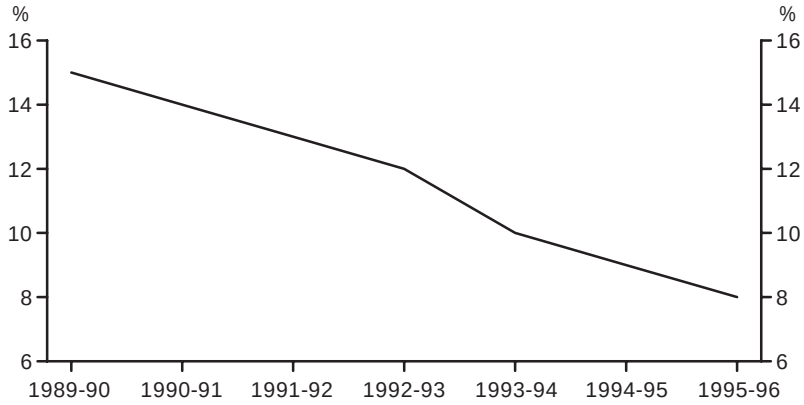
Manufacturing Industry, Australia (8221.0)
Contains annual estimates of the structure and performance of Australia's manufacturing industry.

2.4.3 Effective Rate of Assistance

Comment

The average effective rate of assistance to the manufacturing sector by the Commonwealth Government has decreased steadily from 15% in 1989–90 to 8% in 1995–96. The Industry Commission projects that assistance to the manufacturing sector will decline to 5% by 2000–01. Net assistance to the agricultural sector was 15% in 1990–1991. It remained relatively stable at around 11% from 1991–92 to 1994–95.

AVERAGE EFFECTIVE RATE OF ASSISTANCE, MANUFACTURING



Source: Industry Commission, Annual Report, Annual data.

AVERAGE EFFECTIVE RATES OF ASSISTANCE TO SELECTED INDUSTRY SECTORS

	Agriculture	*Manufacturing*
Period	*%*	*%*
1990–91	15	14
1991–92	11	13
1992–93	10	12
1993–94	12	10
1994–95	11	9
1995–96	n.y.a.	8

Source: Industry Commission, Annual Report.

Explanatory Notes

The Industry Commission measures assistance provided to Australian industries by the Commonwealth Government.

The effective rate of assistance is an indicator of the net assistance to an industry. It is the percentage by which returns to resources (i.e. land, labour and capital) used in an industry are increased by assistance. It takes into account the assistance provided to an industry, less the extra costs the industry must pay for its inputs as a result of assistance to other industries.

The effective rate of assistance is positive if benefits provided by government to an industry outweigh costs imposed to that industry by government assistance to other industries. When the effective rate of assistance is negative, the benefits the industry receives from government assistance are outweighed by the extra costs it must pay for its inputs as a result of assistance to other industries.

The Commission's estimates of assistance include assistance provided by tariffs, quantitative import restrictions, certain export incentives and local content schemes and, for agricultural commodities, domestic pricing arrangements. Due to their differing impacts on particular sectors and data limitations, some forms of assistance, such as government purchasing preferences, offset arrangements and anti-dumping procedures, are excluded from the Commission's estimates.

The Government uses the effective rate of assistance to determine how much assistance is actually provided to an industry. When the Government formulates policy on protection for an industry, it must take into account the effect that the assistance will have on other industries. Lobby groups use effective rate of assistance estimates to argue for increases or decreases in industry protection.

Further Reading

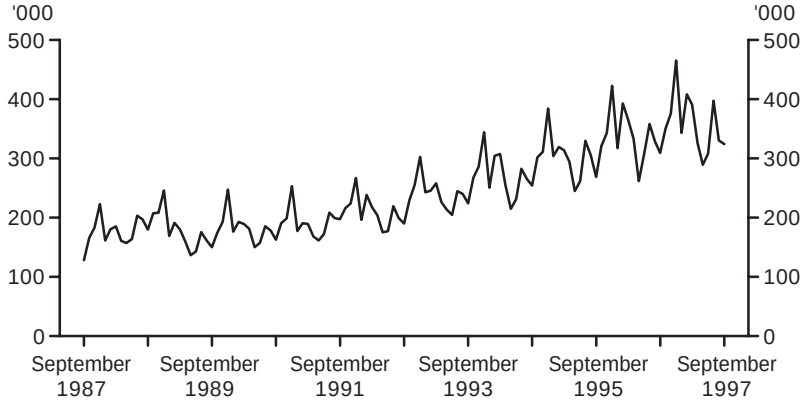
Industry Commission, Annual Report
Contains the average effective rate of assistance, analysis of recent movements and explanatory notes.

2.4.4 Tourism

Comment

Overseas visitor arrivals into Australia show monthly seasonal variations. The series has continued to increase reaching 465,200 visitor arrivals in December 1996, the highest number on record.

SHORT-TERM OVERSEAS VISITOR ARRIVALS



Source: ABS, Overseas Arrivals and Departures, Australia (3401.0), Monthly data.

TOURISM

Period	*Capacity— hotels, motels and guest houses (guest rooms)(a)* no.	*Capacity— holiday flats, units and houses(a)* no.	*Room occupancy rates — hotels, motels and guest houses (b)* %	*Unit occupancy rates — holiday flats, units and house(b)* %	*Number of Short-term overseas arrivals* '000
			ANNUAL		
1994–95	167 752	38 168	58.9	53.7	3 535.3
1995–96	172 372	39 959	59.0	53.0	3 966.0
1996–97	175 847	41 763	58.9	52.0	4 253.0
			MONTHLY		
1996–97					
July	n.a.	n.a.	58.0	57.5	358.2
August	n.a.	n.a.	57.6	54.1	329.2
September	172 421	40 661	60.7	56.5	309.2
October	n.a.	n.a.	64.9	56.0	350.4
November	n.a.	n.a.	62.1	50.8	375.6
December	173 876	42 186	52.7	55.1	465.2
January	n.a.	n.a.	56.2	70.3	342.9
February	n.a.	n.a.	59.2	48.8	408.0
March	174 670	42 197	60.5	49.3	390.9
April	n.a.	n.a.	57.8	49.3	325.9
May	n.a.	n.a.	53.3	37.8	289.1
June	167 752	38 168	52.7	43.2	308.2
1997–98					
July	n.a.	n.a.	n.a.	n.a.	397.4
August	n.a.	n.a.	n.a.	n.a.	330.4
September	n.y.a.	n.y.a.	n.y.a.	n.y.a.	330.9

(a) All annual data are end of period. (b) All annual data are annual averages.

Source: ABS, Tourist Accommodation, Australia (8635.0) and Overseas Arrivals and Departures, Australia (3401.0).

Explanatory Notes

Tourism is short-term travel away from the normal place of work and residence. This includes both domestic and international travel. Tourists spend money on a wide range of goods and services provided by many businesses.

Domestic tourism is the largest contributor to Australia's overall tourist market. When Australians holiday in Australia rather than going overseas, they spend money in Australia instead of overseas, that is, Australia does not lose foreign exchange.

International tourism earns Australia foreign exchange. When tourists from overseas spend money in Australia, their currency is exchanged for Australian dollars. The foreign exchange earned from tourism can be used to finance imports and to service foreign debt.

The foreign exchange earned from tourism in Australia now exceeds earnings from many of Australia's more traditional export commodities. Tourism is seen as a growth industry which could play a role in securing Australia's future prosperity.

In order to identify the market that exists for Australia as a tourist destination, statistics on the country of residence of our international tourists are collected. This information is used to market and tailor our goods and services accordingly.

Statistics are collected on the capacity, occupancy rates and takings of tourist accommodation. The statistics are collected in order to observe the level of activity in the industry, geographical trends and seasonal trends. The information is used by government and private bodies to plan investment, marketing and policy for the tourism industry.

Further Reading

Accommodation Industry, Australia (8695.0)
Contains business size, employment, income and expenditure data as well as an historical overview of the accommodation industry.

Directory of Tourism Statistics (1130.0)
Contains comprehensive information on sources of tourism statistics together with examples showing how some sources may be used in relation to tourism.

Overseas Arrivals and Departures, Australia (3401.0)
Provides a summary of monthly data for all movements into and out of Australia. This includes details of overseas visitors by country of residence, intended length of stay and purpose of journey.

Tourist Accommodation, Australia (8635.0)
Contains quarterly data on capacity, occupancy rates and takings for establishments providing short-term accommodation for each State and Territory and Australia.

Tourism Indicators, Australia (8634.0)
Contains quarterly data on tourist accommodation by State, details on international tourism and other tourism statistics, most of which are not included in either of the above two publications.

2.4.5 Volume of Farm Production

Comment

The estimate for the total volume of production for farms peaked in 1996–97, with all categories experiencing increases over 1995–96. The forecast for 1997–98 shows a decrease in crops principally due to the anticipated effects of El Nino. However, livestock slaughterings and livestock products are expected to experience moderate increases.

VOLUME OF TOTAL FARM PRODUCTION INDEX (1989–90 = 100.0)

Source: ABARE, Annual data.

VOLUME OF FARM PRODUCTION INDEXES (1989–90 = 100.0)

Period	*Crops*	*Livestock Slaughterings*	*Livestock Products*	*Total Farm*
1992–93	116.1	108.1	87.8	103.0
1993–94	127.0	110.6	87.7	107.2
1994–95	87.1	111.5	81.5	92.3
1995–96	136.1	110.7	81.0	107.6
1996–97	166.8	115.5	82.0	119.2
1997–98(a)	139.7	116.5	83.1	111.3

(a) Forecast

Source: ABARE.

Explanatory Notes

The farm sector is a significant contributor to Australia's total export income. The prosperity of farm industries therefore has a large impact on incomes in the rest of the economy.

Economic performance of the farm sector can be measured by the volume of farm production, which is produced in the form of an index by the Australian Bureau of Agricultural and Resource Economics (ABARE). The farm production index is broken into three categories: crops, livestock slaughterings, and livestock products. Changes in the production of farm products which make up these categories cause the index to rise or fall, depending on whether production increases or decreases.

A rise in the volume of production is not always in the best interest of the producer. When a commodity has a large share of the world market, an increase in supply causes a fall in the price of the commodity, unless demand also increases.

The majority of Australia's farm commodities do not have a large share of the world market. The quantity of these commodities exported can increase without having a significant effect on the supply of the commodity on the world market and therefore little effect on the price received.

The Government and producer groups use the volume of farm production to estimate farm incomes. This information is used to formulate policy for farm industries and the general economy.

Further Reading

Agriculture, Australia (7113.0)
Covers structure of the farming sector and includes details on land use, crops, horticultural activity and livestock numbers. Also includes financial activity information.

Australian Commodities Forecasts and Issues (Quarterly)
Contains ABARE forecasts and historical data for agriculture and resource commodities. Includes data on quantity and value of production, quantity and value of exports, value of imports of selected commodities, annual and quarterly prices and world production and consumption, stocks and trade for selected commodities.

Livestock Products, Australia (7215.0)
Provides statistics on livestock slaughterings, meat production, milk, wool and exports of live sheep, cattle and meat.

Value of Agricultural Commodities Produced, Australia (7503.0)
Contains the gross and local value of agricultural commodities, average unit gross values (i.e. prices) of principal crops, livestock, etc. and indexes of values at constant prices.

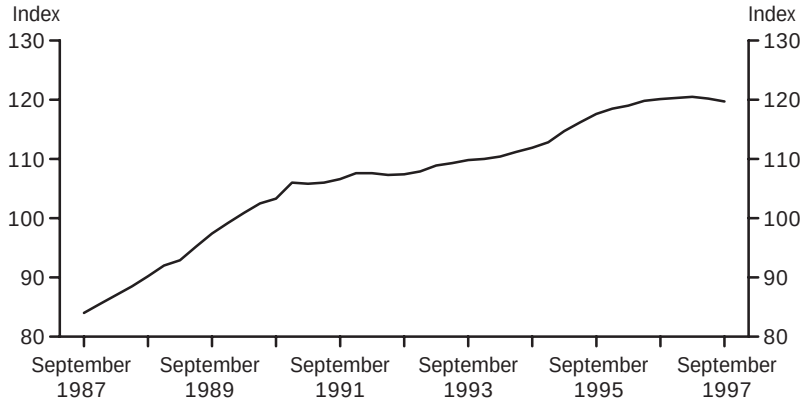
Section 2.5
Prices and Income

2.5.1 Consumer Price Index

Comment

The All Groups Consumer Price Index (CPI) recorded an average annual rate of growth of 7.4% from September 1987 to December 1990. Since then, the rate of growth in the All Groups CPI has slowed considerably recording an average annual rate of growth of 1.9% from March 1991 to September 1997. In September quarter 1997, a decrease from the previous quarter of 0.4% in the All Groups CPI was recorded.

CONSUMER PRICE INDEX: ALL GROUPS (1989–90 = 100.0)



Source: ABS, Consumer Price Index (6401.0), Quarterly data.

CONSUMER PRICE INDEX: SELECTED GROUPS(a) (1989–90 = 100.0)

Period	*Food*	*Clothing*	*Housing*	*All groups*
		ANNUAL AVERAGE		
1991–92	105.8	106.4	98.9	107.3
1992–93	107.4	107.5	94.6	106.4
1993–94	109.4	106.7	94.2	110.4
1994–95	112.1	106.7	100.0	113.9
1995–96	116.0	107.0	105.9	118.7
1996–97	119.7	107.3	101.6	120.3
		QUARTERLY		
1995–96				
March	115.9	106.8	105.7	119.0
June	117.1	107.4	106.3	119.8
1996–97				
September	118.3	107.2	106.1	120.1
December	119.4	107.5	103.2	120.3
March	120.2	107.0	100.2	120.5
June	120.8	107.3	96.9	120.2
1997–98				
September	120.8	107.1	95.9	119.7

(a) Weighted average of eight capital cities.

Source: ABS, Consumer Price Index (6401.0).

Explanatory Notes

The Consumer Price Index (CPI) is a general indicator of the prices paid by household consumers for the goods and services they buy. The simplest way of thinking about the CPI is to imagine a basket of goods and services of the kind bought by Australian households. As prices vary, the total price of this basket will also vary.

This basket of goods and services has been selected to represent purchases by metropolitan employee households and covers expenditure on the following broad items: food, clothing, housing, household equipment and operation, transportation, tobacco and alcohol, health and personal care as well as recreation and education. To ensure the basket remains representative of current spending habits, it is revised every 5 years.

The price of the CPI basket in the base period (currently 1989–90) is assigned a value of 100.0 and prices in other periods are expressed as percentages of the price in the base period. For example, if the price of the basket had increased by 15% since the base period the CPI would read 115.0.

The actual index number for any given period is therefore equal to:

$$\frac{\text{total cost of fixed basket in given period}}{\text{total cost of fixed basket in reference base period}} \times 100$$

The CPI has always been an important economic indicator and in recent years actions related to movements in the CPI have had direct or indirect effects on all Australians. For example, it has been used as a starting point in wage negotiations, to adjust Social Security and superannuation payments and in a range of business contracts.

The CPI is often loosely referred to as a 'cost of living index' but this is not correct. A true cost of living index, among other things, would need to take into account changes in standards of living and the substitutions that consumers make in order to maintain their standard of living. In contrast, the CPI assumes the purchase of a constant basket of goods and services and measures changes in the price of the goods and services in that basket alone.

Further Reading

A Guide to the Consumer Price Index (6440.0)
Contains information designed to promote the understanding of the CPI. It includes what the CPI is, to whom the CPI relates and how it is calculated.

Consumer Price Index (6401.0)
Presents quarterly movements in retail prices of goods and services commonly purchased by metropolitan wage and salary earners. Indexes are published for each of the State capitals, Canberra and Darwin.

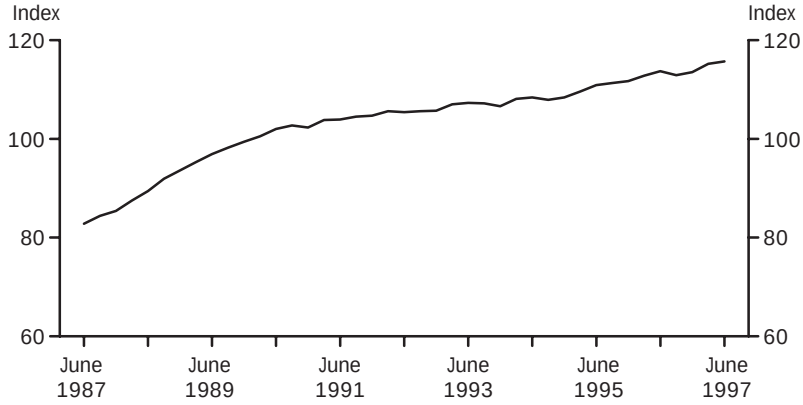
The Australian Consumer Price Index; Cencepts, Sources and Methods (6461.0)
This publication is available, updated and extended, as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Details changes to the CPI, including changes to the treatment of mortgage interest charges and changes as a result of introduction of the twelfth series index effective June quarter 1992.

2.5.2 Implicit Price Deflator

Comment

The Implicit Price Deflator (IPD) for Gross Domestic Product (GDP(E)) has increased steadily from 1987–88 to 1996–97. During this period, the greatest rate of annual increase (8.9%) was recorded in 1988–89. Since then, the yearly rate of change of the IDP of GDP(E) has decreased to 1.0% in 1993–94 before increasing to 2.9% in 1995–96 and then decreasing to 1.7% in 1996–97.

IMPLICIT PRICE DEFLATOR, GROSS DOMESTIC PRODUCT (GDP (E))
(1989–90 = 100.0)



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

IMPLICIT PRICE DEFLATOR

Period	*Index*
ANNUAL	
1991–92	105.0
1992–93	106.4
1993–94	107.5
1994–95	109.2
1995–96	112.4
1996–97	114.3
QUARTERLY (TREND)	
1995–96	
December	112.0
March	112.5
June	113.0
1996–97	
September	113.5
December	114.0
March	114.7
June	115.3

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

An implicit price deflator (IPD) is one of the other indexes in addition to the Consumer Price Index (CPI) which measure price change. IPD indexes are obtained by dividing a current price value by its corresponding constant price value. The general formula for an IPD in period *i* is:

$$IPD_i = [(\Sigma P_i.Q_i) / (\Sigma P_o.Q_i)] \times 100$$

where P_i = prices period *i*, P_o = base period prices, Q_i = quantities period *i*. (Hence $\Sigma P_i.Q_i$ represents the total current price value and $\Sigma P_o.Q_i$ represents the total constant price value in period *i*.)

Unlike the CPI and other ABS price indexes that relate to a fixed basket of goods and services, IPDs relate to a changing basket of goods and services. Hence, changes in an IPD from one period to another generally reflect compositional changes as well as price changes.

When calculated from the major national accounting aggregates, such as gross national expenditure (GNE), IPDs relate to a broader range of goods and services in the economy than that represented by any of the individual retail and wholesale price indexes published by the ABS.

The IPD of GNE is an indicator of overall movement in the prices of all final goods and services purchased by Australian residents, including imported goods. Because increase in stocks is subject to extreme compositional changes, IPD of domestic final demand (i.e. GNE other than increase in stocks and statistical discrepancy) is considered to be a more useful indicator of domestic price change than is the IPD for GNE itself.

The IPD of gross domestic product (GDP) is another broad measure of price change available in the national accounts. It provides an indication of the overall movement in the prices of goods and services produced in Australia, whether for use in the domestic economy or for export.

IPDs are subject to revision because of the revisions in the relevant current price and/or constant price estimates, including changes to seasonally adjusted estimates resulting from seasonal re-analysis.

Further Reading

A Guide to the Australian National Accounts (5235.0)
Contains information on the construction and relevant uses of various IPDs produced by the ABS.

Australian National Accounts: National Income, Expenditure and Product (5204.0)
Provides IPDs for several series including GNE and GDP over a 12-year period. They are derived using the base 1989–90 = 100.0.

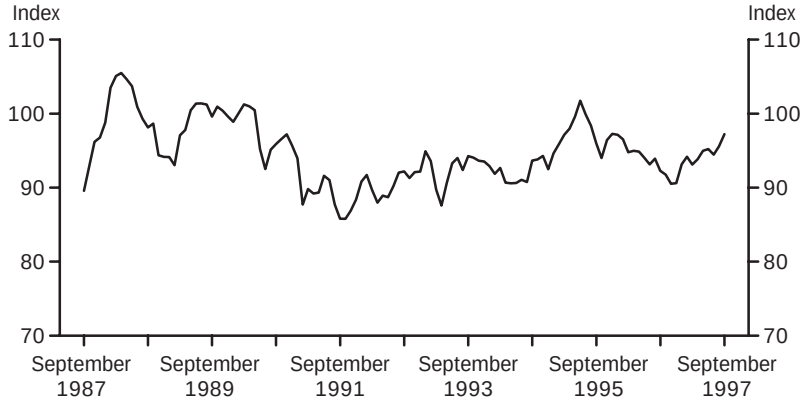
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Contains IPDs derived from both trend and seasonally adjusted quarterly data for domestic final demand, GNE, GDP(E), gross farm product, gross non-farm product and terms of trade.

2.5.3 Reserve Bank of Australia Index of Commodity Prices

Comment

The Reserve Bank of Australia (RBA) index of commodity prices has fluctuated consistently between 1987 and 1997, reaching a high of 105.5 in April 1988 and a low of 85.8 in October 1991. In September 1997, the series recorded 97.2.

RESERVE BANK OF AUSTRALIA INDEX OF COMMODITY PRICES (1989–90 = 100.



Source: Reserve Bank of Australia, Monthly data.

RESERVE BANK OF AUSTRALIA INDEX OF COMMODITY PRICES(a) (1989–90 = 100.0)

Period	*Index*
ANNUAL	
1994–95	95.2
1995–96	96.6
1996–97	93.1
MONTHLY	
1995–96	
July	93.1
August	93.9
September	92.3
October	91.8
November	90.5
December	90.6
January	93.2
February	94.2
March	93.1
April	93.9
May	95.0
June	95.2
1996–97	
July	94.5
August	95.6
September	97.2

(a) Monthly average data.

Source: Reserve Bank of Australia.

Explanatory Notes

The Reserve Bank of Australia (RBA) developed the commodity price index to provide an early indication of trends in Australia's export prices. There are 17 commodities included in the index representing approximately 75% of Australia's commodity exports. The commodities are weighted according to the quantity exported by volume over the previous 12 months. The weights given to each commodity can vary over time to allow for changes in the composition of exports.

Rural and non-rural components are calculated as well as total commodities. In December 1992 rural commodities made up 38% of the index, with wool, wheat and beef being the main rural commodities. Non-rural commodities make up the rest of the index, with coking and steaming coal, iron ore and gold being the main non-rural commodities.

The Government and private enterprise use the RBA commodity price index to predict Australia's export earnings and future economic prospects.

Further Reading

Reserve Bank of Australia Bulletin
Presents monthly estimates for the RBA commodity price index for rural, non-rural and all items. See article in the April 1993 issue for an explanation of the index.

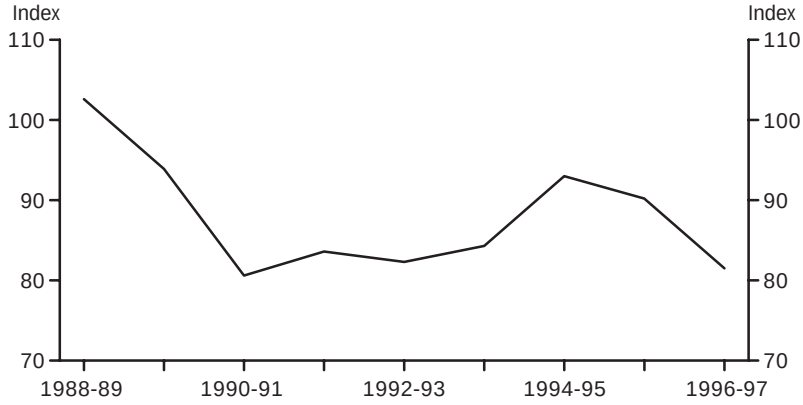
Reserve Bank of Australia Index of Commodity Prices
Monthly RBA press release containing the commodity price index.

2.5.4 Prices Received and Paid by Farmers

Comment

From 1988–89 to 1990–91, a decline in the farmers' terms of trade index occurred due to falls in prices received while prices paid continued to increase. Between 1990–91 and 1993–94, the farmers' terms of trade stabilised, fluctuating within a band of 4 index points. Since then, the index rose to 93.0 in 1994–95 before decreasing to 81.5 in 1996–97.

FARMERS' TERMS OF TRADE INDEX (1987–88 = 100.0)



Source: ABARE, Indexes of Prices Received and Paid by Farmers, Annual data.

INDEXES OF PRICES RECEIVED AND PAID BY FARMERS (1987–88 = 100.0)

Period	*Prices received*	*Prices paid*	*Farmers' terms of trade(a)*
1991–92	98.2	117.5	83.6
1992–93	96.1	116.9	82.3
1993–94	101.0	119.8	84.3
1994–95	114.7	123.4	93.0
1995–96	115.7	128.2	90.2
1996–97p	104.3	128.0	81.5

(a) Ratio of index of prices received by farmers and index of prices paid by farmers.

Source: ABARE, Indexes of Prices Received and Paid by Farmers.

Explanatory Notes

The Australian Bureau of Agricultural and Resource Economics (ABARE) produces indexes of prices received and prices paid by farmers. The indexes measure movements in the price of a fixed baskets of goods and services that farmers sell and purchase, respectively.

The indexes of prices received and paid by farmers are not indicators of farmers' incomes or costs, but are used to determine farmers' terms of trade. Farmers' terms of trade is equal to the ratio of prices received to prices paid. Farmers experience a rise in their terms of trade when, for example, the average level of prices they receive increase at a faster rate than the average level of prices paid. Farmers experience a fall in their terms of trade when, for example, the prices they pay increase at a faster rate than the prices they receive.

ABARE uses farmers' terms of trade along with other information to assist in the projection of income levels for producers of specific commodities. The Government uses the forecasts to formulate economic policy regarding marketing of primary products, guaranteed prices, subsidies to primary producers and overseas trade policy.

Further Reading

Agricultural Industries, Financial Statistics, Australia (7507.0)
Contains detailed information for farm businesses about turnover, expenses, profitability, capital spending, asset values, indebtedness and net worth. The information is available for individual agricultural industries at the State and national levels.

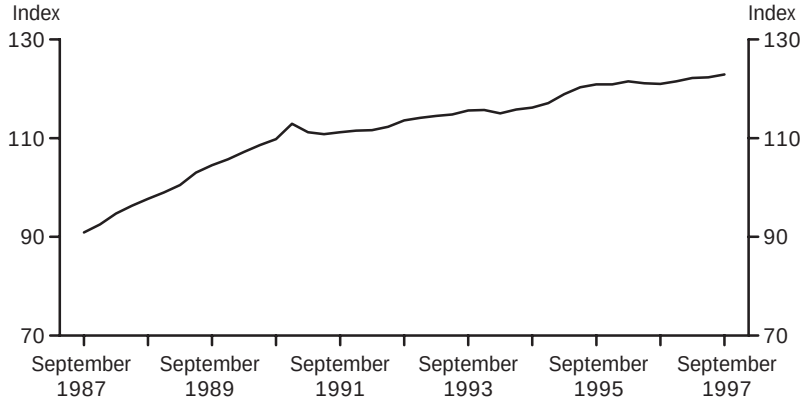
Australian Commodities
Contains ABARE forecast and historical data for agriculture and resource commodities. Includes data on quantity and value of production, quantity and value of exports, value of imports of selected commodities, annual and quarterly prices and world production and consumption, stocks and trade for selected commodities.

2.5.5 Producer Price Indexes

Comment

From the mid-1980s to the end of 1990 the price indexes of articles produced by manufacturing industry recorded strong and steady increases. Over the 5 years to December quarter 1990 the index increased 38.5%. For the 5 years to December quarter 1995, the rate of increase slowed, recording an increase of 7.1%. This lower rate of increase has continued into the second half of the 1990s.

PRICE INDEX OF ARTICLES PRODUCED BY THE MANUFACTURING INDUSTRY
(1988–89 = 100.0)



Source: ABS, Price Index of Articles Produced by Manufacturing Industry, Australia (6412.0), Quarterly data.

SELECTED PRODUCER PRICE INDEXES, ALL GROUPS

Period	*Price index of articles produced by manufacturing(a)*	*Price index of materials used in manufacturing(b)*	*Price index of materials used in building (other than house building(b)*	*Price index of materials used in house building(b)*
		ANNUAL AVERAGE		
1991–92	111.6	101.4	105.7	102.2
1992–93	114.3	106.4	106.0	106.9
1993–94	115.5	104.7	107.5	112.0
1994–95	118.1	107.6	110.4	115.4
1995–96	121.1	110.1	112.7	115.7
1996–97	121.8	106.0	113.2	116.1
		QUARTERLY		
1995–96				
March	121.5	110.7	112.8	115.3
June	121.1	108.2	112.7	115.5
1996–97				
September	121.0	106.1	112.7	115.6
December	121.5	106.1	112.8	115.8
March	122.2	106.3	113.4	116.1
June	122.3	105.4	113.9	117.0
1997–98				
September	122.9	106.5	114.0	117.3

(a) 1988-89 = 100.0. (b) 1989-90 = 100.0.

Source: ABS, Price Index of Articles Produced by Manufacturing Industry, Australia (6412.0), Price Indexes of Materials used in Manufacturing Industries, Australia (6411.0), Price Index of Materials Used in Building Other than House Building, Six Captial Cities (6407.0) and Price Index of Materials Used in House Building, Six State Captial Cities (6408.0).

Explanatory Notes

Producer price indexes measure movements in the prices of goods for various sectors of the Australian economy. They are important economic indicators.

The indexes relate to three broad sectors of the Australian economy: building industry, manufacturing industry and the coal mining industry. The producer price indexes measure changes in prices of materials used in the production processes for each of the sectors, as well as articles produced by the manufacturing sector.

As far as possible the prices collected are actual transaction prices, including all forms of discounting.

The indexes are used by both the public and private sectors, primarily for adjusting business contracts, as well as for economic analysis. The indexes are also used as input into other ABS statistics, such as constant price estimates of the national accounts.

Further Reading

Price Index of Materials Used in Building Other than House Building, Six State Capital Cities (6407.0)
Contains measurements of quarterly price movements of materials delivered on site for use in the construction of buildings other than houses.

Price Index of Materials Used in House Building, Six State Capital Cities (6408.0)
Contains measurements of quarterly price movements of materials delivered on site for use in the construction of houses.

Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0)
Contains indexes which measure the quarterly price movements of articles produced by establishments engaged in manufacturing.

Price Indexes of Copper Materials, Australia (6410.0)
Presents indexes which measure quarterly price movements in copper materials used in the manufacture of electrical equipment.

Price Indexes of Materials Used in Coal Mining, Australia (6415.0)
Contains measurements of quarterly price movements of materials used in the mining of coal, for underground mining and open-cut mining.

Price Indexes of Materials Used in Manufacturing Industries, Australia (6411.0)
Contains indexes which measure the quarterly price movements of materials and fuels used by establishments engaged in manufacturing.

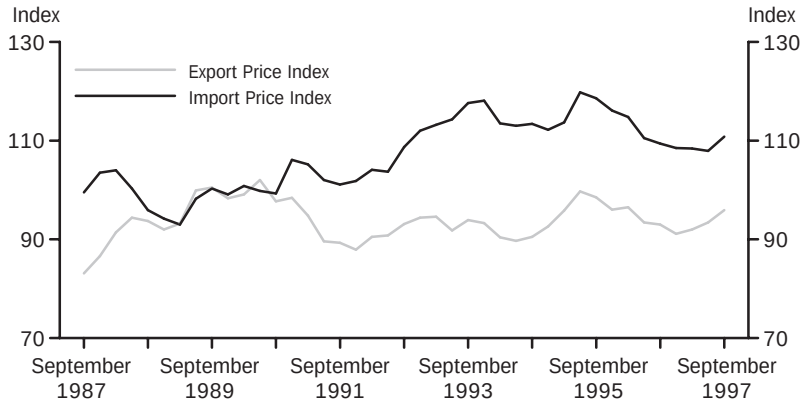
Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods (6419.0).
This publication is available, updated and extended as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a description of the Producer and Foreign Trade Price Indexes including what the indexes measure, items included, source of the prices information and how the indexes are produced.

2.5.6 International Trade Price Indexes

Comment

Movement in both the export and import price indexes has been variable, largely reflecting variations in the value of the Australian dollar against the major trading currencies.

IMPORT AND EXPORT PRICE INDEXES (1989–90 = 100.0)



Source: ABS, Export Price Index, Australia (6405.0) and Import Price Index, Australia (6414.0), Quarterly data.

INTERNATIONAL TRADE PRICE INDEXES: ALL GROUPS (1989–90 = 100.0)

Period	*Export price index*	*Import price index*
	ANNUAL AVERAGE	
1991–92	89.6	102.7
1992–93	93.5	112.1
1993–94	91.8	115.6
1994–95	94.7	114.8
1995–96	96.1	115.0
1996–97	92.4	108.6
	QUARTERLY	
1995–96		
March	96.5	114.8
June	93.4	110.5
1996–97		
September	93.0	109.4
December	91.1	108.5
March	92.0	108.4
June	93.4	107.9
1997–98		
September	95.9	110.8

Source: ABS, Export Price Index, Australia (6405.0) and Import Price Index, Australia (6414.0).

Explanatory Notes

International trade price indexes measure the price of goods leaving and entering Australia. There are two international trade price indexes, the export price index and the import price index.

The export price index measures changes in the prices of exports of merchandise from Australia. The import price index measures changes in prices of imports of merchandise into Australia.

In general, prices are obtained from major exporters and importers of the selected commodities included in each index. The prices used in the indexes relate to the quarter in which the goods physically leave and enter Australia. They are collected on a free on board (f.o.b.) basis. Freight and insurance charges involved in shipping the goods to and from Australian ports are excluded.

The prices used in both the export and import indexes are expressed in Australian dollars. For this reason changes in the relative value of the Australian dollar against overseas currencies will affect both price indexes. An appreciation of the Australian dollar has a downward influence on both indexes, while a depreciation has an upward influence.

The indexes are used by both the public and private sectors for both economic analysis and adjusting business contracts. The indexes are also used as input into other ABS statistics, such as constant price estimates of the national accounts.

Further Reading

Export Price Index, Australia (6405.0)
Measures changes in f.o.b. Australian port-of-origin prices of merchandise exports.

Import Price Index, Australia (6414.0)
Measures price movements of imports of merchandise landed in Australia.

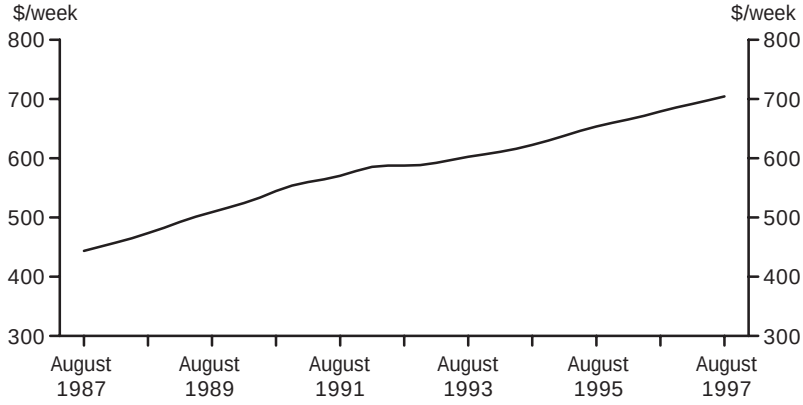
Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods (6419.0).
This publication is available, updated and extended as part of the *Statistical Concepts Reference Library* (available only on CD-ROM)(1361.0.30.001).
Contains a description of the Producer and Foreign Trade Price Indexes including what the indexes measure, items included, source of the prices information and how the indexes are produced.

2.5.7 Average Weekly Earnings

Comment

Average weekly ordinary time earnings, for full-time adults, in trend terms, showed relatively constant growth from August 1987 to August 1991 with an average annual growth rate of 6.5%. Growth then slowed to its lowest quarterly increase in August 1992, before rising again at an average annual growth rate of 4.0% between August 1993 to August 1997.

FULL-TIME ADULT ORDINARY TIME EARNINGS, PERSONS, TREND



Source: ABS, Average Weekly Earnings, States and Australia (6302.0), Quarterly data.

AVERAGE WEEKLY EARNINGS, FULL-TIME ADULT ORDINARY TIME EARNINGS, TREND

	Males	*Females*	*Persons*
Period	$	$	$
	ANNUAL AVERAGE(a)		
1991–92	615.00	515.90	580.40
1992–93	627.60	525.80	591.30
1993–94	645.40	542.60	608.80
1994–95	673.10	564.30	634.00
1995–96	705.00	585.80	662.50
1996–97	732.00	612.00	688.60
	QUARTERLY		
1995–96			
February	708.40	587.10	665.30
May	714.50	593.60	671.50
1996–97			
August	721.40	602.30	678.80
November	728.10	609.80	685.60
February	735.00	615.20	691.70
May	742.90	620.00	697.90
1997–98			
August	708.40	587.10	665.30

(a) Derived as annual average of average weekly earnings in the specified pay period in each quarter.

Source: ABS, Average Weekly Earnings, States and Australia (6302.0).

Explanatory Notes

The ABS collects information from approximately 5,000 employers every quarter to determine estimates of average weekly earnings. Employers are asked to provide details of the total gross weekly earnings paid to employees (including weekly overtime earnings) and the number of employees involved (split into full-time adults and all other employees, by males and females).

The most obvious change in average weekly earnings occurs when wages have increased or decreased as a result of National Wage increases, or agreements between employers and employees, or because of changes to award conditions.

A change in average weekly earnings is not necessarily a reflection of changes in wages but may be due to changes in the composition of the wage and salary earner segment of the labour force. Changes in the type of employment (part-time, full-time), the age of the work force, the occupational make-up of the work force and the amount of overtime all affect average weekly earnings.

If average weekly earnings increase while the level of employment and composition of the wages and salary segment of the labour force remain the same, expenditure on wages rises. If the increase in expenditure on wages is not accompanied by an increase in production, labour costs per unit of output produced will rise.

Governments, unions, employer groups, researchers and private bodies use average weekly earnings as a guide to changes in the labour market and as an indicator of the level of economic activity. Average weekly ordinary time earnings is used in some contracts to adjust for increases in labour costs.

Further Reading

Average Weekly Earnings, Australia, 1941 to 1990 (6350.0)
Contains an historical series of average weekly earnings for all males for Australia from September quarter 1941 to November 1990, as well as average weekly earnings estimates for all employees from August 1981, classified into a number of categories.

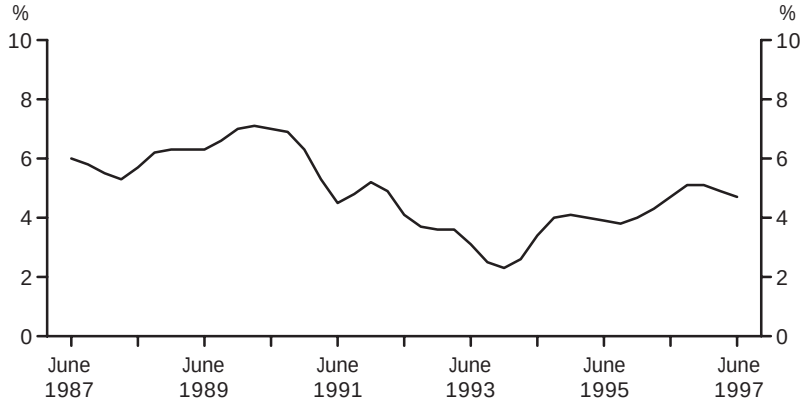
Average Weekly Earnings, States and Australia (6302.0)
Contains quarterly estimates of average weekly ordinary time earnings and average weekly total earnings for full-time adult employees and average weekly total earnings for all employees, males, females and persons, classified by sector and State or Territory.

2.5.8 Saving

Comment

The household saving ratio in trend terms has generally fallen over the period from June 1987 to June 1997. The ratio reached a peak of 7.1% in March quarter 1990. After falling to an historic low of 2.3% in December quarter 1993, the ratio has subsequently risen and was 4.7% in June quarter 1997.

HOUSEHOLD SAVING RATIO, TREND



Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0), Quarterly data.

HOUSEHOLD SAVING

Period	*Saving(a)* $m	*Household disposable income* $m	*Household saving ratio* %
	ANNUAL		
1991–92	11 901	254 154	4.7
1992–93	9 990	264 437	3.8
1993–94	9 010	276 073	3.3
1994–95	11 228	294 884	3.8
1995–96	12 950	315 594	4.1
1996–97	16 027	330 316	4.9
	QUARTERLY (TREND)		
1995–96			
December	3 167	78 410	4.0
March	3 440	79 586	4.3
June	3 790	80 661	4.7
1996–97			
September	4 154	81 674	5.1
December	4 189	82 437	5.1
March	4 104	83 128	4.9
June	3 960	83 782	4.7

(a) Saving is derived as a balancing item.

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

Saving is the excess of income over outlays for each sector in the economy during a given period. Saving can be seen as giving up current consumption to derive a future benefit because it is used to finance investment which, at the national level, will increase the productive capacity to produce a greater quantity of goods and services in the future.

Household disposable income is the amount of income that households have available for spending after deducting from total income any taxes paid, interest payments and transfers overseas. The ratio of household income saved to household disposable income is called the household saving ratio. Australia's household saving ratio has generally been on a downward trend since reaching a high point in the mid-1970s.

For businesses, saving is referred to as undistributed income or retained earnings. For governments, saving is referred to as the surplus on current transactions.

If total saving in the domestic economy from the above sources and from consumption of fixed capital is not enough to cover planned investment, then the nation must borrow from foreign countries to finance its investment. Historically, Australia has relied heavily on foreign borrowing to finance its investment. In effect, we have chosen to consume now rather than to save for investment.

Governments and private organisations are interested in changes in the level of saving because of the effect on investment and Australia's borrowing requirements from overseas.

Further Reading

A Provisional Framework for Household Income, Consumption, Saving and Wealth (6549.0)
A conceptual framework setting out the relationship between household income, consumption, saving and changes in net worth. Shows links with the national accounts.

Australian Economic Indicators (1350.0)
See feature article: 'A Framework for Household Income, Consumption, Saving and Wealth' in the July 1995 issue.

Australian National Accounts: National Income, Expenditure and Product (5204.0)
Contains detailed presentation of the national accounts for the last 12 years and an historical series from 1948–49 to the current year.

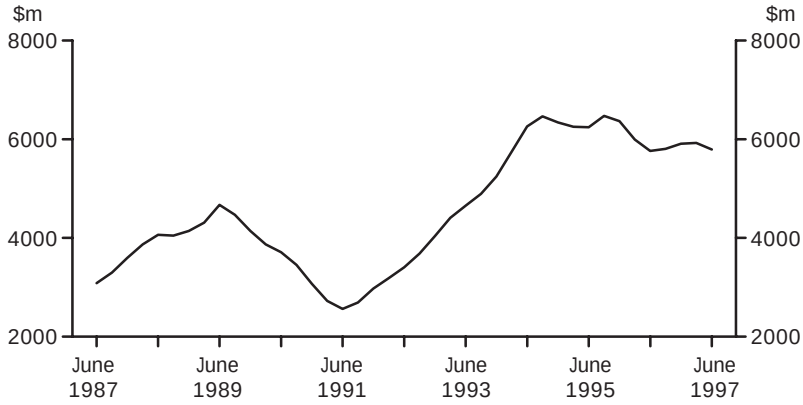
Australian National Accounts: National Income, Expenditure and Product (5206.0)
Contains quarterly data, including household income and expenditure. Measures of national saving and saving for individual institutional sector (government, businesses and households) can be found in the income and outlay accounts.

2.5.9 Company Profits

Comment

Company profits, in trend estimate terms, rose from $3,082m in June quarter 1987 to $4,670m in June quarter 1989 during a period of strong growth. Company profits then fell sharply to $2,562m in June quarter 1991, but have grown since to greatly exceed 1989 levels, recording $6,464m in September quarter 1994. Since then, the series has fallen slightly to $5,790m in June quarter 1997.

COMPANY PROFITS BEFORE INCOME TAX, TREND



Source: ABS, Company Profits, Australia (5651.0), Quarterly data.

COMPANY PROFITS BEFORE INCOME TAX

Period	*Mining* $m	*Manufacturing* $m	*Wholesale and retail trade* $m	*Other selected industries* $m	*Total* $m
			ANNUAL (ORIGINAL)		
1991–92	5 048	6 117	1 533	–367	12 331
1992–93	5 268	8 351	2 489	649	16 757
1993–94	4 833	10 978	3 294	2 716	21 821
1994–95	4 668	13 011	4 691	2 846	25 216
1995–96	5 950	10 771	4 174	3 941	24 836
1996–97	6 099	10 015	3 960	3 375	23 449
			QUARTERLY (TREND)		
1995–96					
December	1 471	2 844	1 062	988	6 365
March	1 464	2 541	1 023	964	5 993
June	1 499	2 339	985	940	5 762
1996–97					
September	1 586	2 334	953	931	5 804
December	1 605	2 471	959	872	5 907
March	1 533	2 553	996	845	5 924
June	1 441	2 533	1033	783	5 790

Source: ABS, Company Profits, Australia (5651.0).

Explanatory Notes

Company profits are defined as net operating profits or losses before income tax and extraordinary items and are net of capital profits or losses and dividends received.

Statistics on company profits are collected quarterly by broad industry. Also collected in the survey of company profits are depreciation of fixed assets and interest paid and received. Industries included are Mining, Manufacturing, Construction, Wholesale and Retail trade, Transport and storage, Services to finance and insurance, Property and business services, and Other services. Companies excluded are those primarily engaged in Agriculture, forestry, fishing and hunting, Finance, Insurance, and Community services activities.

The ABS also publishes information quarterly on expected profit. Additional information on profit on an annual basis is also published.

Government and other economists and analysts use statistics on company profits as a short-term indicator of economic activity. During periods of economic growth there is likely to be a higher level of company profits than in periods of economic decline.

Further Reading

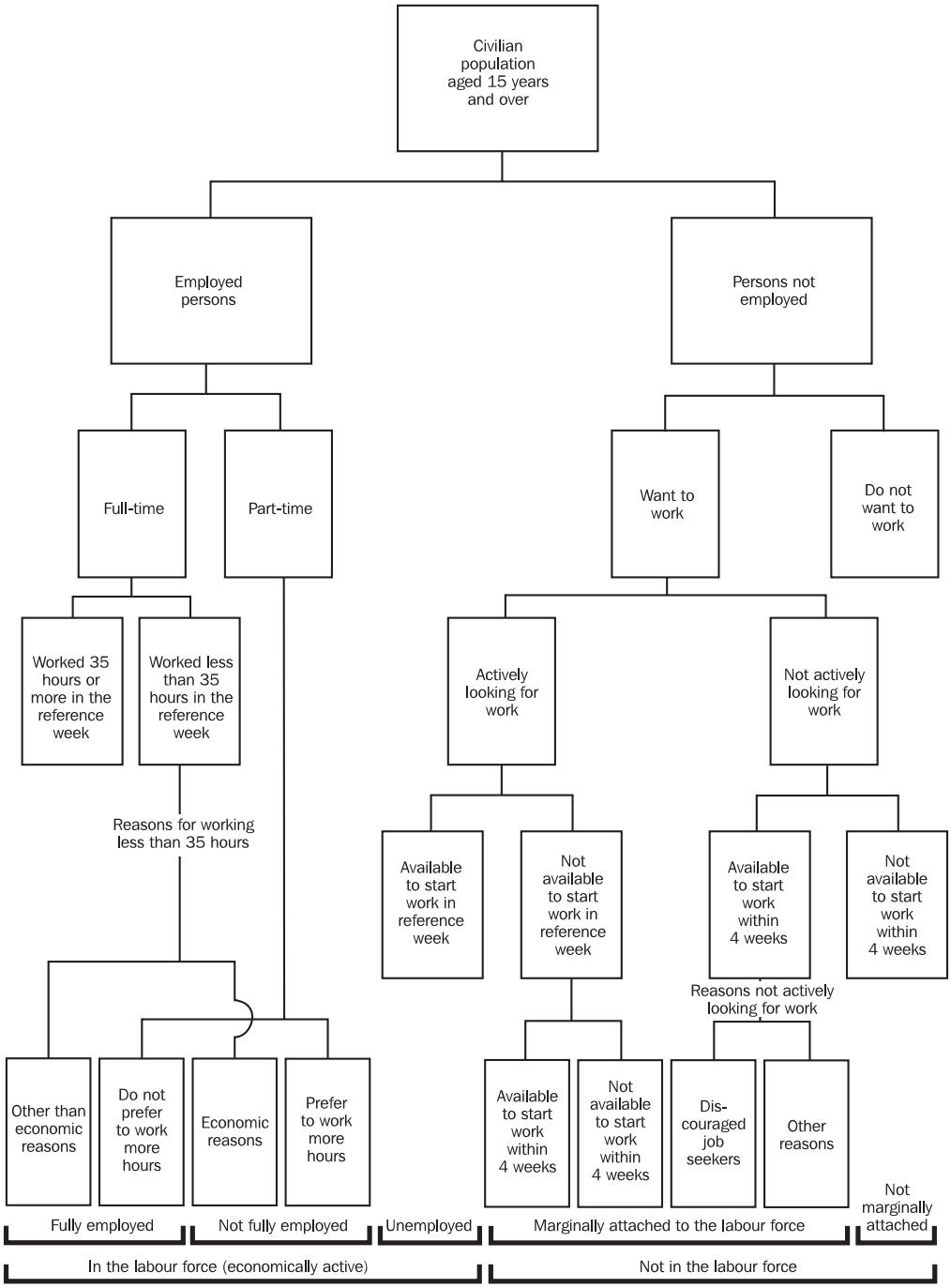
Australian Business Expectations (5250.0)
Provides estimates of percentage change in key business performance indicators. The data are presented by industry sector and size of business.

Business Operations and Industry Performance, Australia (8140.0)
Presents economic statistics based on profit and loss statements and balance sheet accounts of businesses in most industries of the Australian economy. Included is a measure of net profit and profitability.

Company Profits, Australia (5651.0)
Contains quarterly estimates of company profits for companies employing more than 30 people. The data are presented by industry and expressed in original, seasonally adjusted and trend terms.

Section 2.6
Labour Force and Demography

2.6.1 Labour Force Framework



Explanatory Notes

An understanding of the dynamic structure and characteristics of the labour market is assisted by having a labour force framework which is relevant to evolving socioeconomic conditions and policy concerns. The data available from the monthly Labour Force Survey and its supplementary surveys supports the conceptual framework set out in the diagram opposite. Such a framework enables issues such as underemployment, and the transition from education to work, to be analysed in depth.

The ABS follows closely the international standards set out by the International Labour Organisation (ILO) for measuring employment and unemployment. The ILO periodically convenes the International Conference of Labour Statisticians (ICLS) to discuss and reach conclusions upon concepts and definitions and to ensure international comparability as far as possible. Australia is an active participant in ICLS meetings. The international standards relating to employment and unemployment are, to a large extent, those first adopted by the 8th ICLS in 1954.

Further Reading

Australian Labour Market (6284.0)
Provides the reader with an appreciation of labour issues in an easy-to-read feature format.

Information Paper: Measuring Employment and Unemployment (6279.0)
Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

Labour Force, Australia (6203.0)
Contains labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed, duration unemployed, country of birth and year of arrival in Australia.

Labour Statistics, Australia (6101.0)
Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

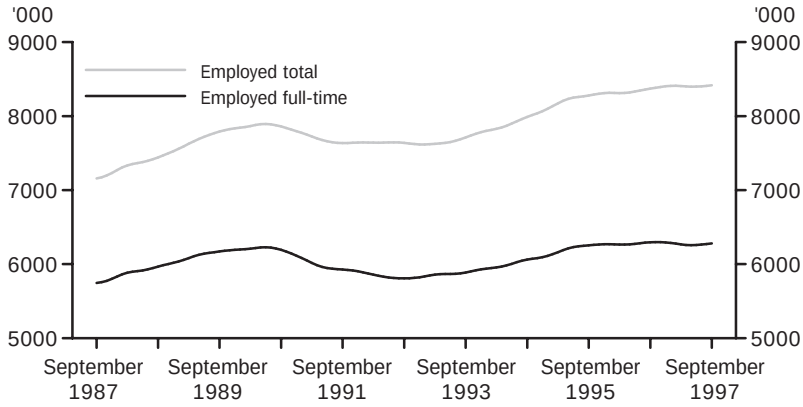
Standards for Statistics on Core Labour Force Variables (1288.0)
Specifies ABS standards for the collection, processing, storage and dissemination of statistics on labour force variables. Topics covered include the ABS recommended definitions of concepts, classification criteria, code structures, questionnaire modules and output categories.

2.6.2 Employment

Comment

The trend estimate of persons employed full-time and total persons employed peaked at 6.23 million and 7.89 million, respectively, in June 1990. Full-time employment then fell to 5.81 million persons in September 1992 and total employment fell to 7.62 million in January 1993. Since then, both full-time and total employment have increased, steadily at first, then more slowly. In September 1997, there were 6.28 million persons employed full-time and a total of 8.42 million persons employed.

EMPLOYED PERSONS, TREND



Source: ABS, Labour Force, Australia (6203.0), Monthly data.

EMPLOYED PERSONS

Period	*Full-time aged 15–19 years* '000	*Full-time aged 20+ years* '000	*Total full-time* '000	*Total part-time* '000	*Total* '000
			ANNUAL AVERAGE (TREND)		
1994–95	245.0	5 873.5	6 118.5	1 972.6	8 091.1
1995–96	239.8	6 022.3	6 262.0	2 038.6	8 300.6
1996–97	228.9	6 051.0	6 279.9	2 109.2	8 389.1
			MONTHLY (TREND)		
1996–97					
September	236.8	6 058.7	6 295.5	2 076.0	8 371.5
October	236.0	6 061.9	6 297.9	2 084.8	8 382.7
November	234.5	6 062.5	6 297.1	2 096.2	8 393.3
December	232.4	6 060.9	6 293.2	2 109.1	8 402.3
January	229.4	6 056.6	6 286.0	2 121.3	8 407.4
February	226.0	6 051.2	6 277.3	2 131.6	8 408.9
March	222.5	6 044.8	6 267.2	2 138.6	8 405.9
April	219.7	6 039.6	6 259.2	2 141.4	8 400.6
May	218.1	6 038.3	6 256.4	2 140.9	8 397.4
June	217.8	6 041.0	6 258.8	2 139.1	8 397.9
1997–98					
July	218.3	6 045.8	6 264.2	2 137.6	8 401.8
August	219.4	6 051.7	6 271.1	2 136.6	8 407.7
September	220.6	6 058.4	6 279.1	2 136.3	8 415.4

Source: ABS, Labour Force, Australia (6203.0).

Explanatory Notes

Each month the ABS collects data on the number of employed and unemployed persons. This information is gathered from the Labour Force Survey, a monthly sample survey of private dwellings and non-private dwellings (e.g. hotels, motels).

The survey is used to determine the labour force status of the civilian population aged 15 years and over. Not included are members of the permanent defence forces, diplomatic and defence personnel from overseas countries and overseas residents in Australia. The Labour Force Survey classifies individuals as employed, unemployed or not in the labour force.

Employed persons are persons aged 15 years and over, who during the reference week, (a) worked 1 hour or more for payment of any kind or profit in a job, business or farm or (b) worked 1 hour or more without pay in a family business or farm or (c) were employees who had a job but were not at work for various defined reasons or (d) were employers, own account workers or contributing family workers who had a job but were not at work. Full-time workers are employed persons who usually work more than 35 hours a week or did so during the reference week.

Estimates of employment and unemployment are primarily indicators of economic activity and, as such, are used by government departments, financial markets, industry organisations and research organisations to monitor the economy's performance and to develop economic policy. However, employment and particularly unemployment are also social indicators and are used by government departments, research organisations and welfare organisations as indicators of social conditions.

Further Reading

Information Paper: Measuring Employment and Unemployment (6279.0)
Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

Labour Force, Australia (6203.0)
Contains labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed, duration unemployed, country of birth and year of arrival in Australia.

Labour Force Projections, Australia (6260.0)
Projections of the labour force and labour force participation rates for Australia. Projections by sex for eight age groups for each year to 2011. Includes detailed notes on methodology used.

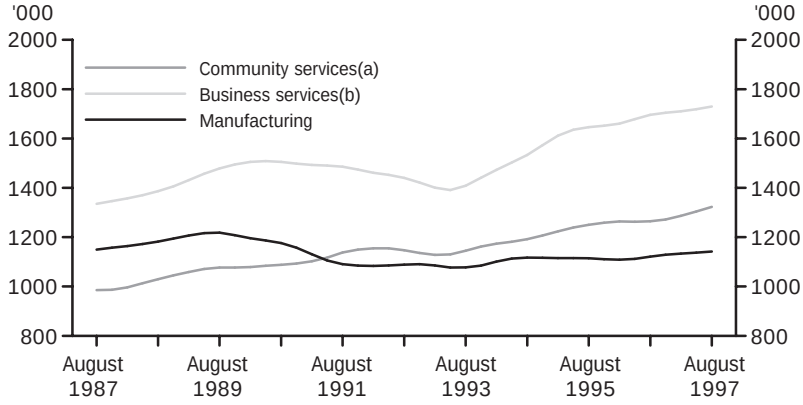
Labour Statistics, Australia (6101.0)
Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

2.6.3 Employed Persons by Industry

Comment

Between August 1987 and August 1997, the trend estimate of employment in Community services and Business services grew substantially with average annual growth rates of 3.0% and 2.6%, respectively. In contrast, over the same period, employment in Manufacturing fell slightly with an average annual growth rate of –0.07%.

EMPLOYED PERSONS BY SELECTED INDUSTRIES, TREND



Source: ABS, The Labour Force, Australia (6203.0), Quarterly data.

EMPLOYED PERSONS BY SELECTED INDUSTRY

Period	*Agriculture, forestry, and fishing* ('000)	*Manufacturing* ('000)	*Trade(c)* ('000)	*Business services(b)* ('000)	*Community services(a)* ('000)	*Other industries(d)* ('000)
			ANNUAL AVERAGE (TREND)			
1991–92	408.8	1 085.8	1 921.0	1 468.1	1 149.2	1 503.8
1992–93	405.7	1 085.4	1 924.0	1 413.4	1 135.4	1 545.9
1993–94	407.0	1 093.7	1 974.4	1 456.2	1 165.5	1 569.1
1994–95	404.7	1 116.1	2 058.2	1 588.1	1 215.2	1 589.6
1995–96	421.3	1 111.4	2 107.8	1 658.9	1 258.9	1 645.7
1996–97	426.4	1 130.0	2 126.5	1 707.1	1 281.5	1 602.0
			QUARTERLY (TREND)			
1995–96						
February	427.3	1 108.5	2 109.1	1 660.3	1 263.6	1 647.1
May	427.0	1 112.0	2 115.1	1 678.0	1 262.8	1 634.4
1996–97						
August	423.7	1 121.2	2 126.2	1 695.7	1 264.2	1 621.6
November	424.4	1 128.6	2 136.6	1 704.4	1 271.4	1 611.9
February	427.7	1 133.2	2 129.9	1 709.9	1 286.2	1 597.3
May	430.0	1 137.0	2 113.3	1 718.3	1 304.2	1 577.2
1997–98						
August	429.6	1 141.6	2 093.1	1 729.8	1 322.9	1 557.1

(a) Community services include Health and community services, Cultural and recreational services and Personal and other services. (b) Business services include Transport and storage, Communication services, Finance and insurance and Property and business services. (c) Trade includes Wholesale trade, retail trade and accommodation, Cafes and restaurants. (d) Other industries include Electricity, gas and water supply, Construction, Public administration and defence, and Education.

Source: ABS, The Labour Force, Australia (6203.0).

Explanatory Notes

Statistics are collected on the number of people employed by industry as at the mid-month of each quarter. The information is collected through the Labour Force Survey, and is used to determine trends in the labour market.

The Labour Force Survey collects information on the respondent's main job. The activity of this person's employer at the location of their main job is classified into one of the following Australian and New Zealand Standard Industrial Classification (ANZSIC) industry Divisions: Agriculture, forestry and fishing; Mining; Manufacturing; Electricity, gas and water supply; Construction; Wholesale trade; Retail trade; Accommodation, cafes and restaurants; Transport and storage; Communication services; Finance and insurance; Property and business services; Government administration and defence; Education; Health and community services; Cultural and recreational services; and Personal and other services.

The ABS also collects information on employment and earnings from a sample of employers. That survey provides wage and salary employment statistics at industry, sector and State level. Information on employment in specific industries is also collected in certain annual or periodic censuses or surveys of those particular industries.

Statistics on employed persons by industry are used by the Government to assess and plan for changes in the labour market by industry sector.

Further Reading

Information Paper: Measuring Employment and Unemployment (6279.0)
Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

Labour Force, Australia (6203.0)
Contains estimates of the civilian population aged 15 years and over by sex, labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed.

Labour Statistics, Australia (6101.0)
Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

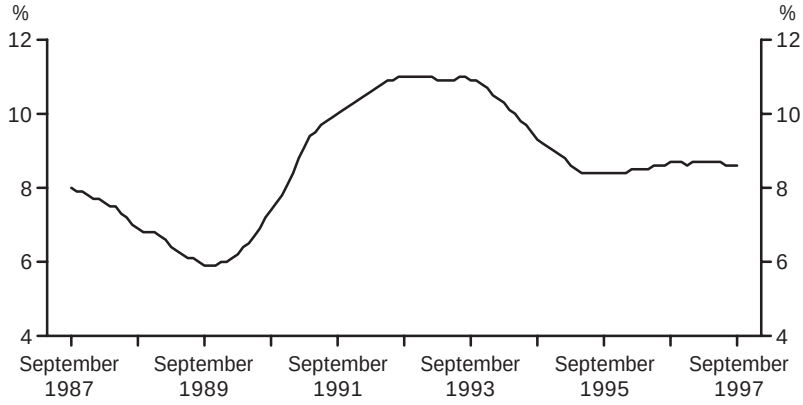
Wage and Salary Earners, Australia (6248.0)
Contains estimates of employees by sex, full-time/part-time, industry and sector. Estimates of gross earnings classified by industry and sector are also shown. Estimates are available for Australia, States and Territories.

2.6.4 Unemployment

Comment

The trend estimate of the unemployment rate increased from 5.9% in November 1989 to 10.0% in September 1991 and remained at double-digit levels for over two and a half years, peaking at 11.0% in late 1992 until mid-1993. The trend estimate then fell to 8.4% between May 1995 and January 1996. Since then, the rate has increased slightly, and was 8.6% in September 1997.

UNEMPLOYMENT RATE, PERSONS, TREND



Source: ABS, Labour Force, Australia (6203.0), Monthly data.

LABOUR FORCE STATUS OF CIVILIAN POPULATION, PERSONS

Period	*Unemployed* '000	*Employed* '000	*Labour force* '000	*Civilian population aged 15+ years(a)* '000	*Unemployment rate* %	*Participation rate* %
			ANNUAL AVERAGE (TREND)			
1994–95	795.0	8 091.1	8 886.9	14 031.1	9.0	63.3
1995–96	767.7	8 300.6	9 068.3	14 236.3	8.5	63.7
1996–97	796.0	8 389.3	9 185.3	14 464.7	8.7	63.5
			MONTHLY (TREND)			
1996–97						
September	793.2	8 371.5	9 164.7	14 405.2	8.7	63.6
October	795.0	8 382.7	9 177.7	14 423.8	8.7	63.6
November	795.3	8 393.3	9 188.6	14 442.4	8.7	63.6
December	795.5	8 402.3	9 197.8	14 461.0	8.6	63.6
January	797.0	8 407.4	9 204.3	14 476.2	8.7	63.6
February	799.6	8 408.9	9 208.4	14 491.3	8.7	63.5
March	801.7	8 405.9	9 207.6	14 506.5	8.7	63.5
April	801.9	8 400.6	9 202.5	14 523.6	8.7	63.4
May	800.0	8 397.4	9 197.4	14 540.8	8.7	63.3
June	797.5	8 397.9	9 195.3	14 558.0	8.7	63.2
1997–98						
July	795.5	8 401.8	9 197.3	14 575.4	8.6	63.1
August	793.9	8 407.7	9 201.6	14 592.8	8.6	63.1
September	793.3	8 415.4	9 208.7	14 610.3	8.6	63.0

(a) Series is not trend. Original data provided.

Source: ABS, Labour Force, Australia (6203.0).

Explanatory Notes

Unemployment exists when people without a job are looking for work but are unable to find employment. Once a month, the ABS conducts a Labour Force Survey in order to monitor the numbers of the employed, the unemployed and those not in the labour force. The labour force is made up of the civilian population aged 15 years or over who are already working and people who do not have a job but are actively looking for work and are available to start work.

The individuals in the labour force who are not employed, but who are actively looking for work and are available to start work, are defined by the ABS as unemployed. Actively looking for work includes writing, telephoning or applying in person to an employer or registering with the Commonwealth Employment Service or registering with Centrelink as a jobseeker. However, whether a person is unemployed or not is measured by the ABS independently of whether he or she is receiving a Newstart or Youth Training allowance from Centrelink.

The unemployment rate is the percentage of the labour force that is unemployed. Individuals who cease to actively look for work are defined as not in the labour force. The participation rate for any group is the labour force expressed as a percentage of the civilian population aged 15 years and over in the same group. It measures the number of people who are participating in the labour force by either working or looking for work.

Statistics on unemployment are used by governments, businesses, industrial tribunals, the media, academics and other research workers to provide a better understanding of the current economic situation when formulating policy.

Further Reading

Australian Economic Indicators (1350.0)
See the feature article in the November 1995 issue 'Measuring Teenage Unemployment'.

Australian Labour Market (6284.0)
Provides the reader with an appreciation of labour issues in an easy-to-read feature format.

Information Paper: Measuring Employment and Unemployment (6279.0)
Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

Labour Force, Australia (6203.0)
Contains estimates of the civilian population aged 15 years and over by sex, labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed.

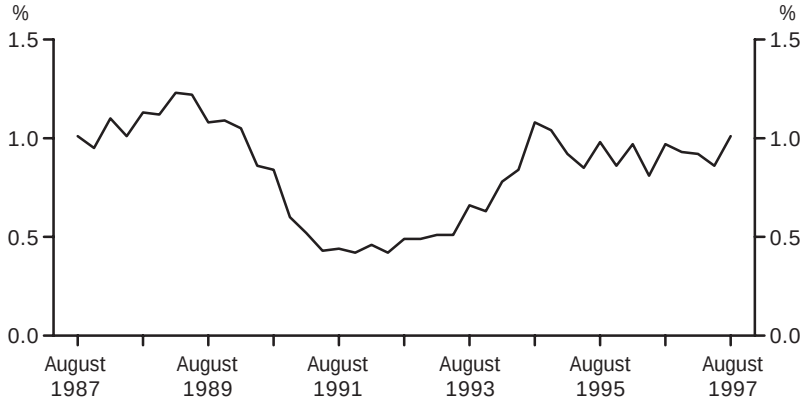
Labour Statistics, Australia (6101.0)
Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

2.6.5 Job Vacancies

Comment

The job vacancy rate recorded a sharp decline from February 1989, falling from 1.23 to a low of 0.42 in November 1991. It then rose to a high of 1.08 in August 1994 and has fluctuated since, to stand at 1.01 in August 1997.

JOB VACANCY RATE



Source: ABS, Job Vacancies and Overtime, Australia (6354.0), Quarterly data.

JOB VACANCIES

Period	*Manufacturing(a)* ’000	*All industries* ’000	*Job vacancy rate(a)* %
	ANNUAL AVERAGE		
1991–92	3.1	25.6	0.43
1992–93	3.5	29.3	0.50
1993–94	5.4	43.1	0.73
1994–95	9.9	61.4	0.97
1995–96	7.9	58.9	0.90
1996–97	6.3	61.6	0.90
	QUARTERLY (TREND)		
1995–96			
February	9.1	59.5	0.97
May	8.2	60.0	0.81
1996–97			
August	6.0	60.1	0.97
November	6.1	61.1	0.93
February	7.4	62.8	0.92
May	5.8	63.6	0.86
1997–98			
August	7.1	63.9	1.01

(a) Trend data not available, original data provided.

Source: ABS, Job Vacancies and Overtime, Australia (6354.0).

Explanatory Notes

One measure of the demand for labour is the number of job vacancies. When the demand for labour is low, the number of job vacancies is reduced. If the demand for labour is high, the number of job vacancies increases.

The demand for labour is an indicator of changes in the level of economic activity. Recessions are characterised by a low level of job vacancies, while periods of economic growth tend to be characterised by an increase in job vacancies.

A job vacancy is a job available for immediate filling on the survey reference date and for which recruitment action has been taken. Recruitment action includes efforts to fill vacancies by advertising, factory notices, notifying public or private employment agencies, notifying trade unions and by contacting, interviewing or selecting applicants already registered with the enterprise or organisation. Excluded are jobs available only to persons employed by the enterprise or organisation, e.g. internal vacancies available only to the Australian Public Service and the Public Services of each of the States and Territories.

The job vacancy rate is calculated by expressing the number of job vacancies as a percentage of employees plus vacancies. The Government, unions and private bodies monitor the job vacancy rates in order to get an indication of the level of future employment. A rise in job vacancies is usually followed by an increase in employment.

Job vacancy statistics are collected by sector (public and private), industry, State or Territory and as a national total. Industry statistics are used to identify the industries experiencing growth or decline. State and Territory statistics show employment prospects and the prospect of economic growth for each of the States and Territories by public and private sectors.

Further Reading

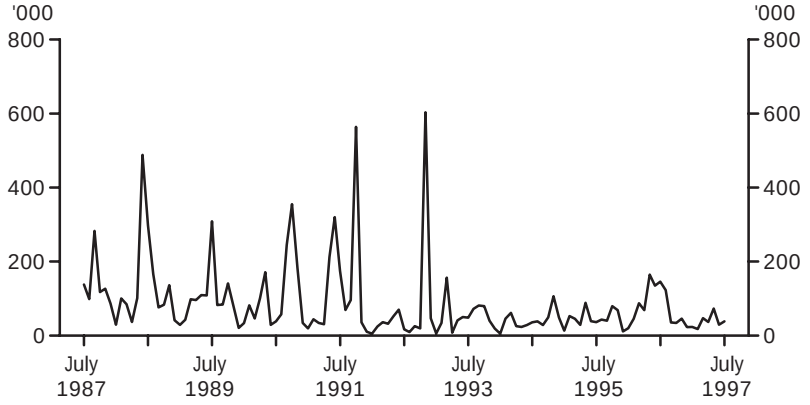
Job Vacancies and Overtime, Australia (6354.0)
Contains quarterly estimates of the number of job vacancies and job vacancy rates by sector, industry, and State and Territory.

2.6.6 Industrial Disputes

Comment

Working days lost due to industrial disputes generally declined in the mid-1990s when compared with the late 1980s and early 1990s. A large number of working days lost were recorded for the months of June 1988, October 1991, and November 1992.

WORKING DAYS LOST



Source: ABS, Industrial Disputes, Australia (6321.0), Monthly data.

INDUSTRIAL DISPUTES IN PROGRESS

Period	*Number of disputes* no.	*Employees involved* '000	*Working days lost* '000	*Working days lost per 1,000 employees(a)* no.
		ANNUAL		
1994–95	649	344.7	579.7	86
1995–96	598	480.2	800.7	115
1996–97	491	509.8	635.2	89
		MONTHLY		
1995–96				
May	65	186.3	164.6	101
June	57	157.2	134.8	115
1996–97				
July	47	155.9	145.8	130
August	47	111.4	122.9	141
September	48	35.4	35.4	140
October	66	23.7	34.3	133
November	53	46.3	46.0	130
December	49	20.8	23.0	131
January	31	7.1	23.5	132
February	36	17.3	17.6	128
March	35	34.8	47.1	122
April	40	30.9	36.9	117
May	45	56.7	73.1	104
June	53	19.3	29.6	89
1997–98				
July	47	23.6	38.7	74

(a) The basis for the calculation of working days lost per 1,000 employees was changed in January 1995.

Source: ABS, Industrial Disputes, Australia (6321.0).

Explanatory Notes

An industrial dispute is defined as a withdrawal from work by a group of employees, or a refusal by an employer or a number of employers to permit some or all of their employees to work, each withdrawal or refusal being made in order to enforce a demand, to resist a demand, or to express a grievance.

The statistics relate to disputes which involved stoppages of work of 10 working days or more at the establishments where the stoppages occurred. Ten working days is equivalent to the amount of ordinary time worked by 10 people in 1 day, regardless of the length of the stoppage, for example, 3,000 workers on strike for 2 hours would be counted as 750 working days lost (assuming they work an 8-hour day).

Statistics on industrial disputes are used by government departments, industrial relations authorities, employer organisations, employee unions, etc. as broad indicators of the level of industrial disputation.

Further Reading

Industrial Disputes, Australia (6321.0)
Details number of disputes, employees involved, working days lost and working days lost per thousand employees in disputes involving stoppages of work of 10 working days or more, classified by State, industry, duration of disputes, cause and method of settlement.

Industrial Disputes, Australia, 1996 (6322.0)
Details number of disputes, etc., on same basis as for the monthly publication, but in some greater detail, and with 6-year time series (1991 to 1996).

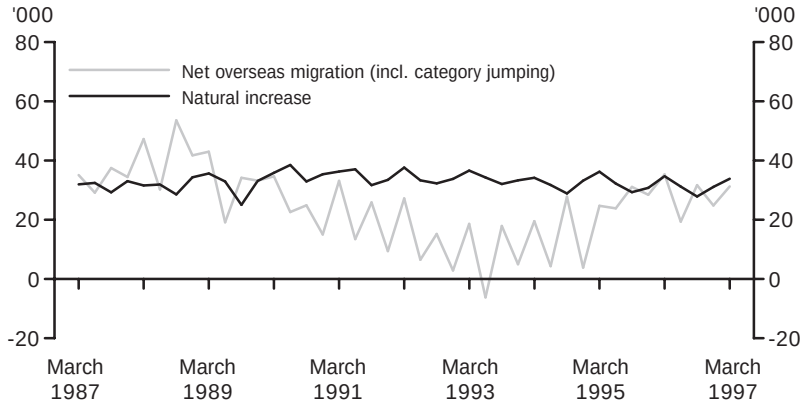
Labour Force, Australia (6203.0)
Monthly publication which contains detailed results of the monthly Labour Force Survey, including tables which show the civilian population aged 15 years and over by sex, labour force status, age, marital status, States and Territories, capital cities, etc. Also covers industry, occupation, hours worked, full or part-time workers, duration of employment and other factors.

2.6.7 Population

Comment

Australia's population grew at an average annual rate of 0.6% between 30 March 1987 and 30 March 1997. Natural increase has been the main contributor to Australia's population growth since 1984–85 except in 1987–88 and 1988–89 when net overseas migration was higher, and the highest population growth rate was recorded. While natural increase has remained fairly stable, net overseas migration has fluctuated quite substantially in response to changes in government policy.

COMPONENTS OF POPULATION CHANGE



Source: ABS, Australian Demographic Statistics (3101.0), Quarterly data.

ESTIMATED RESIDENT POPULATION AND COMPONENTS OF POPULATION CHANGE(a)

Period	*Natural increase* '000	*Net overseas migration (incl. category jumping)* '000	*Total increase(b)* '000	*Total population at end of period* '000
		YEAR ENDED 30 JUNE		
1990–91	141.6	86.4	218.9	17 284.0
1991–92	136.0	69.0	207.4	17 491.5
1992–93	136.9	30.5	170.2	17 661.7
1993–94	133.3	46.8	185.7	17 847.4
1994–95	130.5	80.1	215.8	18 063.3
1995–96	126.0	114.2	248.2	18 311.5
		QUARTERLY		
1995–96				
September	29.3	31.1	62.8	18 126.1
December	30.7	28.4	61.6	18 187.7
March	34.7	35.3	72.5	18 260.2
June	31.2	19.3	51.3	18 311.5
1996–97				
September	27.9	31.7	59.5	18 371.0
December	31.1	24.8	55.9	18 426.9
March	33.9	31.2	65.1	18 492.0

(a) For dates prior to June 1996, differences between the total increase shown and the sum of the natural increase and net overseas migration arise from retrospective adjustments to population estimates (which are made after each census) to eliminate any intercensal discrepancy. A description of the intercensal discrepancy is contained in the ABS technical paper (3103.0) on the methods and procedures of compilation of population estimates. (b) Usual residence basis.

Source: ABS, Australian Demographic Statistics (3101.0).

Explanatory Notes

Population is defined as the total number of people who reside in Australia. The ABS bases its estimates of the population of Australia on the Census of Population and Housing. Adjustments are made for census undercount, overseas visitors are excluded and Australian residents temporarily overseas on census night are added. Estimates of the population are updated quarterly using a range of data including migration levels, births, deaths and other indicators of population change.

The population varies as a result of natural increase and net overseas migration. Natural increase is the number of births less the number of deaths. Net overseas migration is the number of permanent and long-term arrivals to Australia, less the number of permanent and long-term departures from Australia and excludes all movements of less than 12 months. However, people can change their travel intentions from short-term to permanent or long-term or vice versa. Therefore the net overseas migration component of the population must include an adjustment for such changes if the population estimates are to truly represent the resident population at any point in time. This adjustment is known as category jumping.

Population estimates have wide application in both government and private enterprise. Population estimates are used by the Government to determine the number of seats allocated to each State in the House of Representatives, to allocate Commonwealth funds to each State and local government authority, to plan requirements for hospitals, schools, transport, housing development and other infrastructure and for many other purposes.

Further Reading

Australian Demographic Statistics (3101.0)
Contains quarterly estimates of total population by States, Territories and Australia. Included are the most recent estimates of population in 5-year age groups. Details of the components of population change, vital statistics and migration are also included.

Population by Age and Sex, Australian States and Territories (3201.0)
Contains annual estimates of population for each State and Territory classified by sex and single years of age (0–84); also grouped ages, sex ratios, median and mean ages of the population; age-sex pyramid for Australia.

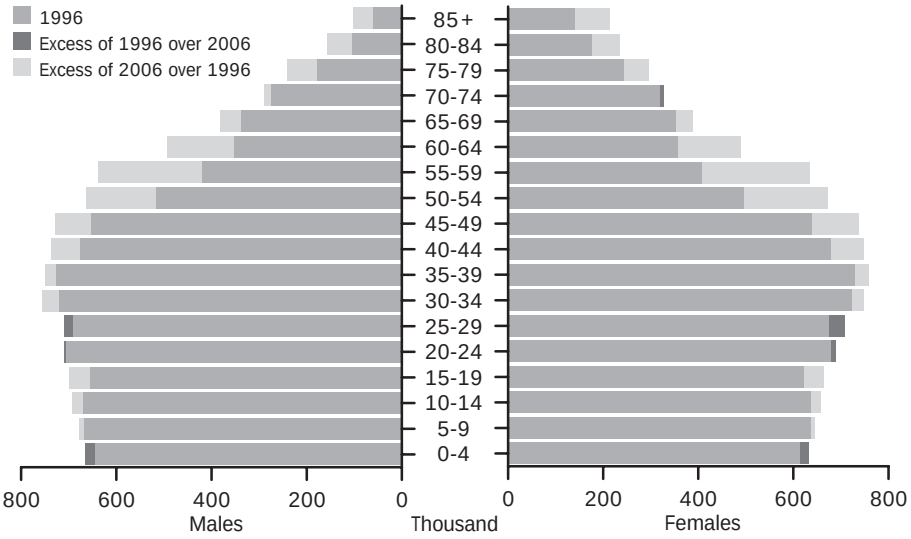
Population Projections (3222.0)
Contains projections of the resident population of each State and Territory by age and sex for each year to 2051.

2.6.8 Demography

Comment

The two main features of Australia's population are low fertility rates and the ageing of the population. Over the last 4 years the total fertility rate has fallen steadily and is now at the lowest level ever recorded (1.8 babies per woman). Falling fertility is the main cause of the ageing of the population. The median age of the population in 1996 was 34 years. Based on certain assumptions about fertility, mortality and migration, this is projected to increase to 36.4 by 2006. At 30 June 1996 the number of persons aged 60 years or more was 2.9 million or 15.9% of the total population. This figure is projected to increase to 3.6 million or 17.7% of the total population in the year 2006. The proportion of children aged 0–14 years is projected to decrease from 21.4% of the total population at 30 June 1996 to 19.4% in the year 2006.

AUSTRALIAN POPULATION: AGE AND SEX DISTRIBUTION 1996 AND 2006



Source: ABS, Population by Age and Sex, Australian States and Territories (3201.0) and Population Projections (3222.0).

DEMOGRAPHY

Year ended 31 December	*Total fertility rate*	*Life expectancy at birth*		*Infant mortality rate*	*Net overseas migration (incl. category jumping)*
		Males	*Females*		
1991	1.86	74.40	80.39	7.1	81 773
1992	1.89	74.46	80.40	7.0	51 774
1993	1.87	74.99	80.86	6.1	35 243
1994(a)	1.85	74.95	80.84	5.9	55 506
1995(a)	1.82	75.22	81.05	5.7	108 028
1996	1.80	n.y.a.	n.y.a.	5.8	p111 157

(a) Life expectancy at birth values refer to the three years surrounding the reference year. The life tables were constructed jointly by the Australian Government Actuary and the ABS.

Source: ABS, Australian Demographic Statistics (3101.0); Births, Australia (3301.0); Deaths, Australia (3302.0); and Marriages, Australia (3306.0).

Explanatory Notes

Demographic data assist researchers in studying the characteristics of the population. Examining these types of data over a period of time helps researchers and policy makers to understand the changing characteristics of the population.

The total fertility rate represents the number of children one woman would bear if the age-specific birth rates of the year shown continued throughout her child-bearing life. It is obtained by summing the age-specific birth rates. Age-specific birth rates are the number of live births registered during the calendar year, per 1,000 of the female estimated resident population of the same age at 30 June.

Life expectancy at birth indicates how long a new born baby could be expected to live if the death rates at the time were to continue throughout his or her life. Life expectancy is often used to indicate changes in the health status of a community or to make comparisons between communities.

Infant mortality measures the number of deaths of babies who are less than 1 year old in a year per 1,000 live births during the year and is also a key indicator of the health of a community.

Net overseas migration, i.e. the difference between permanent and long-term arrivals and departures, and natural increase (excess of births over deaths) are the two components of Australia's population change.

Further Reading

Australian Demographic Statistics (3101.0)
Contains quarterly estimates of the population by States, Territories and Australia. Details of the components of population change are also included.

Births, Australia (3301.0)
Contains annual data on births by State, Territory and Australia, characteristics of the parent(s) and also shows crude and age-specific birth rates and reproduction rates.

Causes of Death, Australia (3303.0)
Contains annual data on the causes of death by selected age groups.

Deaths, Australia (3302.0)
Contains annual data on the number of deaths by State, Territory and Australia. Deaths are classified by age, sex, birthplace, marital status, occupation and cause of death. Also contains information on deaths of Indigenous people.

Marriages and Divorces, Australia (3310.0)
Presents details of marriages and divorces and includes estimates of the population by marital status.

Migration, Australia (3412.0)
Gives details on the breakdown of net overseas migration and includes estimates of the population by country of birth.

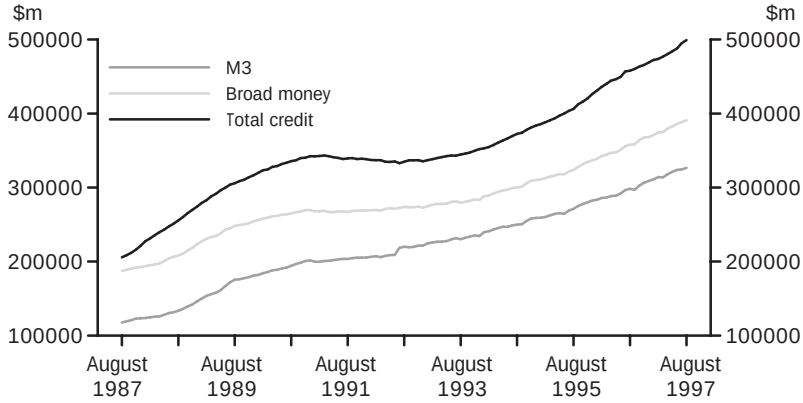
Section 2.7
Financial Markets

2.7.1 M3, Broad Money and Credit

Comment

Over the period from 1987 to 1997 the amount of money in circulation in the Australian economy, as measured by the Broad Money supply, has risen from $187,307m in August 1987 to $390,736m in August 1997.

M3, BROAD MONEY AND CREDIT, SEASONALLY ADJUSTED



Source: Reserve Bank of Australia, Monthly data.

SELECTED FINANCIAL AGGREGATES

Period	*M3(a)* $m	*Broad money(b)* $m	*Total credit(c)* $m
	ANNUAL		
1994–95	263 617	317 014	400 405
1995–96	290 485	349 389	449 322
1996–97	321 014	383 413	487 299
	MONTHLY (SEASONALLY ADJUSTED)		
1995–96			
June	292 823	351 650	449 857
1996–97			
July	296 387	355 404	456 196
August	298 335	357 866	457 847
September	297 016	358 310	460 282
October	302 834	364 316	463 533
November	306 387	367 762	465 589
December	308 952	368 019	468 799
January	311 074	370 941	472 317
February	314 145	374 417	473 691
March	313 907	374 991	476 818
April	318 011	379 473	480 400
May	321 133	382 547	484 030
June	323 818	386 112	487 883
1997–98			
July	324 470	388 482	495 117
August	326 686	390 736	499 191

(a) Currency plus current deposits with bank plus deposits of the private non-bank sector. (b) M3 plus borrowings from the private sector by non-bank financial intermediaries less holdings of currency and deposits of non-bank financial intermediaries. (c) Loans, advances and bills discounted to the private sector (does not include loans to other financial intermediaries).

Source: Reserve Bank of Australia.

Explanatory Notes

There are a number of ways in which the supply of money can be measured. Financial aggregates have long been used by central banks as indicators of the effects of monetary policy. Aggregates used in Australia are currency, M1, M3, Broad Money and Credit. The most commonly referred to are M3 and Broad Money.

The first four of these are monetary aggregates and refer mainly to liabilities of the finance sector while credit is a measure based on financial intermediaries' assets. Definitions are as follows:

Currency is defined as notes and coins on issue less holdings of notes and coins by all banks and the Reserve Bank of Australia (RBA).

M1 is defined as currency plus current deposits with banks.

M3 is defined as M1 plus other deposits of the private non-bank sector.

Broad Money is defined as M3 plus borrowings from the private sector by non-bank financial intermediaries less holdings of currency and deposits of non-bank financial intermediaries.

Credit is defined as loans, advances and bills discounted to the private sector (it does not include loans to other financial intermediaries).

Currency has become less significant with the increasing use of credit cards.

Between 1976 and 1985 projections for M3 growth were established by the authorities in order to determine the stance of monetary policy. Relationships between money and credit, economic growth and inflation are complex, however, and in the period following deregulation of the financial system, these relationships appear to have broken down. Because of this, policies targeting a monetary aggregate are no longer pursued, though financial aggregates remain in the set of indicators used in setting and assessing the effects of monetary policy.

Further Reading

Australian National Accounts: Financial Accounts (5232.0)
Shows the level (stock) of financial assets and liabilities of each sector of the economy; the market for each of the conventional financial instruments; and inter-sectoral transactions in financial assets and liabilities.

Financial Aggregates
Monthly RBA press release containing Australia's financial aggregates.

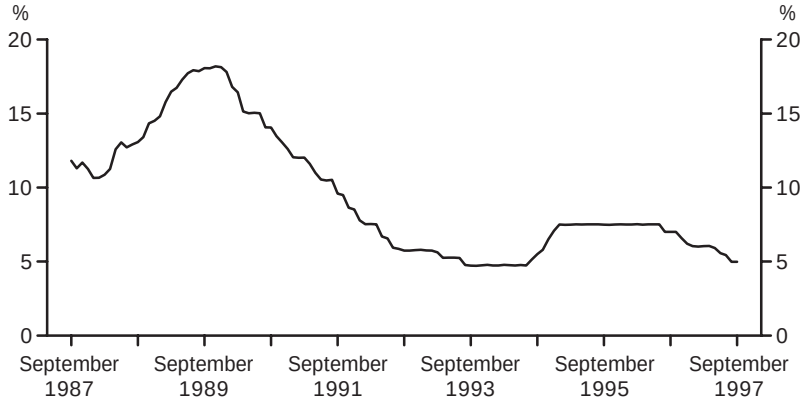
Reserve Bank of Australia Bulletin
Contains monthly levels of selected monetary aggregates for Australia. See also the feature articles 'Recent Trends in Money and Credit' in the December 1991 issue and 'The Art of Monetary Policy' in the October 1994 issue.

2.7.2 Interest Rates

Comment

The unofficial cash market 11.00 am call rate peaked at 18.18% in November 1989 before experiencing a sustained decline to 4.71% in October 1993. The call rate then increased and remained stable at around 7.50% between January 1995 and July 1996.

UNOFFICIAL CASH MARKET, 11.00 AM CALL RATE



source: Reserve Bank of Australia, Monthly data.

KEY INTEREST RATES(a)

Period	*Unofficial cash market, 11.00 am call rate(b)* %	*Banks, business loans, large variable* %	*Private 90-day bank bills(c)* %	*Commonwealth government 10-year Treasury bonds* %
		ANNUAL		
1994–95	7.51	10.70	7.57	9.21
1995–96	7.51	10.80	7.59	8.88
1996–97	5.57	9.00	5.28	7.05
		MONTHLY		
1996–97				
July	7.51	10.80	7.44	8.30
August	7.01	10.40	6.92	8.07
September	7.01	10.25	6.91	7.79
October	7.00	10.25	6.58	7.38
November	6.58	10.05	6.42	7.17
December	6.21	9.55	5.99	7.37
January	6.04	9.30	5.79	7.41
February	6.01	9.30	6.01	7.68
March	6.04	9.30	6.08	8.00
April	6.05	9.30	5.99	7.83
May	5.91	9.25	5.63	7.48
June	5.57	9.00	5.28	7.05
1997–98				
July	5.44	8.95	5.08	6.37
August	4.98	8.45	4.91	6.56
September	4.98	8.45	4.72	6.13

(a) All data are end of period unless otherwise stated. (b) Data are the weighted average of daily figures for the month.
(c) Data are the weighted average of the last week of the period.

Source: Reserve Bank of Australia.

Explanatory Notes

Interest is the compensation paid to a lender for deferring expenditure and the price paid by a borrower for the use of the funds saved by the lender.

There are different rates of interest which vary according to factors such as the amount borrowed, the period of the loan and the credit rating of the borrower. As a guide to the level of long-term interest rates, the yield (i.e. the equivalent of the interest rate) on a 10-year Treasury bond is shown. The cash market rate, prime rate and 90-day bank bill yield are examples of short-term interest rates.

The short-term money market is where banks and other large corporations lend funds that are temporarily in surplus to other financial institutions, etc. which have a temporary shortfall.

The Reserve Bank of Australia (RBA) operates in the short-term money market in order to influence the cash rate (by borrowing and lending funds itself). In turn, changes in the level of the cash rate affect other interest rates. The unofficial cash market 11.00 am call rate measures the amount of interest paid on unsecured overnight loans of cash.

Interest rates on short-term investments, e.g. 90-day bank bills, are very closely related to the cash rate. Ultimately, interest rates on bank deposits and funds placed with building societies, credit unions and the like are also related to the cash rate to varying degrees. Changes in the cost of borrowing by intermediaries flow through to their loan rates. For example, the prime rate, which indicates the amount of interest charged by banks on loans to preferred customers, tends to move at an equal pace with the cash rate.

These interrelationships allow the RBA, through its operations in the short-term money market, to have an effect on many interest rates in the economy. This means that the Bank can influence the cost and hence the amount of borrowing and lending in the economy, with the aim of maintaining low inflation and contributing to a policy mix to achieve strong economic growth.

Further Reading

Monthly Statistics for Corporations Registered under the Financial Corporations Act (5647.0)
Contains monthly statistics, including interest rates, for all financial corporations registered under the Financial Corporations Act.

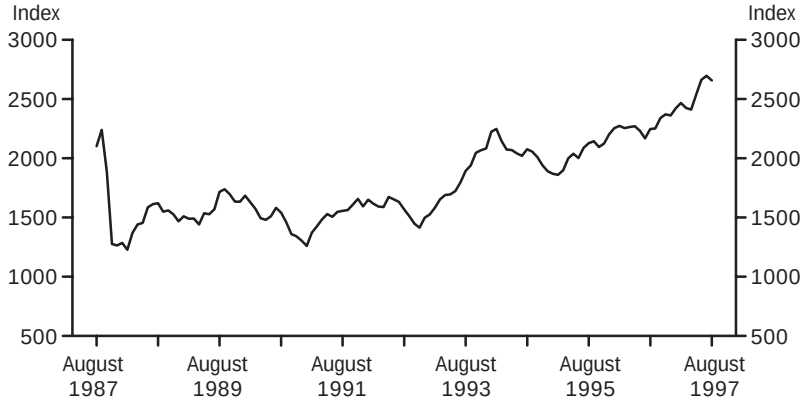
Reserve Bank of Australia Bulletin
Contains information on interest rates for the money market, capital market, banks and other financial institutions.

2.7.3 Share Price Indexes

Comment

The stock market crash of October 1987 resulted in an immediate fall in the all ordinaries index. From the time of the crash to November 1992, the index displayed more modest fluctuations, with a stronger upward trend from December 1992 to February 1994. A strong upward trend was recorded from February 1995 to August 1997.

ALL ORDINARIES INDEX (31 DEC 1979 = 500.0)



Source: Australian Stock Exchange, Monthly Index Analysis, Monthly data.

SHARE PRICE INDEXES(a) (31 DEC 1979 = 500.0)

Period	*All industrials*	*All resources*	*All ordinaries*
	ANNUAL		
1994–95	3 012.1	1 235.7	2 000.8
1995–96	3 305.8	1 423.3	2 231.7
1996–97	4 173.0	1 500.4	2 662.7
	MONTHLY		
1995–96			
June	3 305.8	1 423.3	2 231.7
1996–97			
July	3 270.0	1 332.5	2 167.5
August	3 395.3	1 375.2	2 246.1
September	3 459.2	1 330.7	2 251.8
October	3 624.0	1 355.2	2 339.0
November	3 675.1	1 370.7	2 370.1
December	3 660.8	1 366.2	2 361.3
January	3 748.2	1 406.5	2 421.7
February	3 849.7	1 403.0	2 466.0
March	3 787.1	1 376.8	2 424.2
April	3 784.8	1 351.1	2 410.2
May	3 960.1	1 447.3	2 538.6
June	4 173.0	1 500.4	2 662.7
1997–98			
July	4 304.2	1 448.1	2 696.6
August	4 274.5	1 395.0	2 656.5

(a) Share prices on joint trading floors. Monthly figures are average of daily figures for the month. Annual index is from the last month of the year.

Source: Australian Stock Exchange, Monthly Index Analysis.

Explanatory Notes

Share price indexes provide an indication of aggregate price movements for listed shares on the Australian Stock Exchange (ASX).

The most quoted index is the all ordinaries share price index. The all ordinaries is calculated from a sample of shares which include those of 323 companies which account for 92% of listed Australian and Papua New Guinea equities by aggregate market value.

The all ordinaries sample is reviewed each month and is chosen mainly on the basis of the market value of the company and how often the shares are traded.

Another important index is the all resources index which measures the movement in share prices for leading mining and oil companies. The ASX also produces 24 sub-indexes for specific sectors within the share market. These measure the rise and fall in the aggregate market value of shares included in the sub-index. Some industries (e.g. car manufacturers) have no publicly listed shares in Australia, so no share indexes can be produced for these industries.

Share price indexes only measure the capital gain or loss experienced by shareholders through fluctuations in share prices and do not take into account dividends earned. Share prices reflect business confidence in general, as well as in specific industries. A set of 40 accumulation indexes is also calculated by the ASX. These are intended to indicate the total pre-tax returns (after reinvesting dividends) from investments in listed shares.

Further Reading

Australian Stock Exchange Indices and Yields
Contains tabulations of historical data covering all ASX share price and accumulation indexes monthly from 1979 to 1994. It also provides longer monthly tabulations back as far as 1875 for selected indexes.

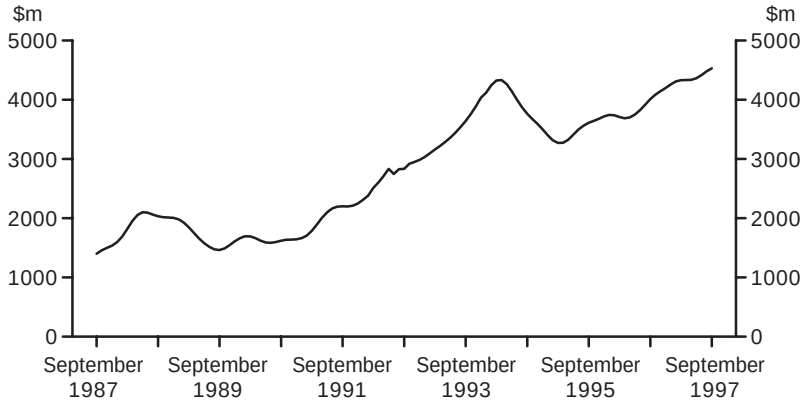
Monthly Index Analysis
Contains monthly records of all Australian share price and accumulation index movements, including sample changes, index weights comparisons with international indexes, currency adjusted indexes and exchange rates.

2.7.4 Home Loans

Comment

Total secured housing finance commitments to individuals, in trend estimate terms, have shown three major periods of activity since September 1987. The first peaked at $2,100m in June 1988; from October 1989, a strong growth period occurred reaching a peak of $4,332m in April 1994. Another period of growth began in 1995 with commitments reaching the highest level recorded in September 1997 at $4,531m.

TOTAL SECURED HOUSING FINANCE COMMITMENTS TO INDIVIDUALS, TREND



Source: ABS, Housing Finance for Owner Occupation, Australia (5609.0), Monthly data.

SECURED HOUSING FINANCE COMMITMENTS TO INDIVIDUALS(a)

Period	*Construction of dwellings* $m	*Purchase of newly erected dwelliings* $m	*Purchase of established dwellings(b)* $m	*Total* $m	*New bank home loans interest rate(c)* %
		ANNUAL			
1994–95	7 280.3	2 226.3	32 909.6	42 416.2	10.50
1995–96	6 103.1	2 196.7	35 734.8	44 034.6	9.75
1996–97	6 679.9	2 648.3	40 760.5	50 088.7	7.20
		MONTHLY (TREND)			
1996–97					
September	506.3	198.5	3 303.4	4 008.1	9.25
October	519.7	207.3	3 355.7	4 082.7	9.25
November	534.2	214.5	3 393.8	4 142.5	8.75
December	550.1	220.1	3 427.0	4 197.1	8.25
January	567.0	225.8	3 463.1	4 255.9	8.25
February	582.0	232.2	3 492.6	4 306.8	7.55
March	593.3	238.4	3 497.8	4 329.5	7.55
April	603.1	243.5	3 485.0	4 331.6	7.55
May	613.5	246.8	3 474.2	4 334.5	7.20
June	626.6	248.1	3 488.5	4 363.2	7.20
1997–98					
July	643.9	248.0	3 521.7	4 413.7	7.20
August	663.1	247.6	3 566.9	4 477.7	6.70
September	683.3	246.4	3 600.8	4 530.5	6.70

(a) Excluding alterations and additions. (b) Including refinancing. (c) Data are at end of period.

Source: ABS, Housing Finance for Owner Occupation, Australia (5609.0), and Reserve Bank of Australia.

Explanatory Notes

Housing purchases are most commonly financed by a loan from a financial institution. Housing finance statistics measure the supply of finance only, not the demand for housing finance. The supply is, however, influenced by both the availability of and the demand for housing finance. The demand for housing loans is dependent on people's perceived ability to repay the loan. The ability to repay the loan is affected by interest rates, the price of the house, the applicant's income level and the risk of losing their source of income.

Prior to April 1986, the Commonwealth Government regulated the housing loan interest rate. Banks were given a maximum interest rate which they were allowed to charge borrowers. The Government was aiming to make housing more affordable. Since 1986, banks have been allowed to determine the interest rate levels for housing loans.

The Government still has an influence over the interest rate through its monetary policy stance. When monetary policy is tight, interest rates are high. The cost of housing, financed by borrowing, increases. When monetary policy is loosened, interest rates fall. The cost of housing, financed by borrowing, declines.

Further Reading

Australian Economic Indicators (1350.0)
See feature articles in the December 1991 issue 'Building Approvals and Housing Finance Statistics — Do they Tell the Same Story' and in the March 1994 issue 'Impact of Refinancing on Housing Finance Statistics'.

Housing Finance for Owner Occupation, Australia (5609.0)
Presents data on secured finance commitments to individuals for construction of dwellings, purchase of new and established dwellings by banks, permanent building societies and other lenders.

2.7.5 Financial Accounts

Comment

Total demand for credit by the non-financial sectors during the year ended June 1997 was $57,200m. At the end of 30 June 1997, total credit market outstandings were $1,170,800m. The fall in demand for credit since the year ended June 1996 has been the result of decreasing demand by all non-financial sectors, coupled with the repayment of debt by both State and local general government and State and local government trading enterprises.

DEMAND FOR CREDIT

Source: Australian National Accounts: Financial Accounts (5232.0), Annual data.

DEMAND FOR CREDIT, NET TRANSACTIONS DURING PERIOD

	1991–92	*1992–93*	*1993–94*	*1994–95*	*1995–96*	*1996–97*
	$'000m	$'000m	$'000m	$'000m	$'000m	$'000m
Total funds raised on conventional credit markets by non-financial domestic sectors	**25.8**	**28.3**	**61.1**	**54.0**	**70.9**	**57.2**
Commonwealth public trading enterprises	–1.1	–0.5	–1.6	–1.4	0.3	2.6
State and local public trading enterprises	–1.1	–2.9	–2.1	–1.3	–1.8	–0.3
Private corporate trading enterprises	*2.7*	*0.4*	*17.6*	*15.7*	*47.8*	*31.3*
Loans and placements	–11.3	–7.8	–3.3	7.5	18.7	9.0
Short-term debt securities	1.8	–2.2	–1.6	–0.2	8.9	3.6
Long-term debt securities	0.7	–0.5	–1.0	–0.5	1.9	1.0
Equities and units in trusts(a)	11.2	10.8	23.3	8.6	18.1	17.7
Commonwealth General Government	*8.3*	*16.6*	*14.1*	*13.0*	*5.6*	*2.5*
Loans and placements	–0.2	–0.1	–0.2	0.0	0.0	0.0
Short-term debt securities	2.0	1.3	0.5	–2.0	1.6	–2.0
Long-term debt securities	6.8	15.5	13.7	15.1	3.9	4.5
State and local General Government	*7.2*	*7.1*	*5.5*	*2.1*	*–11.6*	*–6.1*
Loans and placements	–2.8	0.3	0.0	–0.5	0.5	0.4
Short-term debt securities	4.5	3.5	–1.2	–0.4	–8.1	0.8
Long-term debt securities	5.4	3.2	6.7	3.2	–3.8	–7.5
Households and unincorporated businesses	*9.8*	*7.7*	*27.5*	*25.9*	*30.8*	*27.2*
Loans and placements	8.5	7.8	27.1	26.0	31.6	27.7
Short-term debt securities	1.1	0.1	0.2	–0.1	–1.0	–0.6

(a) These estimates are considered to be of poor quality.
Note: Positive numbers indicate an increase in borrowings. Negative numbers indicate debt repayments.

Source: Australian National Accounts: Financial Accounts (5232.0).

Explanatory Notes

The table presents a summary of the demand for credit in Australia by the non-financial domestic sectors. It includes annual net raisings of credit, by the issue of both debt and equity, on conventional credit markets. The ABS defines conventional credit markets to include the share, bond, money and loan markets, in Australia and overseas which are reasonably open to all potential borrowers wishing to raise capital by means of loans, debt securities, shares and units.

Credit may be defined broadly as funds provided to those seeking to borrow. However, analytically useful measures of credit usually exclude borrowings by financial enterprises because their main role is as an intermediary, i.e. they borrow in order to lend to others (creating loan assets). Hence, including both the liabilities and loan assets of financial intermediaries in the table would be double counting. All non-market funding arrangements are also excluded from this table; for example, debt and equity claims between related companies, levels of government, and governments and their trading enterprises. Similarly, some types of financial instrument, such as trade debts, are not considered to be part of an organised market. All these types of transactions are omitted from the table.

The aggregate at the head of the table is a measure of the primary credit flow in Australia; that is, credit which is to be used primarily to finance non-financial outlays such as investment in plant and equipment.

Further Reading

A Guide to the Australian National Accounts (5235.0)
Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

Australian National Accounts: Financial Accounts (5232.0)
Presents data on the level (stock) of financial assets and liabilities of each sector of the economy; the market for each of the conventional financial instruments; and inter-sectoral transactions in financial assets and liabilities.

Government Finance Statistics, Australia (5512.0)
Provides annual details of the consolidated financial transactions of the non-financial public sector for all levels of government.

Chapter

CHAPTER 3
INTERNATIONAL COMPARISONS

NOTE: The statistics for Germany in these tables refer to Germany after unification.

Statistics refer to Organisation for Economic Co-operation and Development (OECD) Major 7 which consists of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States of America.

International Comparisons

International comparisons show the economic performance of Australia against the performance of other countries.

Some care must be taken when comparing economic indicators between countries. Statistical systems vary considerably between countries and this will affect the extent of comparability of the data.

Australian and other government statistical agencies throughout the world produce and present national accounts based on the principles contained in the United Nations *A System of National Accounts* (SNA). Although a number of other international standards have been developed for specific areas of national accounts, such as the International Monetary Fund's *Balance of Payments Manual* and *Government Finance Statistics*, the SNA has a central position in the standard setting process for economic statistics generally. However, the degree to which the system is implemented varies considerably between countries.

Further Reading

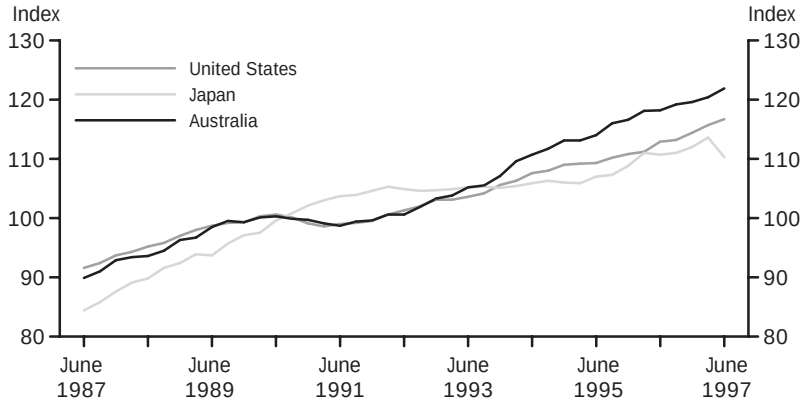
Australian Economic Indicators (1350.0)
A comprehensive, monthly compendium of economic statistics including international comparisons. Generally presents statistics for the last 9 years.

OECD Economic Outlook
Presents data on OECD member countries, published in June and December of each year, including employment/unemployment, current account balance and GDP.

OECD Economic Surveys: Australia
Reviews trends in the Australian economy and policy conclusions. Presents a calendar of the main economic events and Australian and international statistics in a statistical annex.

3.1 Real Gross Domestic Product Volume Indexes

REAL GROSS DOMESTIC PRODUCT VOLUME INDEXES, SEASONALLY ADJUSTED (1990 = 100.0)



Source: OECD, Quarterly data.

REAL GROSS DOMESTIC PRODUCT VOLUME INDEXES(a) (1990 =100.0)

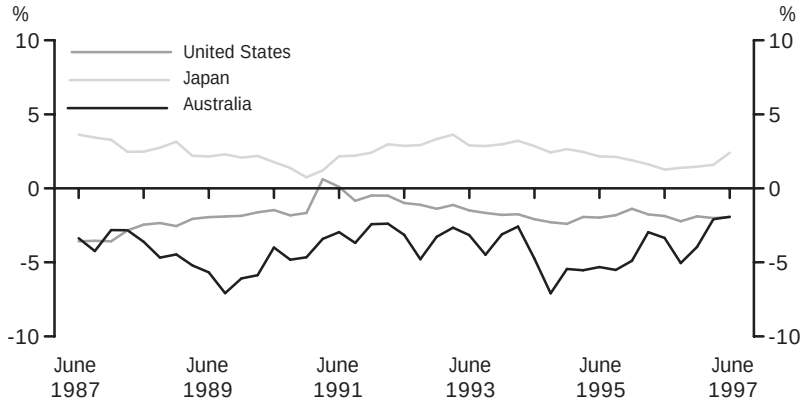
Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia(b)*
			ANNUAL			
1991–92	100.2	104.7	113.7	102.2	97.6	100.1
1992–93	103.0	104.9	113.4	103.5	98.3	103.6
1993–94	105.9	105.4	114.6	105.5	101.5	108.2
1994–95	108.9	106.3	117.7	108.3	105.6	113.0
1995–96	111.3	109.5	118.9	110.5	107.8	117.2
1996–97	115.0	111.7	121.5	113.4	111.0	120.3
			QUARTERLY (SEASONALLY ADJUSTED)			
1995–96						
December	110.8	108.8	118.5	110.0	107.5	116.6
March	111.2	111.0	118.3	110.8	108.1	118.1
June	112.9	110.7	120.2	111.7	108.7	118.2
1996–97						
September	113.2	111.0	120.8	112.1	109.3	119.2
December	114.4	112.0	121.0	113.0	110.5	119.6
March	115.7	113.6	121.4	114.1	111.5	120.4
June	116.7	110.3	122.6	114.4	112.6	121.9

(a) Data for Japan measure real gross national product. (b) Data refers to GDP(A).

Source: OECD.

3.2 Balance on Current Account

BALANCE ON CURRENT ACCOUNT AS A PERCENTAGE OF SEASONALLY ADJUSTED GDP



Source: OECD, Quarterly data.

BALANCE ON CURRENT ACCOUNT: PERCENTAGE OF SEASONALLY ADJUSTED GDP(a)

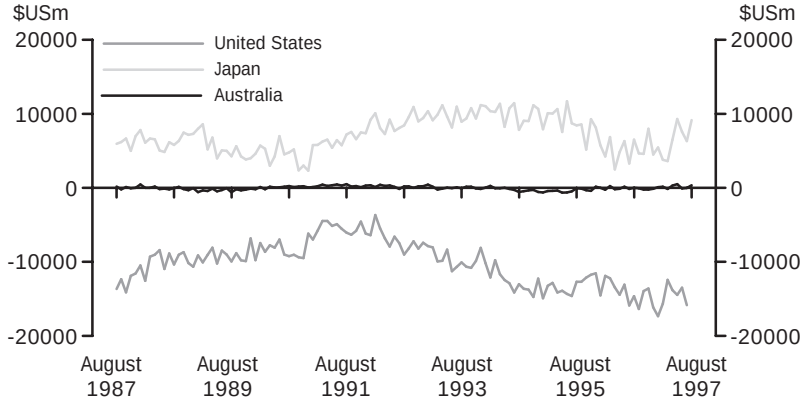
Period	*United States*	*Japan*	*United Kingdom*	*Australia*
		ANNUAL		
1991–92	–0.7	2.6	–1.6	–2.9
1992–93	–1.3	3.2	–1.7	–3.5
1993–94	–1.8	3.0	–1.0	–3.7
1994–95	–2.2	2.4	–0.1	–5.8
1995–96	–1.7	1.7	–0.5	–4.2
1996–97	–2.0	1.7	0.3	–3.2
		QUARTERLY (SEASONALLY ADJUSTED)		
1995–96				
December	–1.4	1.9	0.1	–4.9
March	–1.8	1.6	–0.3	–3.0
June	–1.9	1.3	–0.8	–3.4
1996–97				
September	–2.2	1.4	–0.3	–5.1
December	–1.9	1.5	1.1	–4.0
March	–2.0	1.6	0.9	–2.1
June	–1.9	2.4	–0.4	–1.9

(a) Statistics are calculated as the original balance on current account as percentage of the seasonally adjusted current price GDP, except for Japan where real gross national product replaces GDP.

Source: OECD.

3.3 Balance on Merchandise Trade

BALANCE ON MERCHANDISE TRADE, SEASONALLY ADJUSTED



Source: OECD, Monthly data.

BALANCE ON MERCHANDISE TRADE(a)

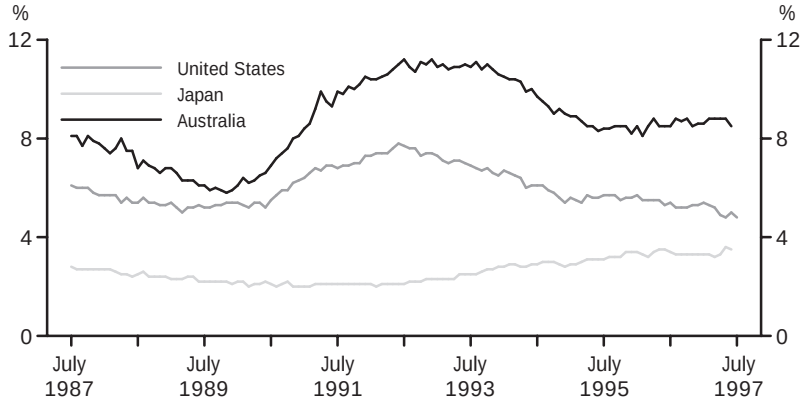
Period	*United States* $USm	*Japan* $USm	*Germany* $USm	*United Kingdom* $USm	*Australia* $USm
			ANNUAL		
1991–92	–71 397	93 358	18 208	–26 469	3 159
1992–93	–102 894	113 646	32 093	–27 936	868
1993–94	–129 333	122 555	40 262	–25 272	90
1994–95	–164 887	117 037	50 938	–20 812	–5 581
1995–96	–155 089	78 805	58 492	–27 168	–1443
1996–97	–177 805	67 684	71 083	–21 793	–6
			MONTHLY (SEASONALLY ADJUSTED)		
1995–96					
June	–13 083	6 317	4 256	–2 337	147
1996–97					
July	–15 893	3 284	6 778	–2 079	–152
August	–14 637	6 500	5 530	–1 172	–10
September	–16 361	4 642	5 844	–2 041	–55
October	–13 940	4 588	6 151	–1 551	–237
November	–13 608	7 977	6 218	–2 153	–229
December	–16 144	4 502	5 156	–2 382	–125
January	–17 350	5 455	2 993	–1 478	80
February	–15 661	3 781	5 789	–1 684	155
March	–12 434	3 611	6 903	–1 504	–150
April	–13 811	6 476	6 488	–2 360	301
May	–14 471	9 305	5 993	–1 566	506
June	–13 496	7 563	7 241	–1 822	–91
1997–98					
July	–15 838	6 317	6 139	–1 588	–19
August	n.y.a.	9 140	n.y.a.	n.y.a.	344

(a) All series are exports (f.o.b.) less imports (c.i.f.), except the United States and Australia where imports are also f.o.b. Data are measured on a foreign trade basis.

Source: OECD.

3.4 Unemployment Rates

STANDARDISED UNEMPLOYMENT RATES, SEASONALLY ADJUSTED



Source: OECD, Monthly data.

UNEMPLOYMENT RATE(a)

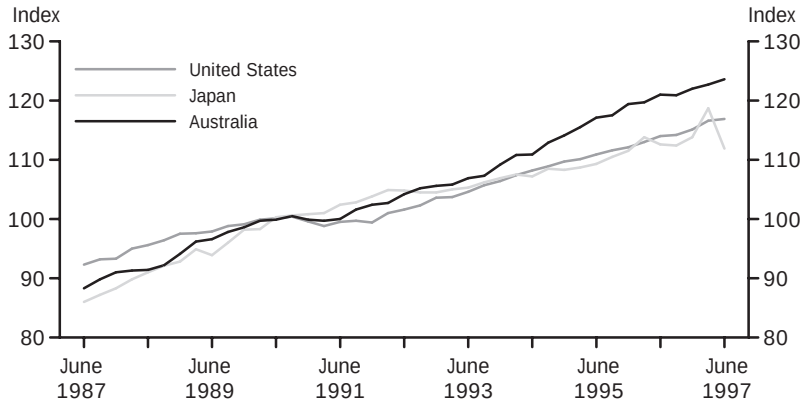
Period	*United States* %	*Japan* %	*Germany* %	*OECD Major 7* %	*United Kingdom* %	*Australia* %
			ANNUAL			
1991–92	7.8	2.1	n.a.	n.a.	10.0	11.0
1992–93	7.0	2.5	7.9	7.3	10.5	11.0
1993–94	6.1	2.9	8.6	7.1	9.8	10.0
1994–95	5.6	3.1	8.2	6.8	8.8	8.3
1995–96	5.3	3.5	8.9	6.8	8.3	8.5
1996–97	5.0	3.5	n.y.a.	n.y.a	n.y.a	8.5
			MONTHLY (SEASONALLY ADJUSTED)			
1995–96						
May	5.5	3.5	8.9	6.9	8.3	8.5
June	5.3	3.5	8.9	6.8	8.3	8.5
1996–97						
July	5.4	3.4	8.9	6.9	8.2	8.5
August	5.2	3.3	9.0	6.7	8.1	8.8
September	5.2	3.3	9.1	6.8	8.3	8.7
October	5.2	3.3	9.2	6.8	8.1	8.8
November	5.3	3.3	9.3	6.8	7.7	8.5
December	5.3	3.3	9.3	6.8	7.7	8.6
January	5.4	3.3	9.6	6.8	7.6	8.6
February	5.3	3.3	9.6	6.8	7.4	8.8
March	5.2	3.2	9.7	6.7	7.2	8.8
April	4.9	3.3	9.6	6.6	7.0	8.8
May	4.8	3.6	9.8	6.6	6.9	8.8
June	5.0	3.5	n.y.a.	n.y.a.	n.y.a.	8.5
1997–98						
July	4.8	n.y.a.	n.y.a.	n.y.a	n.y.a	n.y.a

(a) All series are OECD standardised unemployment rates.

Source: OECD.

3.5 Private Consumption Expenditure Volume Indexes

PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEXES, SEASONALLY ADJUSTED (1990 = 100.0)



Source: OECD, Quarterly data.

PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEXES (1990 = 100.0)

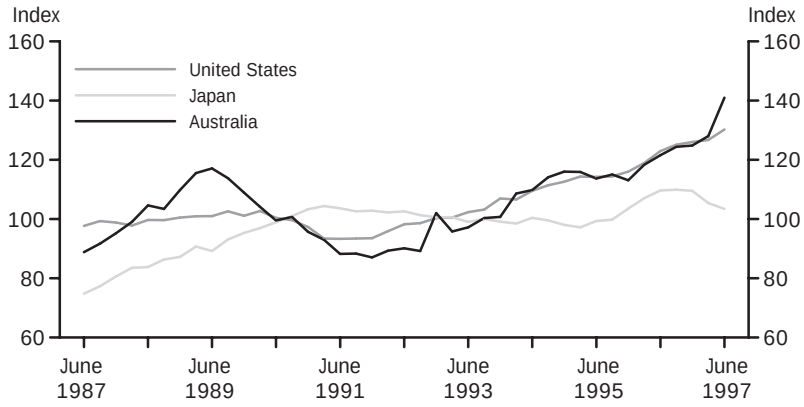
Period	*United States*	*Japan*	*Germany(a)*	*United Kingdom*	*Australia*
			ANNUAL		
1991–92	100.4	104.1	100.8	97.3	102.7
1992–93	103.6	104.3	102.5	98.8	105.9
1993–94	106.9	107.0	103.5	101.7	109.5
1994–95	119.9	108.7	105.1	103.9	114.9
1995–96	112.7	112.1	106.6	106.3	119.4
1996–97	115.7	114.2	107.8	110.5	122.3
			QUARTERLY (SEASONALLY ADJUSTED)		
1995–96					
December	112.1	111.5	106.0	105.5	119.4
March	113.0	113.8	106.9	107.0	119.7
June	114.0	112.6	107.2	107.8	121.0
1996–97					
September	114.2	112.4	107.8	108.6	120.9
December	115.1	113.8	107.2	110.0	122.0
March	116.6	118.7	107.3	110.9	122.7
June	116.9	111.9	108.7	112.6	123.6

(a) 1991 = 100.0.

Source: OECD.

3.6 Private Fixed Capital Investment Volume Indexes

PRIVATE FIXED CAPITAL INVESTMENT INDEXES, SEASONALLY ADJUSTED
(1990 = 100.0)



Source: OECD, Quarterly data.

PRIVATE FIXED CAPITAL INVESTMENT VOLUME INDEXES(a) (1990 = 100.0)

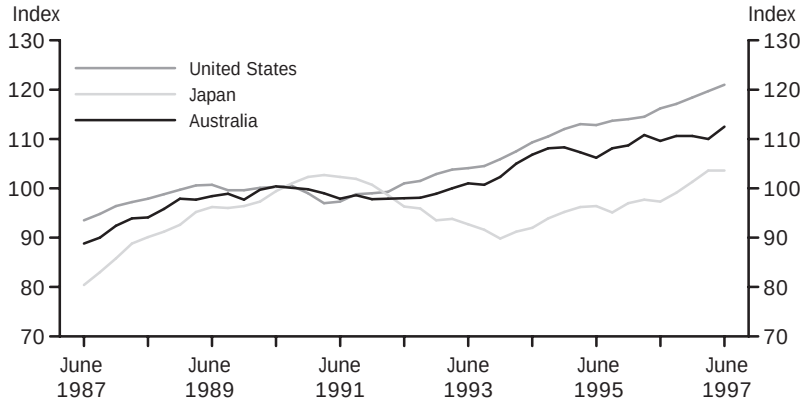
Period	*United States*	*Japan*	*Germany(b)*	*United Kingdom*	*Australia*
			ANNUAL		
1991–92	95.2	102.5	102.5	89.6	88.7
1992–93	100.4	100.4	99.3	89.2	96.0
1993–94	106.6	99.5	97.9	91.2	104.9
1994–95	113.1	98.5	102.0	95.3	114.9
1995–96	118.0	105.0	99.6	95.6	117.0
1996–97	127.0	107.1	101.2	98.2	129.6
			QUARTERLY (SEASONALLY ADJUSTED)		
1995–96					
December	116.0	103.5	99.7	94.5	113.1
March	118.9	107.0	95.9	95.4	118.3
June	122.9	109.6	101.6	98.0	121.5
1996–97					
September	125.1	109.9	101.9	95.6	124.4
December	126.0	109.5	102.1	98.0	124.8
March	126.7	105.4	99.9	98.5	128.0
June	130.2	103.4	100.6	100.5	141.0

(a) Fixed capital investment volume indexes for Germany and the United Kingdom are for gross domestic fixed investment.
(b) 1991 = 100.0.

Source: OECD.

3.7 Industrial Production Volume Indexes

INDUSTRIAL PRODUCTION VOLUME INDEXES, SEASONALLY ADJUSTED
(1990 = 100.0)



Source: OECD, Quarterly data.

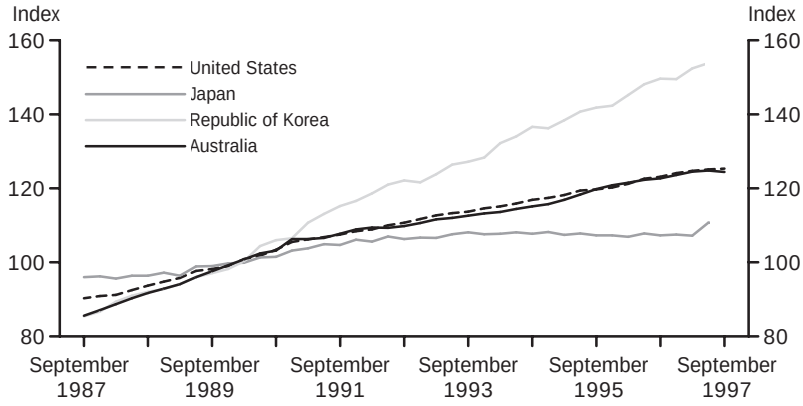
INDUSTRIAL PRODUCTION VOLUME INDEXES (1990 = 100.0)

Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1991–92	99.5	99.4	102.9	99.5	96.3	98.0
1992–93	103.1	94.0	96.0	98.7	97.8	99.5
1993–94	106.8	91.2	94.6	99.8	101.6	103.7
1994–95	112.1	95.4	99.0	105.0	106.0	107.5
1995–96	114.6	96.8	98.4	106.5	107.2	109.3
1996–97	119.0	101.9	101.1	109.9	108.6	110.9
			QUARTERLY (SEASONALLY ADJUSTED)			
1995–96						
December	114.0	97.0	97.6	106.2	107.0	108.7
March	114.5	97.7	98.1	106.5	107.2	110.8
June	116.2	97.3	99.1	107.2	107.5	109.6
1996–97						
September	117.1	99.1	100.3	108.3	108.2	110.6
December	118.4	101.3	100.0	109.2	108.6	110.6
March	119.7	103.6	101.6	110.5	108.6	110.0
June	121.0	103.6	102.6	111.6	109.2	112.5

Source: OECD.

3.8 Consumer Price Indexes

CONSUMER PRICE INDEXES, ALL GROUPS EXCLUDING HOUSING
(1989–90 = 100.0)



Source: ABS, Consumer Price Index (6401.0), Quarterly data.

CONSUMER PRICE INDEXES, ALL GROUPS EXCLUDING HOUSING(a) (1989–90 = 100.0)

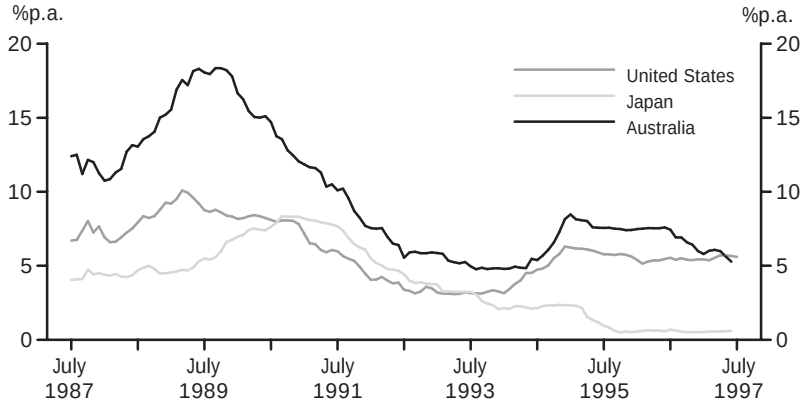
Period	*United States*	*Japan*	*Germany*	*Canada*	*United Kingdom*	*Hong Kong*	*Republic of Korea*	*Taiwan*	*Australia*	*New Zealand (b)*
					ANNUAL					
1991–92	108.7	105.9	107.1	108.8	115.0	121.7	117.9	107.6	108.8	106.5
1992–93	112.1	106.8	110.3	110.8	118.6	130.8	123.5	111.4	111.0	108.7
1993–94	114.8	107.9	113.2	112.0	122.0	140.1	130.4	114.2	113.5	109.4
1994–95	118.0	107.8	115.2	113.4	124.8	151.4	138.0	119.1	116.5	110.5
1995–96	120.9	107.3	116.3	116.0	128.3	160.8	144.4	122.5	121.1	111.9
1996–97	124.3	108.2	117.7	118.8	131.5	168.2	151.3	125.7	123.9	113.7
					QUARTERLY					
1995–96										
March	121.2	106.9	116.4	116.0	128.5	160.7	145.2	122.3	121.5	112.0
June	122.6	107.8	116.9	117.3	130.0	164.1	148.1	124.3	122.3	112.8
1996–97										
September	123.1	107.3	117.3	117.5	130.3	165.5	149.6	126.1	122.7	113.0
December	124.1	107.5	117.1	118.5	131.2	167.4	149.5	126.3	123.6	113.8
March	124.7	107.2	118.0	119.2	131.6	168.9	152.4	124.7	124.5	113.9
June	125.1	110.7	118.2	119.8	132.8	170.8	153.8	125.7	124.8	114.1
1997–98										
September	125.3	n.y.a.	119.3	n.y.a.	133.5	n.y.a.	n.y.a.	127.6	124.4	114.4

(a) Because of the many differences in the structure of the housing sector in different countries and in the way that housing is treated in their CPIs, an index which excludes housing is used for the purpose of international comparisons of CPIs. (b) From March quarter 1994 the statistics for New Zealand refer to 'all groups excluding housing and credit services'.

Source: ABS, Consumer Price Index (6401.0).

3.9 Short-term Interest Rates

SHORT-TERM INTEREST RATES



Source: OECD, Monthly data.

SHORT-TERM INTEREST RATES(a)

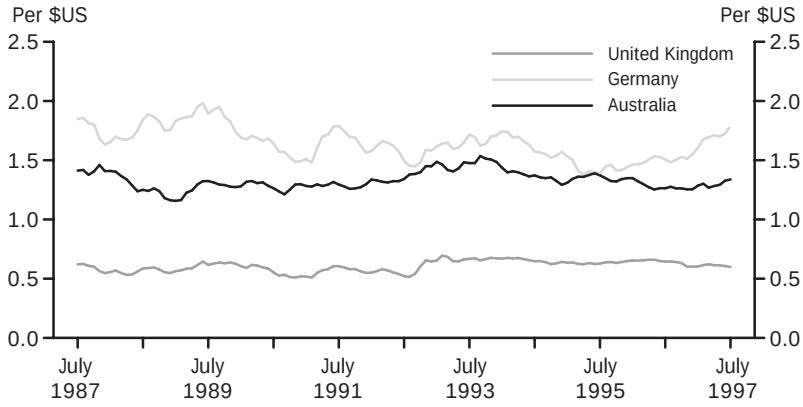
Period	*United States* %p.a.	*Japan* %p.a.	*Germany* %p.a.	*United Kingdom* %p.a.	*Australia* %p.a.
			ANNUAL		
1991–92	3.86	4.66	9.75	9.75	6.40
1992–93	3.21	3.23	7.60	5.88	5.25
1993–94	4.52	2.11	5.07	5.12	5.47
1994–95	5.90	1.18	4.53	6.63	7.57
1995–96	5.46	0.57	3.39	5.84	7.59
1996–97	5.66	0.61	3.14	6.66	5.28
			MONTHLY		
1995–96					
May	5.36	0.64	3.29	6.02	7.54
June	5.46	0.57	3.39	5.84	7.59
1996–97					
July	5.53	0.68	3.38	5.73	7.44
August	5.40	0.64	3.29	5.74	6.92
September	5.51	0.54	3.12	5.77	6.91
October	5.41	0.52	3.12	5.93	6.58
November	5.38	0.52	3.19	6.30	6.42
December	5.44	0.52	3.23	6.35	5.99
January	5.43	0.53	3.14	6.32	5.79
February	5.37	0.55	3.19	6.19	6.01
March	5.53	0.56	3.26	6.20	6.08
April	5.71	0.56	3.23	6.37	5.99
May	5.70	0.58	3.17	6.44	5.63
June	5.66	0.61	3.14	6.66	5.28
1997–98					
July	5.60	n.y.a.	3.14	6.95	n.y.a.

(a) Rates are certificates of deposit (United States), 3-month certificates of deposit (Japan), 3-month FIBOR (Germany), 3-month interbank loans (United Kingdom) and 90-day bank bills (Australia).

Source: OECD.

3.10 Exchange Rates

SELECTED EXCHANGE RATES



Source: OECD, Monthly data.

EXCHANGE RATES, CURRENCY PER US DOLLAR(a)

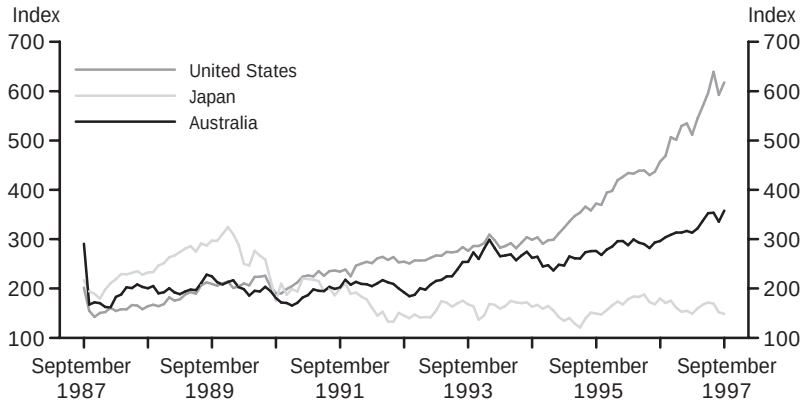
Period	*Japan Yen*	*Germany Mark*	*United Kingdom Pound*	*Australia Dollar*	*New Zealand Dollar*
		ANNUAL			
1991–92	126.91	1.57	0.54	1.32	1.85
1992–93	107.29	1.65	0.66	1.48	1.85
1993–94	102.69	1.63	0.66	1.36	1.69
1994–95	84.51	1.40	0.63	1.39	1.49
1995–96	108.88	1.53	0.65	1.26	1.48
1996–97	114.44	1.73	0.61	1.33	1.46
		MONTHLY			
1995–96					
May	106.57	1.53	0.66	1.25	1.46
June	108.88	1.53	0.65	1.26	1.48
1996–97					
July	109.36	1.51	0.64	1.26	1.45
August	107.81	1.48	0.65	1.28	1.45
September	109.75	1.51	0.64	1.26	1.44
October	112.41	1.53	0.63	1.26	1.43
November	112.38	1.51	0.60	1.25	1.41
December	113.76	1.55	0.60	1.25	1.42
January	117.99	1.60	0.60	1.29	1.42
February	123.06	1.68	0.62	1.30	1.45
March	122.69	1.70	0.62	1.27	1.43
April	125.56	1.71	0.61	1.28	1.44
May	118.66	1.70	0.61	1.29	1.45
June	114.44	1.73	0.61	1.33	1.46
1997–98					
July	115.21	1.79	0.60	1.34	1.51

(a) Monthly data are daily averages of spot rates quoted for the US dollar on national markets.

Source: OECD.

3.11 Share Price Indexes

SHARE PRICE INDEXES (31 JAN 1985 = 100.0)



Source: Reserve Bank of Australia, Monthly data.

SHARE PRICE INDEXES (31 JAN 1985 = 100.0)

Period	*United States Dow Jones Industrial*	*Japan Nikkei — 225*	*Germany Commerzbank*	*United Kingdom FT Industrial Ordinary*	*Hong Kong Hang Seng*	*Taiwan Weighted*	*South Korea Composite*	*Australia All Ordinaries*
				ANNUAL				
At end of 30 June								
1991–92	257.9	133.0	168.9	197.2	447.2	574.3	397.4	212.7
1992–93	273.2	163.4	161.4	230.5	520.1	507.2	539.1	224.8
1993–94	281.7	172.1	189.5	231.1	641.6	753.1	672.9	257.2
1994–95	354.1	121.1	189.9	251.9	674.5	691.2	643.9	260.8
1995–96	439.4	187.9	225.0	277.1	807.4	826.0	592.9	289.9
1996–97	596.3	171.8	327.5	303.1	1 113.3	1 146.3	536.6	352.5
				MONTHLY				
1996–97								
July	429.7	172.6	217.5	276.0	782.5	775.2	591.6	281.9
August	436.5	168.2	223.7	284.0	817.5	802.9	562.6	293.3
September	457.1	179.8	232.3	287.8	872.0	825.7	568.5	296.1
October	468.6	170.7	233.4	284.1	914.1	815.8	545.4	303.9
November	506.8	175.3	247.6	287.0	981.2	866.5	523.0	308.8
December	501.1	161.4	248.8	285.6	985.4	880.2	468.8	313.5
January	529.5	152.8	261.9	289.0	975.9	928.6	493.8	313.4
February	534.5	154.7	282.5	289.1	981.6	1 013.5	487.1	316.8
March	511.6	149.0	299.0	289.5	884.5	1 016.1	487.6	313.2
April	544.7	159.7	297.6	294.2	945.3	1 077.2	506.3	321.7
May	569.7	167.3	306.7	301.6	1 081.1	1 036.3	544.8	337.5
June	596.3	171.8	327.5	303.1	1 113.3	1 146.3	536.6	352.5
1997–98								
July	639.0	169.5	373.4	314.9	1 198.9	1 277.9	522.8	353.6
August	592.4	152.0	327.9	314.9	1 035.5	1 238.5	500.6	335.3
September	617.5	148.8	347.8	342.1	1 102.5	1 105.5	465.9	357.8

Source: Reserve Bank of Australia.

Chapter

CHAPTER 4
STATISTICS: CONCEPTS, SOURCES, METHODS AND USAGE

To assist your understanding of the statistics presented in Chapters 2 and 3, some of the more important or regularly occurring statistical concepts, sources, methods and usage are explained in this chapter. However, the explanations provided here are very brief, so if you require a detailed understanding of a topic, you must be prepared to undertake further research.

The ABS has a range of publications that discuss the following issues in detail. Some of these are included in the Further Reading reference at the end of this chapter. In addition, the publications listed as sources in Chapter 2 contain information on concepts, sources and methods of the statistics they relate to and, in some cases, provide reference to publications which explain the issues in further detail.

STATISTICAL CONCEPTS AND METHODS

Time Series

A data set is a collection of observations relating to a variable or group of variables. For example, a set of data could consist of observations of the population for each State and Territory in Australia at a single point in time, say census night 1991. This provides a snapshot view of the population of Australia which could be used to compare populations of the various States and Territories in terms of age, sex, etc.

A time series is a list of observations for the same variable or group of variables over a period of time. For example, a time series could consist of the population for Australia for each year from 1980 to 1990. Time series enable recent estimates to be placed in a meaningful historical perspective, which permits analysts to see if the current situation is improving, deteriorating or staying much the same.

When compiling time series for analysis, care should be exercised that data has not been revised since publication. Many statistical series produced by the ABS, especially derived series like national accounts, are subject to revision as more information becomes available. Seasonally adjusted and trend series are always subject to revision.

Classifications

Classification is the grouping of data into classes or categories according to various characteristics. For example, retail businesses may be classified according to what they sell. Instead of just compiling data about ‘retailers’, data could be compiled separately for footwear stores, butchers, newsagents, etc.

The ABS has defined standard classifications that are used to present a wide range of data. Some examples of these are:

- Australian and New Zealand Standard Industrial Classification;
- Australian Standard Geographical Classification;
- Australian Standard Commodity Classification and
- Standard Institutional Sector Classification of Australia.

Classifications have a standard framework which enables clear scope (boundaries) for the collection and compilation of data. This makes it possible to compare and analyse data from different surveys over a period of time.

ABS classifications align closely with international classifications enabling comparability with international statistics. A wide variety of organisations (government, private sector, educational institutions, etc.) use the ABS classifications for a variety of purposes including analysis of data and running their own surveys and censuses. This enables them to compare their data with data from the ABS and from other organisations which use the same standard classifications.

Constant Price Estimates

Constant price estimates provide a convenient way of measuring *real* changes in various economic statistics, that is, the growth after adjusting values to remove the direct effects of price changes.

Many economic statistics, such as GDP, relate to a wide range of goods and services. Our difficulty is how to aggregate different units of measurement, e.g. the number of cars produced with tonnes of steel produced. If we use a common unit of measurement, i.e. money values (or dollars), we can express transactions for a range of goods and services as a single aggregate.

However, change in money values from one period to another is generally a combination of change in price and a change in quantity. In most cases, we are interested in changes in the physical quantities underlying the dollar values, e.g. the change in the number of cars produced. As a result, estimates are adjusted to remove the direct effects of price changes. Such estimates are said to be *at constant prices* (or in real terms).

The current price value of a transaction may be thought of as being the product of a price and a quantity. The value of a transaction at constant prices can be derived by substituting, for each current price, the corresponding price in the chosen base year.

It is not possible to derive constant price estimates for items such as interest rates or profits that do not have price and quantity components. Nevertheless, such items can be expressed in real terms by deflation using a price index in order to measure changes in the purchasing power of the item.

This involves dividing the current price values by a broad indicator of price change such as the CPI or the IPD of GDP. The underlying assumption is that these price indexes are representative

Constant Price Estimates *continued*

of price hange of the goods and services that could be purchased with the money earned from profits, interest, etc.

Base Year Selection

Most developed countries have chosen to rebase their constant price estimates either every 5 or 10 years. The ABS has chosen to rebase its estimates every 5 years. The current base year is 1989–90.

Indexes

An index number measures the value of a variable in relation to its value at a base period. The essential idea of index numbers is to give a picture of changes in a variable much like that drawn by saying 'The price of petrol rose 5% from June 1992 to December 1993.' Index numbers measure change without giving the actual numerical value of the variable. Change is measured from a base period which is expressed as 100.0.

$$\text{The index number} = \frac{\text{current value}}{\text{base value}} \times 100$$

Because indexes summarise change, they are useful in economic analysis.

Movements in index numbers from one period to another can be expressed either as percentage changes or as changes in index points. It is important not to confuse the two methods because unless the comparison is with the base period, the two yield different results.

Seasonal Factors

Some data are influenced by the nature of the period to which they relate. For example, sales of sunblock are higher for January than for July. Normal seasonal influences on data are those effects that recur regularly one or more times a year. Data that are seasonal may reflect the influence of the seasons themselves (such as farm production) or social convention (such as the incidence of holidays) or economic factors (e.g. timing of tax payments and financial year timing). Some data reflect differences in the composition of the months or quarters in terms of the number of trading days in the period or accounting practices used.

This feature of the data can make interpreting monthly, quarterly and yearly changes difficult and so the ABS uses a special statistical tool called *seasonal adjustment* to standardise the data. Seasonally adjusted data has had all the calendar-related influences removed.

Seasonally adjusted data still contains the effects of irregular influences on the data. For example, sales of beer may have been affected by some large, one-off event such as a strike in several large breweries. Seasonal analysis does not remove such effects but the ABS is able to significantly dampen such irregular influences in seasonally adjusted series by producing a *smoothed seasonally adjusted* or *trend* estimate.

Trend Estimates

The smoothing or trending procedure used by the ABS is based on a set of moving averages known as Henderson filters. These moving averages dampen the irregularity of data without distorting the timing, level or shape of turning points, i.e. peaks and troughs. Trend estimates provide a simple yet very effective measure of the underlying growth or decline of a time series. They also provide a much wider basis for analysis than the more erratic seasonally adjusted or original data.

National Accounts

With separate indicators, particular aspects of economic activity can be monitored. Another important use of this information is as the building blocks of a set of accounts for Australia, called the national accounts. Just as a set of accounts for a business consolidate a lot of information about the business and present it in a set format, national accounts consolidate a range of statistics, from those involving individuals to those involving the whole nation, into a consistent format which describes the overall economic position of the nation.

The concept of national accounting is quite old, having been developed as far back as the 17th century. However, its current look is relatively new, with welfare economists led by Pigou in the 1920s producing the first effective modern measurement of national income. A fundamental re-direction of emphasis in economic analysis and policy occurred after the acceptance and adoption of principles set down in John Maynard Keynes' 1936 publication *The General Theory of Employment, Interest and Money*.

As a result, national accounting has developed as an integral part of economic analysis and policy advising. Government interest focused on production and the allocation of resources to competing uses. Macro-economic policy, concerned with the maintenance of income, price and employment stability, was dependent for much of its effectiveness on timely and accurate information on the components of domestic production. To provide conceptually consistent information and to illustrate the relationships between the components, estimates were gathered into a system of national accounts.

Australia's national accounts are compiled in a manner which closely accords with the recommendations of the United Nations' *A System of National Accounts* (SNA), which was published in 1968. Further work on the development of national accounting standards to reflect changing economic and policy requirements since 1968 has culminated in the publication of the *System of National Accounts 1993* (SNA93). This document was produced jointly by five international organisations: the Commission of the European Communities, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the United Nations and the World Bank. SNA93 is expected to provide a framework for national account statistics into the 21st century.

There will be changes made to the concepts, classification and presentation of the data in the Australian national accounts resulting from revised international standards in SNA93. The first

National Accounts *continued*

'live' release of national accounts data on the SNA93 basis will be in the September quarter 1998 edition of *Australia National Accounts: National Income, Expenditure and Product* (5206.0).

At the summary level, the national accounts are designed to reflect the economic flows of the Keynesian system: production, consumption, investment and saving. The relationship which Keynes elaborated (that production is equal to the value of incomes received and in turn equal to the value of final expenditures) is summarised in the equation:

$$Y = C + I + X - M$$

In this equation, Y represents income, C represents consumption, I represents investment, X is exports, and M is imports. The relationship between Keynes' work and national accounts becomes apparent when the domestic production account from Australia's national accounts is examined.

On the *income side* of the account are the incomes accruing to the factors of production: wages, salaries and supplements earned by labour, operating surplus (profits) earned by capital and net indirect taxes accruing to government. On the *expenditure side* of the account are final consumption expenditure, investment (represented by gross fixed capital expenditure and increase in stocks), plus the value of Australia's exports (which are part of Australia's total production) minus the value of imports (which represent part of the production of other nations).

The various terms from the equation $Y = C + I + X - M$ are grouped into four major accounts in Australia's national accounts. The *domestic production account* summarises domestic production, income and expenditure. Consumption is examined in more detail in the *national income and outlay account*, saving and investment in the *national capital account* and exports and imports in the *overseas transactions account*.

National accounts estimates attempt to account for every monetary transaction of every economic agent in the economy, as well as imputing a value for a range of transactions that do not involve the exchange of money (for example, when producers consume their own products). The quality of national accounts statistics depends to a large degree on the quality of the original records maintained by businesses, governments and other institutions from which data are obtained.

INTERPRETING STATISTICS

Definitions

It is important that your understanding of relevant terms corresponds to the ABS definitions. This ensures that interpretation of terms is uniform and the information is used in the right context. For example, how do you define 'unemployment'? Compare your definition with the ABS definition. Most ABS publications contain definitions of the information they include.

Footnotes

Footnotes are used to add comments and/or explanations to the tables or graphs. Footnotes are indicated by the inclusion of a letter in brackets e.g. (a), (b), (c), etc. beside the figure or heading which requires explanation. This letter and its footnote are presented under the table or graph.

The position of the footnote reference is important in the table or graph. If the footnote reference is in the title of the table or graph, then the message in the footnote relates to the whole table or graph. If it appears next to a column heading, then the message in the footnote applies to the data within that column. When analysing statistics, it is important to give attention to the footnotes as they often point out limitations in the data which could significantly affect interpretation.

Explanatory Notes

Explanatory notes are designed to assist the user in understanding the data in the publication. They provide information on the data collected and the method of collection and are useful in highlighting the limitations of the data. For example, explanatory notes generally include descriptions of the methodology and scope used to collect the data, data definitions, reliability of estimates, seasonal adjustment and comparability with other data.

Averages

An average (arithmetic mean) provides a useful summary measure of the contents of a set of data. However, averages can give a very deceptive picture of the meaning of statistics if they are misunderstood or misused. The average is affected by extremes in data (highest and lowest values) and unequal distributions. It may be beneficial in analysis to also examine the mode (most frequently occurring value) and the median (the value in the middle of an ordered data set) as a guide to the characteristics of the data.

Composition of Totals

Analysis of totals will give you an idea of overall trends in time series data. To gain a more complete understanding of the data, however, an analysis of the components making up the totals is necessary. For example, there were more women than men in Australia at the 1986 Census. However, further analysis shows men outnumbered women in each age group up to the 50–59 years age group, but women outnumbered men greatly in the older age groups.

Graphs

Graphs are an excellent way of presenting data. They enable the user to get a feel for the data quicker than using tables or from text.

Graphs, however, can very easily be misleading and care should be taken in interpretation. Care must be taken to understand what the title and axis headings mean and what data series are actually represented in the graph. Attention must be paid to the units (e.g. millions of dollars, persons) and the scales used.

Surveys and Censuses

Ideally, if we want to find out something about a group of people or businesses, we would approach every person or business in the

Surveys and Censuses *continued*

group (called the population). This is called a census. The best known census is the Census of Population and Housing, which collects information from every household in Australia. However, by applying the rules of sampling, a reliable picture of a population can be drawn from a selection or a sample of that population. The key lies in selecting a sample that is representative of the whole population.

An advantage of sample surveys over censuses is that they are cheaper and are easier to run. However, one main disadvantage is that the results contain *sampling error*, which is the difference in the results obtained by using a sample of the population rather than the whole population. In some instances this error can be quite large. Where information is being analysed from sample surveys, the size of this error should be taken into account when assessing the credibility of results. Sample survey and census results can also contain *non-sampling error*, which is error resulting from collection and processing errors, e.g. respondents being unable to accurately recall information or mistakes made in recording or coding.

STEPS IN ANALYSIS

Although there are no hard and fast rules to the correct approach, the following steps may give you a starting point for analysing time series data:

- Determine what data are available and relevant to your topic. The ABS *Catalogue of Publications and Products* (1101.0) is a good place to start.
- Look at the layout of the table in order to understand how the data are arranged. Check the row and column names to obtain a clear idea of the variables being displayed.
- Scan the totals in the tables for an overall idea of the trends in the data. A graph is often the most appropriate tool for this analysis. If no graph is presented, consider graphing the data yourself to get a clear picture.
- If the data are available by different frequencies (e.g. annually, monthly), decide which of the available frequencies is most appropriate for your purpose. Annual data may be appropriate for examining data over a long time; quarterly or monthly data may provide a better picture of more recent developments.
- Make sure you have a clear idea of the questions for which you seek answers in the data. For example:
    - are the values of the variable rising or falling over time?
    - when was the last peak (high point) or trough (low point)?
    - has the rate of change risen or fallen over time?
    - have the shares of components in the total changed over time?

STEPS IN ANALYSIS *continued*

It is important to conduct your analysis one logical step at a time. Do not try to take all the information in at once and try not to get side-tracked with minor issues as you do your analysis.

Further Reading

Statistics — A Powerful Edge! (1331.0)
A comprehensive guide to understanding statistics — designed for the reader to gain confidence in using statistical information.

Surviving Statistics: A User's Guide to the Basics (1332.0)
A comprehensive basic guide to understanding and using statistics.

A Guide to Interpreting Time Series: Monitoring 'Trends' (1349.0)
Explains why, in ABS publications, the main features and commentaries sections concerning most time series are increasingly emphasising the trend series rather than the seasonally adjusted or original data. It also explains how these trend estimates are obtained, as well as how they may be used more effectively for informed decision making.

Index

For more information . . .

The ABS publishes a wide range of statistics and other information on Australia's economic and social conditions. Details of what is available in various publications and other products can be found in the ABS Catalogue of Publications and Products available from all ABS Offices.

ABS Products and Services

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