

MEASURING AUSTRALIA'S ECONOMY
EDITION 6

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Preface

The sixth 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. New sections have been included covering the impact of The New Tax System, environmental accounts, industry activity and income distribution. An overview of the Australian economy at the end of the 20th Century has also been included.

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.

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

Dennis Trewin
Australian Statistician

2001

Relevance to Curriculum Frameworks

With greater media focus on both the Australian and world economies, the study of economics is an increasingly important and relevant subject in the school curriculum. Students studying economics are focusing on decision making about how production occurs, how resources are allocated, and how the proceeds of production are distributed. They are required to identify trends and patterns in economic data and assess the impact of economic policy on business activity, domestic activity and the environment. Investigation of Australia's trade relations, balance of payments, and other connections between the domestic and international economies are also important. These curriculum outcomes are well supported by the content of *Measuring Australia's Economy*.

The inter-relationship between key economic factors has a particularly important influence on Government decision making, which ultimately affects the well-being of Australians. The ABS has a primary role in measuring the economic health of the nation and assisting governments to make informed decisions. Material presented in this book provides concise treatment of key Australian economic indicators and how they are used to measure economic activity.

Measuring Australia's Economy covers topics including national accounts, balance of payments, domestic consumption and investment, production, labour, and financial markets. Australia's relationship with the international economy is also analysed by presenting information on international accounts and trade comparisons between Australia and other overseas countries. New sections have been included on the impact of The New Tax System, income distribution, environmental accounts, and industry activity.

Statistical material is presented extensively throughout the book and will promote numerical and statistical competency while the broad focus of the content increases the value of the book as a timely and relevant education resource.

General Information

Introduction

Measuring Australia's Economy has been structured so that readers will initially gain a broad understanding of how economic activity can be measured and an overview of the Australian economy at the end of the century is presented. Information on specific economic indicators is provided in chapters which consider economic activity from different perspectives. The format of most entries presents commentary, a graph and table of data, explanatory notes and further reading. There is also a chapter on the introduction of The New Tax System. The final chapter brings together information on concepts, classifications, sources, methods and usage of the material provided in the book.

Chart and Table Contents

The statistics presented are the latest available at October 2000.

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

The tables generally present the last three or six years of annual data. Provision of quarterly or monthly data varies depending on the series.

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 charts 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.

Seasonally Adjusted and Trend Estimates *continued*

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:

- longer-term changes in the item being measured (i.e. trend movements);
- short-term irregular changes;
- 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. The ABS believes that trend series provide the best 'underlying' measures of economic activity for monthly or quarterly series.

Chain Volume Estimates

Chain volume estimates in this publication refer to estimates in 1998–99 dollar terms. Chain volume estimates remove the direct effect of price change from the current price values so that movements in the data between one period and another reflect changes in volume, 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 and how it is used to measure economic activity.

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.

Access to FREE ABS information

ABS website <URL: www.abs.gov.au>.

ABS economic information is freely available on the ABS website. The *Statistics* button on the website brings together a wide range of economic data. Of particular interest are the following links:

- **Key National Indicators** details Australia's key economic and social indicators including the latest Consumer Price Index (CPI), Gross Domestic Product (GDP), employment and unemployment figures, retail trade figures and many more.
- **Statistical Concepts Library** provides easy access to authoritative information about the concepts, sources, methods and classifications underlying Australian official statistics.
- **Information papers** including special articles, working papers, research papers and other information.

The ABS Library Extension Program (LEP)

The LEP makes ABS publications freely accessible to the community via public, State, TAFE 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. A full list of participating libraries is available on the ABS website.

Universities

University students and staff have access to *AusStats*, a web based information service providing the ABS full standard product range on-line. This includes the publications referenced in *Measuring Australia's Economy* and spreadsheets containing time series data for major economic series.

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
. .	not applicable
—	nil or rounded to zero (including null cells)

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
ANZSIC	Australian and New Zealand Standard Industrial Classification
c.i.f.	cost insurance freight
CLI	Composite Leading Indicator
CPI	Consumer Price Index
f.o.b.	free on board
GDP	Gross Domestic Product
GNE	Gross National Expenditure
GOS	Gross Operating 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 Co-operation and Development
HFCE	Household 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 1
MEASURING ECONOMIC ACTIVITY

Measuring Economic Activity

Introduction

A large amount of the information published by the ABS relates to economic activity. For example, the ABS publishes measures of retail trade, the number of persons employed, and the number of new motor vehicles registered. These measures are known 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.

The economic information published by the ABS is obtained mainly from surveys conducted by the ABS or as a by-product of administrative activities. For example, information on retail turnover is collected from a survey of retail businesses, information on the number of people employed is collected from a household labour force survey, and information on new motor vehicles registered is compiled from data provided to the ABS by State motor vehicle registration authorities.

What the National Accounts Measure

There is a wide range of data series available to anyone who wishes to analyse 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 the many other economic statistics 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 *national accounts* provide a framework within which data about particular aspects of the economy can be combined and presented to show the overall economic position of the nation.

In addition, the accounts provide details of the contributions of different types of economic activity to the economy as a whole. 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.

What the National Accounts Measure *continued*

The national accounts are organised in the form of a sequence of integrated accounts that show the essential elements of the Australian economy: production, income, consumption, the accumulation of assets (both financial and non-financial) and wealth.

Many of the key national accounts aggregates are affected by both changes in prices as well as by changes in underlying quantities. For these aggregates, analysts often prefer to see estimates that exclude the direct effects of changes in prices. The ABS provides such estimates—in its national accounts and other economic statistics—in the form of *chain volume measures*.

The national accounts provide vital information for a range of important purposes. The conventions which are followed in compiling them are fully articulated in internationally accepted standards. They have been developed and refined in the course of the past half-century by experts in the field of economic accounting.

Gross Domestic Product (GDP)

A key measure provided in the national accounts is *gross domestic product*, or GDP. GDP may be defined as the unduplicated value of production that occurs in Australia during a particular period. It is unduplicated in the sense that the value of goods and services used up in the production process is deducted from the value of output in the calculation of GDP. GDP can also be measured in terms of the income generated by production, or in terms of 'final' expenditures on outputs produced. 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 fixed assets (e.g buildings, machinery and equipment and computer software) through wear and tear is not accounted for when measuring GDP.

GDP and Wellbeing

It is important to recognise that the 'performance' of the economy, as represented in national accounting measures such as GDP, is not an end in itself. While movements in GDP in chain volume terms are an important measure of economic growth, they do not provide a comprehensive measure of the well-being of a country's citizens. For example, changes in the levels of pollution and changes in social structures—both of which affect well-being—are not accounted for in GDP.

GDP and Wellbeing *continued*

There are significant aspects of the ‘quality of life’ which cannot be comprehensively measured in a system of national accounts, and the national accounts were never designed to provide such measures. There are many questions that cannot be answered by any system that relies predominantly on using monetary values as its measuring yardstick. However, the system of national accounts provides a structure which can be, and has been, adapted and extended to facilitate the examination of linkages between various economic and social and environmental policy issues.

The Australian Economy at the end of the 20th Century

During 1999–2000 the value of goods and services produced by the Australian economy (gross domestic product or GDP) was \$632b. This amount is equivalent to production of about \$33,000 per person, or about \$71,000 per person employed.

In chain volume terms (i.e., after allowing for changes in prices) Australia’s GDP increased by 4.4% in 1999–2000 compared with 1998–99. This continued the strong growth rates evident throughout most of the 1990s; with average annual growth rates of 3.5% recorded for the period 1989–90 to 1999–2000. However, in the first two years of this period growth rates of only -0.2% and 0.4% were recorded.

GDP, CHAIN VOLUME MEASURE, % CHANGE



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

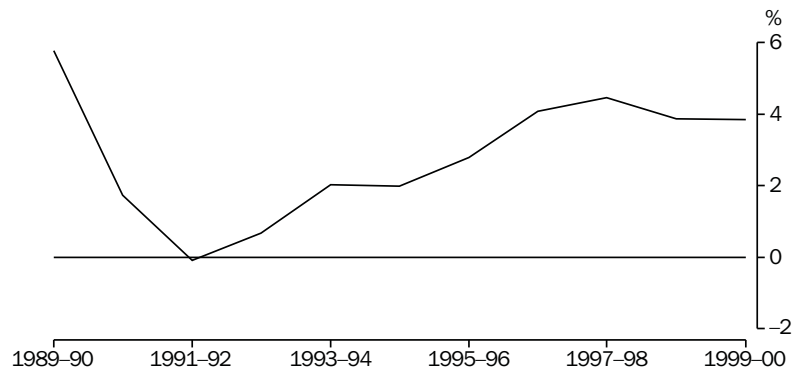
The industry making the most significant contribution to production in 1999–2000 was manufacturing (13%), closely followed by property and business services (13%). The next most significant industry was ‘ownership of dwellings’ (10%), which is the industry that provides dwelling services. Most dwellings are owned by those occupying them, and the value of

The Australian Economy at the end of the 20th Century *continued*

the production of the dwelling services they produce for themselves has to be imputed.

Australia's gross disposable income in 1999–2000 was \$614b. (The difference between this amount and GDP mainly reflects net income and current transfers payable to non-residents.) Of this, \$493b was spent on final consumption expenditure. After allowing for consumption of fixed capital (depreciation) of \$98b, this left net saving of \$24b (or 3.8% of gross disposable income). During the 1990s the proportion of gross disposable income saved ranged from a low of 0.1% in 1991–92 to a high of 4.4% in 1997–98.

SAVING AS A PERCENTAGE OF GROSS DISPOSABLE INCOME



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

Of the final consumption expenditures in 1999–2000, 24% was incurred by governments, with the remaining 76% incurred by households. The most significant components of the latter were rent (18%), which includes the imputed rent paid by owner-occupiers to themselves, food (12%) and recreation and culture (12%).

During 1999–2000 the value of new investment in fixed assets was \$151b, or 24% of GDP. As this amount exceeded the combined total of net saving and depreciation, this meant that Australia was a net borrower from the rest of the world. The net amount borrowed during 1999–2000 was \$33b.

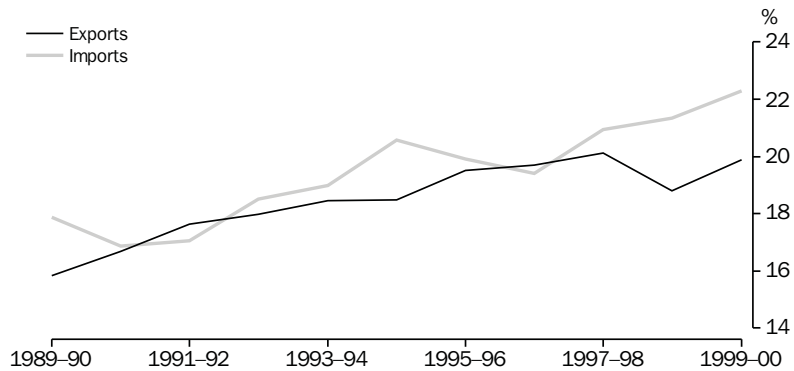
Throughout the 1990s, the proportion of GDP represented by new investment in fixed assets was generally in the range 22–24%.

Australia's balance of payments current account deficit during 1999–2000 was \$34b, or 5.3% of GDP. This deficit was mostly attributable to an excess of \$15b in imports of

The Australian Economy at the end of the 20th Century *continued*

goods and services over exports, and net income payable to non-residents of \$19b. During the 1990s the current account deficit as a percentage of GDP fluctuated, with a high of 6.0% in 1989–90 and a low of 3.3% in 1991–92. Both exports and imports became increasingly more important to the Australian economy during the 1990s. When expressed as a percentage of GDP, exports rose from 16% in 1989–90 to 20% in 1999–2000, while over the same period imports rose from 18–22%. Australia’s terms of trade—which reflects changes in the prices of exports relative to those for imports—improved by 4.0% in 1999–2000, following a decline of 5.2% in the previous year.

EXPORTS AND IMPORTS OF GOODS AND SERVICES AS A PERCENTAGE OF GDP



Source: Australian System of National Accounts (5204.0), Annual data.

CURRENT ACCOUNT AS A PERCENTAGE OF GDP



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

The Australian Economy at the end of the 20th Century *continued*

There was a small surplus (\$1b) on Australia's balance of payments capital account for 1999–2000. Overall, for 1999–2000 the balance on current and capital accounts was a deficit of \$33b, which is equivalent to Australia's net borrowing requirement mentioned previously.

At 30 June 2000, Australia's net worth (assets less liabilities) was \$2,431.4b, an increase of \$218b on the position one year earlier. Of the increase, \$24b was attributable to net saving, with the remainder due mainly to the revaluation of assets and liabilities to take account of price changes. As the value of Australia's net worth at 30 June 2000 was less than the value of its non-financial assets (\$2,835.2b), this meant that Australia had net liabilities to non-residents (\$404b). Australia's net foreign debt, which is a component of its net liabilities to non-residents, was \$268b at 30 June 2000, an increase of \$36b during the year.

Inflation in Australia remained relatively muted at the end of the 1990s. The consumer price index (CPI) increased by 2.4% in 1999–2000 compared with 1998–99. Over the same period, the GDP price index—which provides a broader measure of inflation than the CPI—increased by 1.6%. During the 1990s the average annual rate of change in the CPI was 2.2%.

YEAR ON YEAR CHANGE IN CONSUMER PRICE INDEX



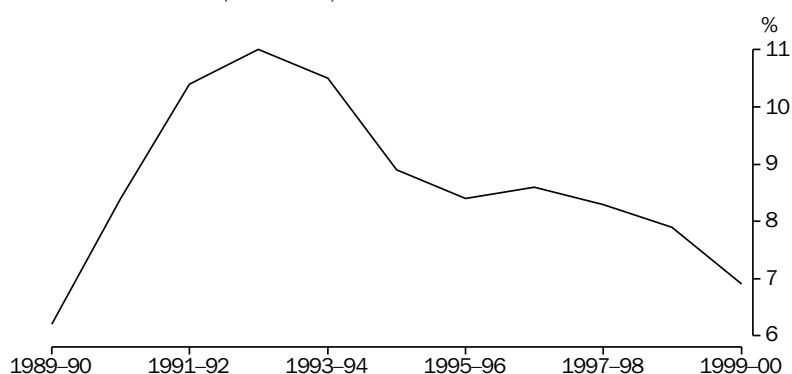
Source: Consumer Price Index, Australia (6401.0), Annual data.

Growth in employment during 1999–2000 was 2.7%, the strongest growth since 1994–95 when employment grew by 4.0%. The average unemployment rate for 1999–2000 was 6.9%, down 0.7 percentage points on the rate for the previous year. During the 1990s unemployment peaked at 11.0% in 1992–93, and after this it generally declined. Average weekly ordinary time earnings for full-time adults during 1999–2000 was

The Australian Economy at the end of the 20th Century *continued*

\$768.20, an increase of 3.4% on the comparable figure for the previous year. Movements in average weekly earnings are affected by changes in the composition of the labour force as well as by changes in the wage rates. The price of labour, as measured by the wage cost index, increased by 2.9% during 1999–2000. Unlike the ABS average weekly earnings measure, the wage cost index is free of the effects of changes in labour composition.

UNEMPLOYMENT RATE, PERSONS, ANNUAL AVERAGE



Source: Australian Economic Indicators (1350.0), Annual data.

The average ‘all ordinaries’ stock market index for June 2000 was 3,115.9, an increase of 5.2% on the average for the same month a year earlier. At 30 June 2000 the Australian dollar was worth 0.5986 United States dollars, down 9.2% on a year earlier. The trade weighted index also fell, by 8.7%, during 1999–2000.

CHAPTER 2

SUMMARY MEASURES OF ECONOMIC ACTIVITY

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2.1 National Accounts

National turnover of goods and services	Imports of goods and services	Imports of goods and services	Imports of goods and services	Imports of goods and services	Imports of goods and services	Imports of goods and services	Exports of goods and services
	Gross domestic product	Total factor income	Net factor income	Net income paid overseas	Net income paid overseas	Net income paid overseas	
				National income	Net current transfers to overseas	Net current transfers to overseas	
			Taxes less subsidies on production and imports		Consumption of fixed capital	Consumption of fixed capital	Consumption of fixed capital
Taxes less subsidies on production and imports	Consumption of fixed capital	Consumption of fixed capital	Consumption of fixed capital	Gross national expenditure	Gross national expenditure		

Explanatory Notes

The essential function of the national accounts is to provide a systematic summary of national economic activity. The structure of the 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, firstly by economic type, and secondly, grouped to form accounts. The four domestic institutional sectors are: non-financial corporations; financial corporations; households and general government.

The main accounts in the Australian national accounts are:

- gross domestic product (GDP) account, which records the value of production (GDP), the income from production and the final expenditures on goods and services produced;

Explanatory Notes *continued*

- income accounts, which show primary and secondary income transactions, final consumption expenditures and consumption of fixed capital. Net saving is the balancing item for these accounts;
- capital accounts, which record the net accumulation, as the result of transactions, of non-financial assets; and the financing, by way of saving and capital transfers, of the accumulation. Net lending/borrowing is the balancing item for these accounts;
- financial accounts, which show the net acquisition of financial assets and the net incurrence of liabilities. The balance on these accounts is the net change in financial position, which is conceptually equivalent to the net lending/borrowing balance in the capital account; and
- balance sheets, which record the stock of assets, both financial and non-financial, and liabilities at a particular point in time. Net worth is the balance from the balance sheets.

The figure on the facing page shows how some of the main national accounting aggregates are related to each other. It starts with national turnover, which can be viewed as the *total supply of goods and services* available in Australia to final buyers in a given period. This is conceptually equivalent to the sum of all *final expenditures* on goods and services in the same given period. These final expenditures are defined to include changes in inventories and exports, which are considered to be final expenditures from the point of view of the domestic economy. Deduction of imports of goods and services from national turnover leaves GDP.

Australia's national accounts are essentially compiled according to the recommendations of the latest international standard—the 1993 *System of National Accounts* (SNA93). SNA93 is a joint publication of the United Nations, IMF, OECD, World Bank and Commission of the European Communities (Eurostat).

Further Reading

Australian National Accounts: Concepts, Sources and Methods 2000 (5216.0), which is available in the *Statistical Concepts Library* on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

System of National Accounts, 1993

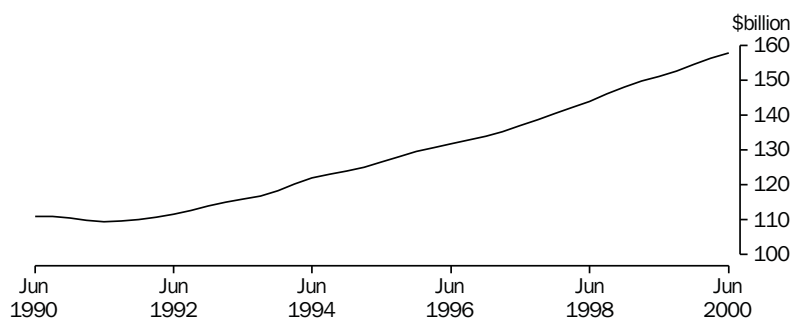
Contains international standards issued by the United Nations, International Monetary Fund, World Bank, Organisation for Economic Co-operation and Development and the Commission of the European Communities (Eurostat) for the compilation of national accounts statistics. Included on the ABS CD-ROM product *Statistical Concepts Library* (1361.0.30.001).

2.2

Gross Domestic Product

The Australian economy, as measured by the chain volume estimates of GDP, grew during the late 1980s. This was followed by a sustained decline in economic activity (a recession) from December quarter 1990 to June quarter 1991 with 3 quarterly decreases in the trend chain volume estimates of GDP. In the nine years since the recession in 1990–91 GDP grew in every year. Although growth in 1991–92 was relatively low (0.4%), by 1994–95 it had accelerated to 4.5%. It has subsequently been above 4%, except for 1996–97 when it was 3.6%. GDP growth in 1999–2000 was 4.4%.

GDP, CHAIN VOLUME MEASURES(a): **TREND**



(a) Reference year for chain volume measures is 1998–99.

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

GROSS DOMESTIC PRODUCT, Chain Volume Measures(a)

GDP	
Period	\$m
ANNUAL	
1994–95	498 550
1995–96	520 261
1996–97	539 088
1997–98	565 126
1998–99	595 417
1999–2000	621 423
QUARTERLY (TREND)	
1998–99	
December	148 150
March	149 832
June	151 179
1999–2000	
September	152 703
December	154 540
March	156 374
June	157 959

(a) Reference year for chain volume measures is 1998–99.

Source: 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.

There are three ways of measuring GDP: the value of goods and services produced by an industry less the costs of production (production approach); the sum of incomes generated by production (income approach); and the sum of final expenditure on goods and services produced, plus exports minus imports (expenditure approach). An average of the three approaches is calculated and referred to as GDP.

From 1994–95 the Australian national accounts have been benchmarked to annual supply and use tables, thereby eliminating statistical discrepancies between the various measures of GDP. However, as no supply and use tables are available for the latest financial year and for years prior to 1994–95, discrepancies are recorded between the average measure of GDP and the income, expenditure and production based measures for those years. Furthermore, there are discrepancies for all quarters.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

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 a detailed presentation of quarterly national accounts at both current prices and chain volume measures in original, seasonally adjusted and trend terms.

Australian System of National Accounts (5204.0)

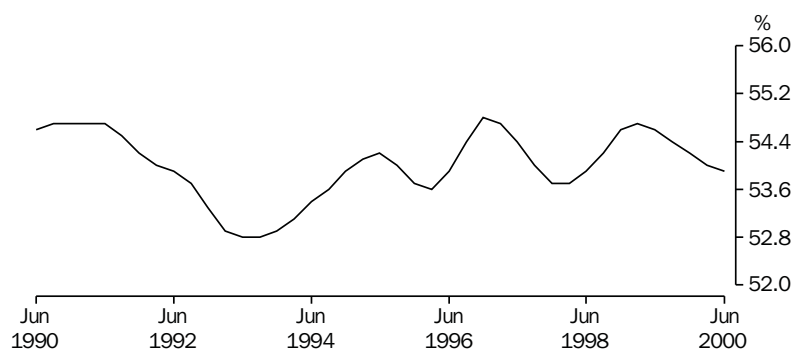
Contains a comprehensive range of annual national accounts data.

2.3

National Accounts Gross Domestic Product Account

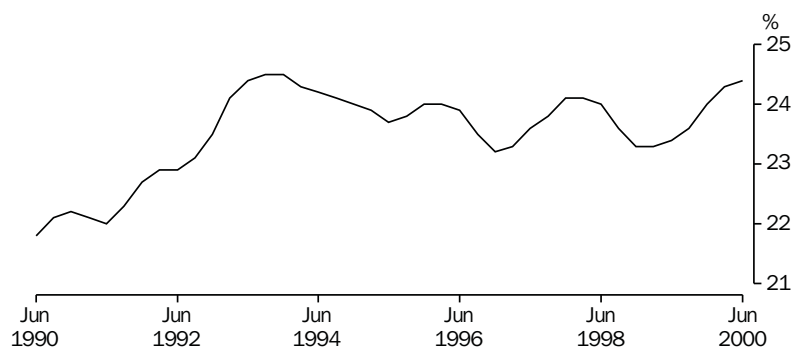
The ratio of compensation of employees to total factor income (the wages share) decreased for 8 consecutive quarters from June quarter 1991 to June quarter 1993, where it stood at 52.8%. However, by December quarter 1996 the ratio had risen to reach 54.8%, its highest level for the 1990s. The ratio in June quarter 2000 was 53.9%. Movements in the ratio of gross operating surplus for financial and non-financial corporations to total factor income (the profits share) tends to be inverse to the movements in the wages share as wages and corporate profits are the two major components of total factor income. The profits share recorded its highest value during the 1990s in September and December quarters 1993 at 24.5%. It has been rising over recent quarters and was 24.4% in June quarter 2000.

WAGES SHARE OF TOTAL FACTOR INCOME: TREND



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

PROFITS SHARE OF TOTAL FACTOR INCOME: TREND



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

Summary Measures of Economic Activity

GROSS DOMESTIC PRODUCT ACCOUNT, Current Prices

<i>Particulars</i>	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
	\$m	\$m	\$m	\$m	\$m	\$m
Final consumption expenditure	370 822	395 139	411 461	436 340	462 490	492 516
Gross fixed capital formation						
Private	86 794	90 254	97 544	111 591	117 535	127 492
Public	23 859	23 403	22 575	20 768	24 696	23 608
<i>Domestic final demand</i>	<i>481 475</i>	<i>508 796</i>	<i>531 581</i>	<i>568 699</i>	<i>604 721</i>	<i>643 616</i>
Changes in inventories	1 908	163	-980	690	5 307	2 062
<i>Gross national expenditure</i>	<i>483 383</i>	<i>508 959</i>	<i>530 601</i>	<i>569 389</i>	<i>610 027</i>	<i>645 679</i>
Exports of goods and services	87 654	99 095	105 160	113 744	111 843	125 774
Less Imports of goods and services	97 654	101 078	103 590	118 482	126 453	140 954
Statistical discrepancy(E)	—	—	—	—	—	1 791
Gross domestic product	473 381	506 975	532 170	564 653	595 417	632 290
Compensation of employees	225 462	240 835	257 193	268 646	286 761	303 134
Gross operating surplus	148 066	158 161	164 152	178 091	182 585	197 429
Gross mixed income	45 104	49 228	49 382	53 016	55 715	59 485
<i>Total factor income</i>	<i>418 632</i>	<i>448 224</i>	<i>470 727</i>	<i>499 753</i>	<i>525 061</i>	<i>560 048</i>
Taxes less subsidies on production and imports	54 749	58 751	61 443	64 900	70 356	72 093
Statistical discrepancy(I)	—	—	—	—	—	149
Gross domestic product	473 381	506 975	532 170	564 653	595 417	632 290
	\$	\$	\$	\$	\$	\$
MEMORANDUM ITEM						
Average compensation per employee(\$)	33 581	34 856	36 619	37 930	39 430	40 477

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

Explanatory Notes

The gross domestic product 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 gross domestic product account records sales of goods and services (including goods produced for own use) to final domestic consumers, gross fixed capital formation, changes in inventories and exports minus imports.

The income side of the gross domestic product account shows compensation of employees (the income of employees from production), gross operating surplus (the income of corporations, general government and dwellings owned by persons from production), gross mixed income (the income of unincorporated enterprises from production) and taxes less subsidies on production and imports paid to general government.

The gross domestic product 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

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

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 a detailed presentation of quarterly national accounts for both current prices and chain volume measures in original, seasonally adjusted and trend terms.

Australian System of National Accounts (5204.0)

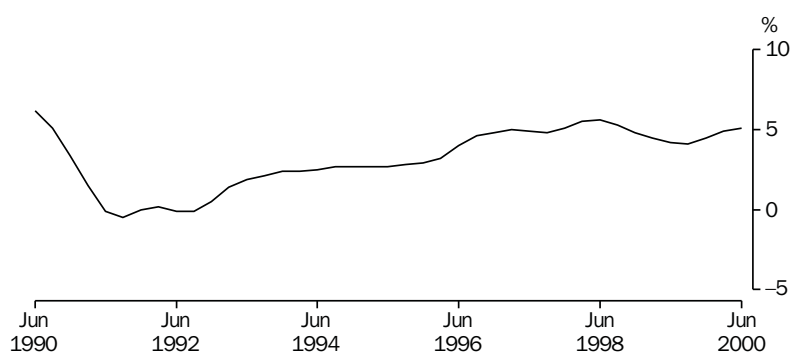
Contains a comprehensive range of annual national accounts data.

2.4 National Accounts

National Income Account

The ratio of national net saving to national net disposable income in quarterly trend terms is shown in the following graph. The ratio was particularly low during the recession in the early 1990s. In recent years it has been around 5%.

PROPORTION OF NET SAVING TO NET DISPOSABLE INCOME: TREND



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

NATIONAL INCOME ACCOUNT, Current Prices

Particulars	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
	\$m	\$m	\$m	\$m	\$m	\$m
Income						
Compensation of employees	225 462	240 835	257 193	268 646	286 761	303 134
Gross operating surplus	148 066	158 161	164 152	178 091	182 585	197 429
Gross mixed income	45 104	49 228	49 382	53 016	55 715	59 485
Taxes less subsidies on production and imports	54 749	58 751	61 443	64 900	70 356	72 093
Net primary income from non-residents	-18 118	-19 533	-19 307	-18 005	-18 328	-18 591
Gross national income	455 263	487 442	512 863	546 648	577 089	613 550
Net secondary income from non-residents						
Current taxes on income, wealth, etc.	778	873	937	1 008	1 087	1 192
Other current transfers	-1 306	-1 044	-1 114	-1 083	-1 865	-1 098
Gross disposable income	454 735	487 271	512 686	546 573	576 311	613 644
Use of gross disposable income						
Final Consumption expenditure						
General government	88 023	93 363	96 226	101 291	108 733	119 203
Households	282 799	301 776	315 235	335 049	353 757	373 313
Net saving(a)	9 033	13 637	20 957	24 367	22 312	23 597
Consumption of fixed capital	74 880	78 495	80 268	85 866	91 509	97 531
Total use of gross disposable income	454 735	487 271	512 686	546 573	576 311	613 644

(a) Net saving is derived as a balancing item.

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

Explanatory Notes

The national income account shows the sources and 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 account records compensation of employees, gross operating surplus, gross mixed income and taxes less subsidies on production and imports. Net payments of income and current transfers to overseas are deducted to yield gross disposable income.

Gross disposable income is used for final consumption expenditure, with the balance being the nation's gross saving—a source of finance for gross capital formation. Gross saving less consumption of fixed capital yields net saving.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

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 data for the last nine quarters and nine years for the national income account as well as quarterly income accounts for the households and general government sectors.

Australian System of National Accounts (5204.0)

Contains annual data for the national income account as well as income accounts for each sector.

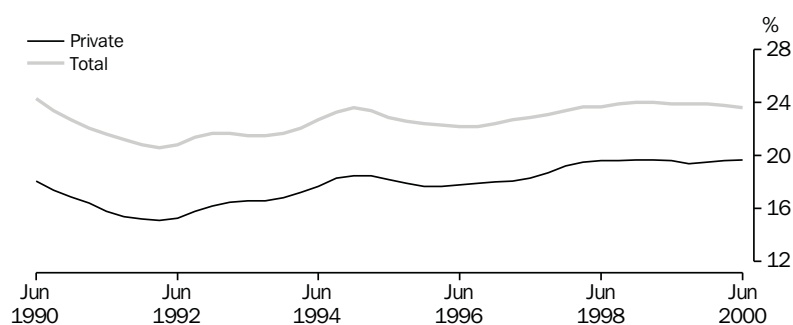
2.5

National Accounts

National Capital Account

The proportion of private gross fixed capital formation (investment) to GDP in quarterly trend terms fell from 21.3% in March quarter 1989 to a low of 15.1% in March quarter 1992 but has subsequently recovered, reaching 19.7% in June quarter 2000. The proportion of total gross fixed capital formation to GDP substantially reflects the movements in the private sector.

PROPORTION OF PRIVATE AND TOTAL GROSS FIXED CAPITAL FORMATION TO GDP: TREND



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

Summary Measures of Economic Activity

NATIONAL CAPITAL ACCOUNT, Current Prices

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
<i>Particulars</i>	\$m	\$m	\$m	\$m	\$m	\$m
Net saving	9 033	13 637	20 957	24 367	22 312	23 597
Consumption of fixed capital	74 880	78 495	80 268	85 866	91 509	97 531
Capital transfers						
Receivable from non-residents	1 383	1 956	2 200	2 068	2 197	2 413
Less Payable to non-residents	843	907	877	971	1 011	1 230
Gross saving and capital transfers	84 453	93 181	102 548	111 330	115 007	122 311
Gross fixed capital formation						
Private	86 794	90 254	97 544	111 591	117 535	127 492
Public corporations	12 203	11 639	9 792	8 342	11 450	8 514
General government	11 656	11 764	12 783	12 426	13 245	15 095
<i>Total gross fixed capital formation</i>	<i>110 653</i>	<i>113 657</i>	<i>120 120</i>	<i>132 359</i>	<i>142 231</i>	<i>151 101</i>
Changes in inventories						
Private non-farm(a)	1 529	874	1 670	-59	5 343	2 300
Farm	385	108	-279	374	-289	-5
Public authorities(b)	-6	-819	-2 371	375	253	-233
<i>Total changes in inventories</i>	<i>1 908</i>	<i>163</i>	<i>-980</i>	<i>690</i>	<i>5 307</i>	<i>2 062</i>
Acquisitions less disposals of non-produced non-financial assets	-32	-25	6	-30	19	64
Statistical discrepancy(c)	0	0	0	0	0	1 642
Net lending to non-residents	-28 074	-20 613	-16 597	-21 691	-32 549	-32 558
Total capital accumulation and net lending	84 453	93 181	102 548	111 330	115 007	122 311

(a) Includes for all periods the marketing authorities privatised in July 1999. (b) Includes for all periods the remaining public marketing authorities. (c) Statistical discrepancy (E) less statistical discrepancy(I).

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

Explanatory Notes

The national capital account records the saving and investment flows taking place in the economy. It shows how saving, consumption of fixed capital and capital transfers are used to finance the gross accumulation of capital formation.

If, as is typically the case in Australia, the nation's saving and consumption of fixed capital formation are not sufficient to pay for all its capital formation, 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 non-residents*.

The national capital account shows, on the receipts side, consumption of fixed capital and net saving (transferred from the national income account) and capital transfers receivable from less capital transfers payable to non-residents (transferred from the external account).

Shown on the payments side are new investment in fixed assets (such as equipment and buildings), changes in inventories, acquisitions less disposals of non-produced non-financial assets (such as mineral deposits and other sub-soil assets), a balance described as net lending to non-residents and a statistical discrepancy for years in which supply and use tables are not available.

In principle, the sum of net lending for all domestic sectors is equal to the nation's net lending to non-residents. 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.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

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 data for the last 9 quarters and 9 years for the national capital account.

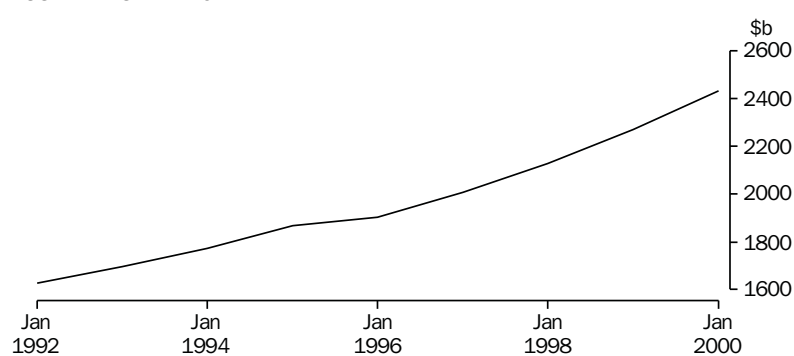
Australian System of National Accounts (5204.0)

Contains annual data for the national capital account as well as capital accounts for each sector.

2.6 National Accounts Balance Sheet

Except for the year ending June 1992, positive growth rates in Australia's net worth have been recorded in each year over the last decade. As at June 2000, net worth totalled \$2,431.4b. The average growth rate during the 1990s was 5.5%. The graph below illustrates the rise of Australia's net worth in the 1990s.

AUSTRALIA'S NET WORTH



Source: Australian National Accounts: National Balance Sheet (5204.0), Annual data.

CONSOLIDATED BALANCE SHEET, as at 30 June 2000

	\$b
Assets	
Non-financial assets	
Produced assets	
Fixed assets	
Tangible fixed assets	
Dwellings	589.5
Other buildings and structures	706.4
Machinery and equipment	321.8
Livestock — fixed assets	17.8
<i>Total tangible fixed assets</i>	<i>1 635.5</i>
Intangible fixed assets	
Computer software	20.0
Entertainment, literary or artistic originals	0.6
<i>Total intangible fixed assets</i>	<i>20.6</i>
<i>Total fixed assets</i>	<i>1 656.1</i>
Inventories	108.3
<i>Total produced assets</i>	<i>1 764.4</i>
Non-produced assets	
Land	916.7
Sub-soil assets	151.7
Native standing timber	2.4
<i>Total non-produced assets</i>	<i>1 070.8</i>
<i>Total non-financial assets</i>	<i>2 835.2</i>
Financial assets	303.5
Total assets	3 138.7
Liabilities (including share capital)	707.3
Net Worth	2 431.4

Source: Australian System of National Accounts: (5204.0).

Explanatory Notes

Net worth is defined as the difference between total assets and total liabilities. It measures the economic wealth of a nation or of an institutional sector. The national balance sheet measures the levels as at 30 June each year of Australia's financial and non-financial assets as well as its liabilities to the rest of the world. Net worth is calculated by subtracting liabilities from total assets. Changes in net worth are mainly due to saving or changes in the prices of assets. Non-financial assets include natural (non-produced) assets that are under the control of an economic agent, such as land, sub-soil assets and certain natural forests. Closely linked to the balance sheet are the accumulation and revaluation accounts which record the change in the value of assets and liabilities during an accounting period. They explain the changes in the balance sheet from one accounting period to the next.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

Australian System of National Accounts (5204.0)

Contains the national balance sheet as well as balance sheets for each sector.

2.7 Government Financial Statistics

For 1998–99 the Government Finance Statistics (GFS) net operating balance for the total consolidated public sector for all Australian governments combined was \$8,687m. Because this amount was less than the public sector's net acquisition of non-financial assets (\$9,011m), the GFS net borrowing for all Australian governments combined was \$324m.

The total public sector deficit was \$3,369m. The main contributing factors to this result were a \$30,589m investment in new non-financial assets, partially offset by net cash flows of \$22,286m from operating activities and \$5,693m from sales of non-financial assets.

The consolidated GFS net worth as at 30 June 1999 for all Australian governments combined was \$276,201m. The major factors contributing to this result were \$561,855m in land and fixed assets partially offset by liabilities of \$197,222m and \$135,980m for borrowing and employee entitlements (including unfunded superannuation), respectively.

Key GFS aggregates for the public sector for 1998–99 are provided in the following table:

GOVERNMENT FINANCE STATISTICS

Particulars	Commonwealth	Multi-	State	Local	All Australian
	<i>jurisdictional(a)</i>	<i>jurisdictional(a)</i>			<i>Governments(b)</i>
	\$m	\$m	\$m	\$m	\$m
OPERATING STATEMENT					
GFS Revenue	176 563	8 725	119 721	14 961	286 761
GFS Expenses	171 586	8 380	116 688	13 703	268 416
GFS Net Operating Balance	4 977	345	3 033	1 258	8 687
Net Acquisition of non-Financial Assets	3 722	183	4 394	725	9 011
GFS Net Lending(+)/Borrowing(-)	1 255	161	-1 360	533	-324
CASH FLOW STATEMENT					
Net cash flows from operating activities	11 479	1 168	7 189	3 726	22 286
Net cash flows from investments in non-financial assets	-7 969	-755	-12 780	-3 418	-24 918
Net cash flows from investments in financial assets for policy purposes	7 685	3	8 378	6	14 513
Net cash flows from investments in financial assets for liquidity purposes	-1 825	-168	-1 391	-58	-2 206
Net cash flows from financing activities	-9 592	-149	209	88	-7 850
Net increase(+)/decrease(-) in cash held	-223	99	1 606	345	1 825
Surplus(+)/Deficit(-)(c)	2 910	413	-5 717	298	-3 369

For footnotes see end of table.

...continued

Summary Measures of Economic Activity

GOVERNMENT FINANCE STATISTICS—*continued*

<i>Particulars</i>	<i>Commonwealth</i>	<i>Multi-jurisdictional(a)</i>	<i>State</i>	<i>Local</i>	<i>All Australian Governments(b)</i>
	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>
Balance Sheet					
Assets	196 319	22 908	422 608	139 283	764 966
Liabilities	260 187	5 301	192 014	9 201	450 635
Shares and other contributed capital	38 226	—	—	—	38 130
			260	130	
GFS Net Worth	-102 094	17 608	593	082	276 201
Net Debt(d)	67 510	-3 957	26 106	227	89 873

(a) The multi-jurisdictional sector currently contains only universities. (b) The sums of individual levels of government may not agree with total Australian governments figures due to transfers between levels of government. (c) Equals Net cash flows from operating activities and investments in non-financial assets less Distributions paid less Acquisitions of assets under finance leases and similar arrangements. (d) Equals deposits held, advances received, Reserve Bank notes on issue and borrowing less cash and deposits, advances paid, and investments, loans and placements.

Source: *Government Finance Statistics, Australia (5512.0)*.

Explanatory Notes

The ABS has recently introduced an accrual accounting system of recording government finance statistics (GFS) in line with international statistical standards, replacing the previous predominantly cash basis. Accrual accounting is a method in which revenue, expenses, lending and borrowing are recorded as they are earned, accrued or incurred regardless of when payment is made or received. Under a cash-based system such transactions are recorded only when payment is made or received.

An accrual system of accounting provides a more accurate picture of the state of government finances. For example, items such as increases in a government's unfunded superannuation liability, provisions for the depreciation of its capital assets, or exchange rate effects on its foreign currency borrowings are not recorded in a cash-based system. As a result of adopting an accrual basis, GFS tables have changed and new analytical balances derived.

For a thorough understanding of the financial position of governments the Operating Statement, the Balance Sheet and the Cash Flow Statement should all be used. The 'bottom line' of each of these financial statements is a GFS analytical balance. A range of analytical measures is provided because it is generally accepted that there is no single measure or balance that summarises the macro-economic impact, or the viability, of a government's financial situation. The GFS analytical balances are:

- *Net Operating Balance* which reflects the sustainability of government operations when considered over a number of periods. A positive balance means that revenue exceeds expenses.

Explanatory Notes *continued*

- *Net Lending/Borrowing* which represents the government's call on the financial sector and reflects the economic impact of government operations. A positive result reflects a net lending position and a negative result reflects a net borrowing position.
- *Net Worth* which is an economic measure of 'wealth'.
- *Surplus/Deficit* which is a broad indicator of a sector's cash flow requirements. When this measure is positive it reflects the extent to which cash is available to government to either increase its financial assets or decrease its liabilities. When this measure is negative it is a measure of the extent to which government requires cash, either by running down its financial assets or by borrowing.

GFS can also be used to monitor fiscal policy. When a 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, governments can reduce expenditure or increase taxes in an attempt to reduce demand. Government spending on goods and services can also affect aggregate demand.

Further Reading

Information Paper: Accruals-based Government Finance Statistics (5517.0)

This ABS paper outlines the new GFS conceptual framework (including the new analytical balances), the new format for GFS tables, and the relationship between GFS, accrual accounting and Australian System of National Accounts reports.

Government Finance Statistics, Australia (5512.0)

Contains final annual data on the financial transactions for the general government, public non-financial corporations, financial corporations and total public sectors of each level of government and consolidated statistics for total State, total State and local, and all Australian governments.

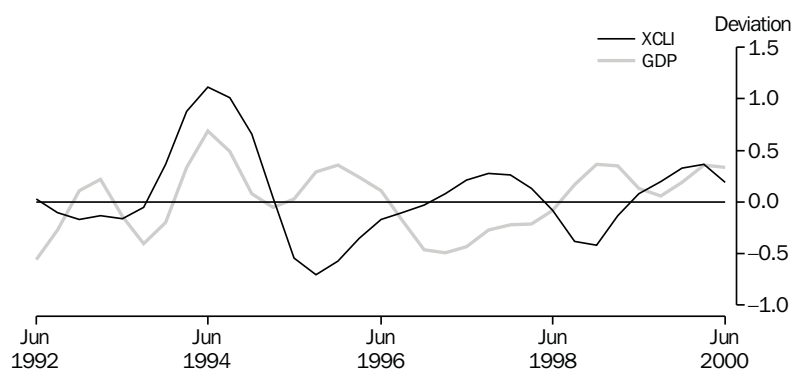
Government Financial Estimates, Australia (5501.0)

Contains forward (or budget) year data on the financial transactions for the general government and non-financial public sector of each level of government and consolidated statistics for total State and all Australian governments.

2.8 Experimental Composite Leading Indicator

The graph below shows the experimental composite leading indicator (XCLI) and GDP (chain volume measure) expressed as deviations from their historical long term trend. The XCLI recorded a trough in the December quarter 1998. The GDP business cycle recorded a trough in the September quarter 1999, three quarters after the trough in the XCLI. Following five consecutive quarters of growth, the XCLI declined 0.17 in the June quarter 2000, a turnaround of 0.20 from the previous quarter. This indicates a provisional peak in the XCLI in the March quarter 2000.

EXPERIMENTAL COMPOSITE LEADING INDICATOR,
(XCLI) AND GDP (Chain volume measure)—
Deviation of trend from historical long-term trends



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

XCLI AND GDP CHAIN VOLUME MEASURE (REFERENCE YEAR—1998–1999)

Period	XCLI deviation from long term trend	XCLI change from previous quarter	GDP deviation from long term trend	GDP change
				from previous quarter
			%	%
1998–99				
September	-0.38	-0.30	0.17	1.45
December	-0.42	-0.03	0.37	1.37
March	-0.13	0.28	0.35	1.14
June	0.08	0.22	0.13	0.90
1999–2000				
September	0.20	0.11	0.06	1.01
December	0.33	0.14	0.19	1.20
March	0.37	0.03	0.36	1.19
June	0.19	-0.17	0.34	1.01

Source: Australian Economic Indicators (1350.0).

Explanatory Notes

The ABS Experimental Composite Leading Indicator (XCLI) is a single time series designed to provide early signals of turning points in the Australian business cycle. It does not predict the level of GDP or signal recessions or recoveries. Past performance of the XCLI shows it led turning points in the business cycle of GDP by around two quarters, but the lead time for the peaks and troughs can vary considerably.

The XCLI 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 GDP 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 (trade factor which is defined as the ratio of commodity prices to import prices), external demand (US 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. The reference or target series for the XCLI is the chain volume measure of the GDP business cycle used by most decision makers in Australia.

Further Reading

Australian Economic Indicators (1350.0)

The Experimental Composite Leading Indicator is released every quarter and is published in Australian Economic Indicators. It is also released electronically under catalogue number 1350.0.65.001.

Information Paper: An Experimental Composite Leading Indicator of the Australian Economic Activity (1347.0)

This information paper describes the nature and construction of the experimental composite leading indicator of Australian economic activity.

2.9 Input-Output Tables

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 publishes 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 and gross mixed income), 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) Compensation of employees, row (5) Gross operating surplus and gross mixed income, row (6) Taxes and row (7) Imports.

Column (7) Total supply is equal to row (8) Australian production.

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

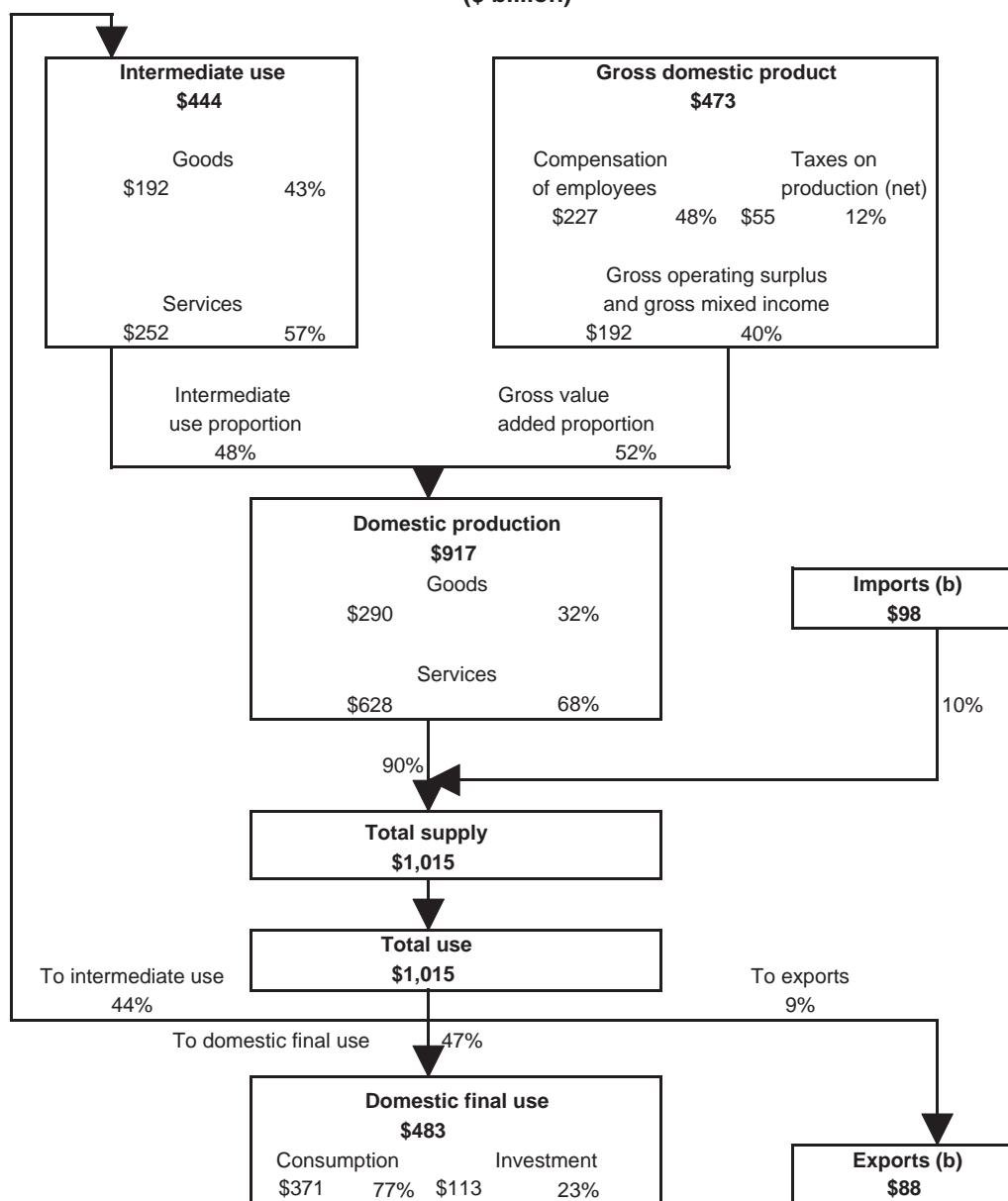
Supply	Use						Total supply (7) = (3) + (6)
	Goods (1)	Services (2)	Intermediate use (3) = (1)+(2)	Domestic consumption (4)	Exports (5)	Final demand (6) = (4) + (5)	
Goods(1)	84	62	146	63	58	121	267
Services(2)	54	187	242	357	26	383	625
Intermediate use(3)	139	249	388	421	83	504	892
Compensation of employees(4)	42	185	227	—	—	—	227
Gross operating surplus and gross mixed income(5)	50	142	192	—	—	—	192
Taxes less subsidies on production and imports(6)	6	23	29	24	1	25	55
Imports(7)	30	26	56	39	3	42	98
Australian production(8)	267	625	892	483	88	571	1 463

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

The Australian Economy

Flow of Goods and Services, 1994-95 (a)

(\$ billion)



(a) : Flows are based on 1994-95 Input-Output tables.

(b) : Includes re-exports.

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

The links between the table and the diagram are as follows:

Intermediate use (\$444b) in the diagram is derived by summing from column (3) of the table: Intermediate use of domestic production (\$388b); and Imports (\$56b).

Gross domestic product (\$473b) in the diagram is derived by summing from column (7) of the table: Compensation of employees (\$227b); Gross operating surplus and gross mixed income (\$192b); and taxes less subsidies on production and imports (\$55b).

Domestic production (\$917b) in the diagram is derived by summing: Intermediate use from column (3) of the table (\$388b); total final demand at basic values from column (6) (\$504b); and the taxes less subsidies payable on those final demand items (see column 6) (\$25b).

Imports (\$98b) in the diagram is total imports, column (7), in the table.

Total supply (\$1,015b), which must equal total demand, is the sum of Domestic production (\$917b) and Imports (\$98b).

Domestic final use (\$483b) in the diagram is derived from the table by subtracting total Exports (\$88b), column (5), from total Final demand (\$571b), column (6).

Exports (\$88b) in the diagram is total exports, column (5), in the table.

Total use (\$1,015b), which must equal total supply, is the sum of Domestic final use (\$483b), Intermediate use (\$444b), and Exports (\$88b).

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 from production plus any taxes on production paid less any subsidies received. 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 changes in inventories (an increase in

Explanatory Notes *continued*

inventories if more goods are produced than purchased or a run-down in inventories 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 use (inventories provide the mechanism which balances supply and use).

Input-output tables are directly related to the gross domestic product account. However, the latter only shows details of the end results of economic activity, whereas the input-output tables show the flows of goods and services through the production process. The extra detail provided by the input-output tables is essential for many analyses.

A form of input-output tables called *supply and use* tables are used to benchmark the gross domestic product account in the national accounts. They have been produced by the ABS since 1994–95, but are not published separately.

Input-output tables are used by analysts who require a detailed understanding of the economy and/or an understanding of the relationships between the various parts of the economy. They are used extensively in economic modelling.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site <URL: <http://www.abs.gov.au>>.

Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

Australian National Accounts: Input-Output Tables (5209.0)
Contains detailed input-output statistics, including industry by industry flow matrices, requirement coefficient matrices, and multipliers.

Australian National Accounts: Input-Output Tables (Product Details) (5215.0)

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.

2.10 Environmental Accounts

Environmental accounts depict physical and/or financial information on natural resources that can then be linked to economic data series such as Australia's National Accounts. The advantage of an environmental account exists in its capacity to link together physical data and monetary data in a consistent framework. Environmental accounts can be used to measure the impact on the environment of different sectors of the economy and the environment and resource implications of structural change. Australia's environmental accounts have been compiled according to the guidelines in the United Nation's *Integrated Environmental and Economic Accounting*, which is a complement to the SNA93.

The core components of a physical environmental account are the stock table and the flow table. Ideally a stock table will present estimates of the total stock of a resource available for extraction or harvest. The flow accounts comprise physical input-output tables (or supply and use tables), which show the flow of products in physical terms through the economy. The supply table shows the total amount of product (domestic production plus imports), in quantity terms, available for use by industry or final demand. The use table presents estimates of the distribution of supply across industries, as intermediate consumption or for export and final consumption. Physical input-output tables can be explicitly linked to the monetary input-output tables (see chapter 2.9 for more information on input-output tables).

As part of its environmental accounting program the ABS has produced a number of physical accounts, including energy, minerals, fish and water, as well as a series of publications presenting information on financial transactions relating to environmental management—*Environment Protection Expenditure, Australia* (4603.0). The Water Account is looked at in more detail below.

Water Account

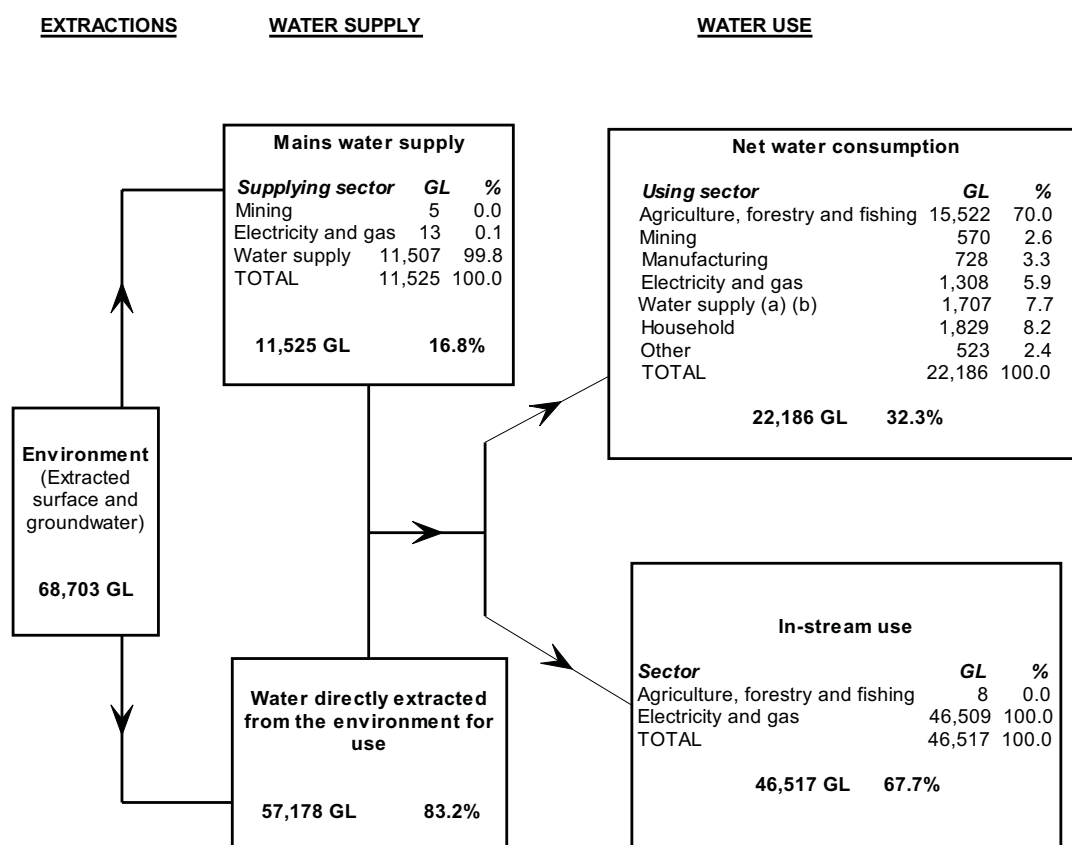
The figure below shows the passage of water through the economy, from extraction through to supply and final use. In Australia in 1996–97 an estimated 68,703 GL of surface and groundwater was extracted from the environment, of which 11,525 GL was distributed via the mains water supply network (including irrigation). The remainder (57,178 GL) was extracted directly from the environment by private diverters/users. Most of this amount was used in-stream—primarily by hydro-electric power stations—and discharged back to surface waters (46,517 GL). Net water consumption was estimated at 22,186 GL.

Water Account *continued*

The agricultural sector was the largest net user of water, totalling 15,502 GL in 1996–97, accounting for 70% of net water use in Australia. Households used 1,829 GL, or 8% of net water consumption in that year.

About half of Australia’s net water consumption was sourced from the mains water supply network (52%), with rice growing and households sourcing the vast majority of their water from this source. Industries whose water supply was primarily self-extracted included sugar, cotton, mining and the utilities (electricity, gas and water).

WATER SUPPLY AND CONSUMPTION (Gigalitres GL), Australia—1996–97



(a) Water Supply includes sewerage and drainage services.
 (b) Mains water usage accounts for 350 GL and conversion losses for 1,357 GL. Losses occur either through the mains supply network or from the point of intake to the point of distribution and occur for a number of reasons including releases for environmental flows, seepage, evapo-transpiration.

NET WATER CONSUMPTION, By Industry and Water Source—1996–97

<i>Industry</i>	<i>Direct extraction</i>	<i>Mains water</i>	<i>Total(a)</i>
Livestock, pasture, grains and other agriculture	3 817	4 978	8 795
Vegetables	373	262	635
Sugar	947	290	1 236
Fruit	387	316	704
Grapevines	323	326	649
Cotton	1 310	530	1 841
Rice	0	1 643	1 643
Services to agriculture; hunting, trapping, forestry and fishing	5	14	19
Mining	540	30	570
Manufacturing	217	511	728
Electricity and gas	1 249	58	1 308
Water supply, sewerage and drainage	1 357	350	1 707
Other	104	419	523
Household	33	1 796	1 829
Total	10 662	11 523	22 186

(a) Sums may not equal totals due to rounding.

Source: *Water Account for Australia* (4610.0).

Further Reading

Water Account for Australia (4610.0).

Provides detailed statistics on the volume of surface and ground water assets (stocks), the supply and use of water by various industries and sectors, water re-use and discharge. Monetary data linked to the use of water resources and a compilation of water supply and use sustainability indicators are also provided.

Environment Protection Expenditure, Australia (4603.0)

Presents estimates of expenditure on environment protection by Australian governments, businesses and households.

Australian System of National Accounts (5204.0)

Provides information on the stocks of economic environmental assets, including land, sub-soil and timber assets.

Fish Account, Australia (4607.0)

Presents a set of statistics for Australia's fisheries resources.

Mineral Account, Australia (4608.0)

Presents stock and flow accounts for Australia's mineral and petroleum resources.

Energy Accounts Australia, (4604.0)

Provides information on stocks, supply, production and consumption of energy in Australia, as well as associated greenhouse gas emissions. Experimental estimates integrating physical and monetary input-output tables are also presented in the most recent edition.

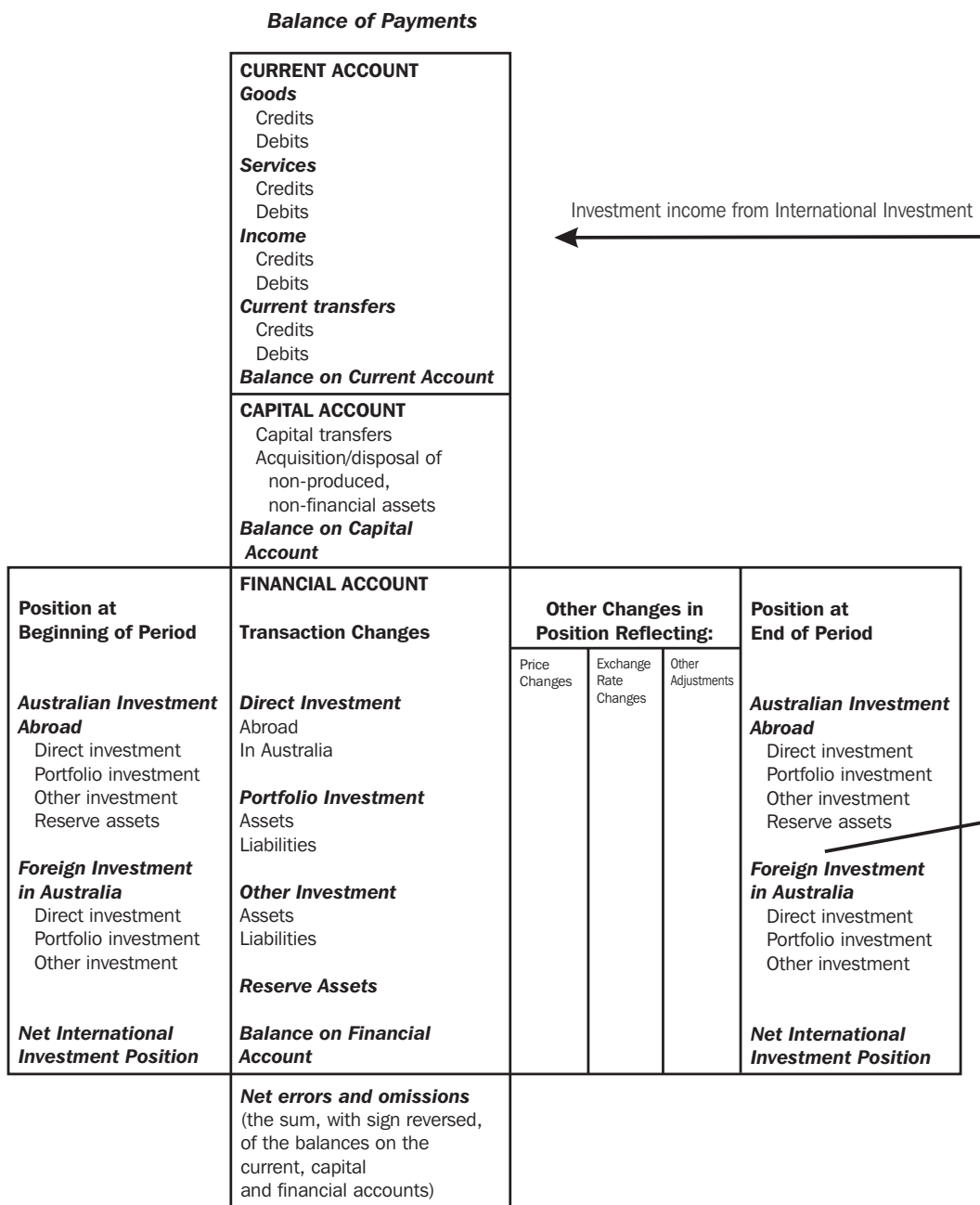
CHAPTER 3

INTERNATIONAL ACCOUNTS AND TRADE

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3.1 Balance of Payments and International Investment Position

RELATIONSHIP BETWEEN BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATEMENTS



Explanatory Notes

Australia's international accounts cover the closely related and integrated balance of payments and international investment position statistics. They 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 provided in exchange for financial claims (for example, wheat in exchange for 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 which are classified as transfers (such as gifts). These entries offset the provision of real and financial resources when nothing is provided in exchange.

Australia's international investment position provides statistics showing the stock of foreign financial assets and liabilities of Australian residents. Changes in the balance sheet positions can occur as a result of transactions as shown in the financial account of the balance of payments, and non-transaction changes such as price changes and exchange rate variations.

Further Reading

Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

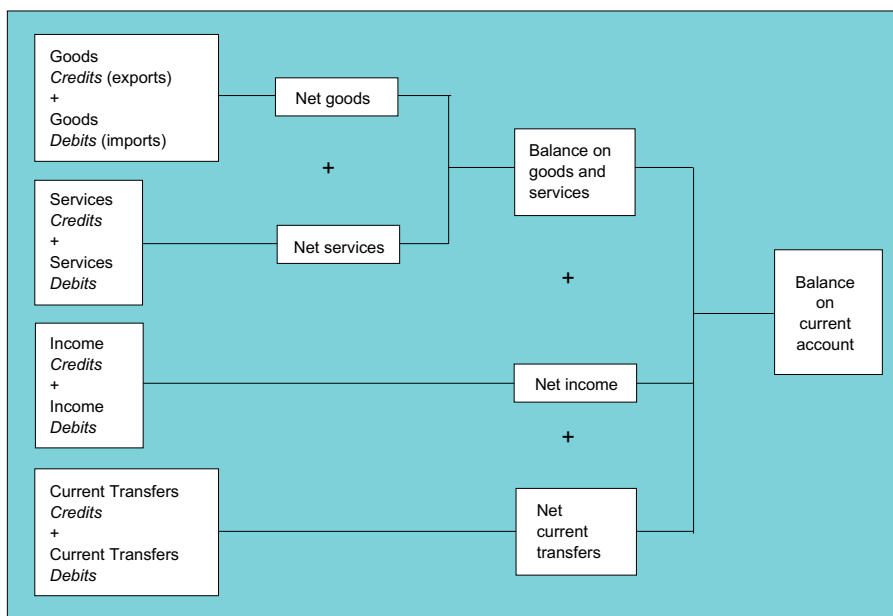
Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

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. Included on the ABS CD-ROM product *Statistical Concepts Library* (1361.0.30.001).

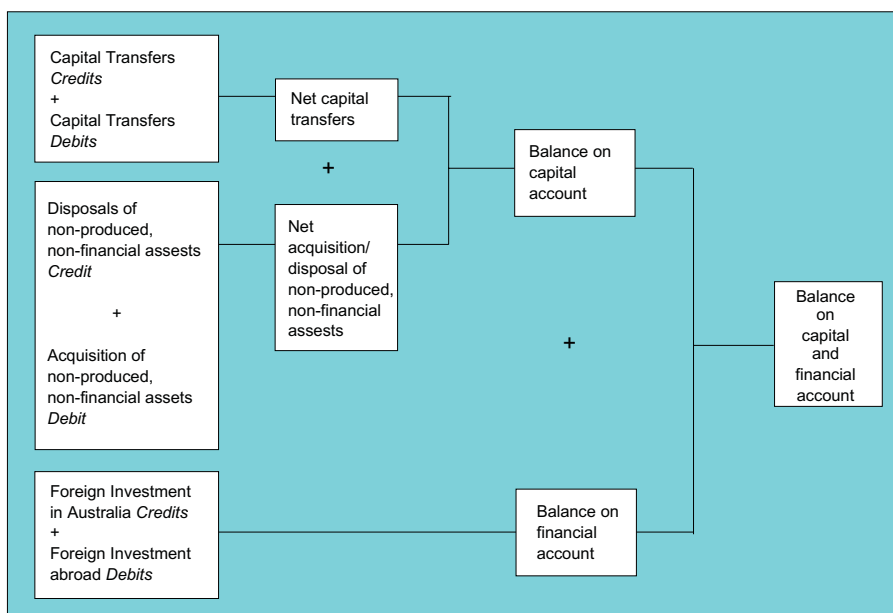
3.2 Balance of Payments

CURRENT ACCOUNT



Note: Debit entries are shown with a minus sign.

CAPITAL AND FINANCIAL ACCOUNT



Note: Debit entries are shown with a minus sign.

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 and *current transfers* (counterpart in the double entry system for one-sided transactions that are of a non-capital nature).

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, as well as some longer term historical series.

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.

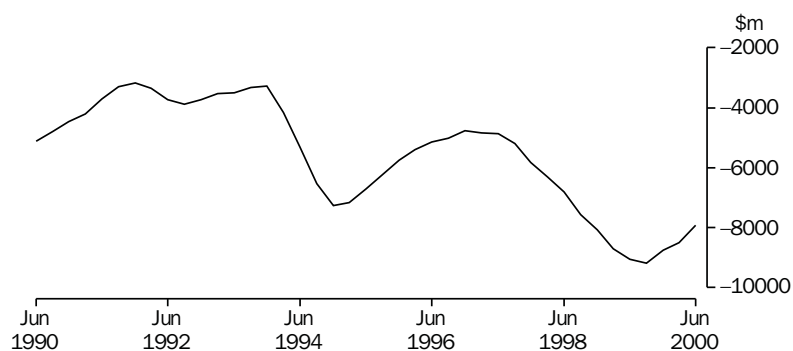
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.3 Balance of Payments Current Account

In trend terms, Australia's balance on current account recorded a deficit of \$7,918m in June quarter 2000. For the period since June quarter 1990, the highest deficit recorded was in September quarter 1999 (\$9,175m) and the lowest was recorded in December quarter 1991 (\$3,180m).

BALANCE ON CURRENT ACCOUNT: TREND



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

BALANCE OF PAYMENTS, CURRENT ACCOUNT

Period	Balance on current account	
	\$m	
	ANNUAL	
1994-95		-28 646
1995-96		-21 687
1996-97		-17 914
1997-98		-22 818
1998-99		-33 716
1999-2000		-33 677
	QUARTERLY (TREND)	
1998-99		
March		-8 706
June		-9 048
1999-2000		
September		-9 175
December		-8 765
March		-8 490
June		-7 918

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

Australia has had a current account deficit in most years. This indicates that the nation as a whole has been investing more than is available from its saving. 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 increases in Australia's net foreign equity and net foreign debt liabilities. Interest accruing on this net debt is the major cause of Australia's large net income deficits, which represent a substantial component of Australia's current account deficits.

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 summing 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, otherwise 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;
- *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); and
- *Net current transfers*: the difference between current transfer credits and debits. A current transfer is recorded when real or financial resources of a non-capital nature are provided without something of economic value being received in return. For example, Australia's foreign aid abroad supplies the rest of the world with goods or cash and requires an offsetting debit transfer entry while pensions received by residents from foreign governments provides Australia with cash and requires a credit entry current transfers.

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, as well as some longer term historical series.

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.

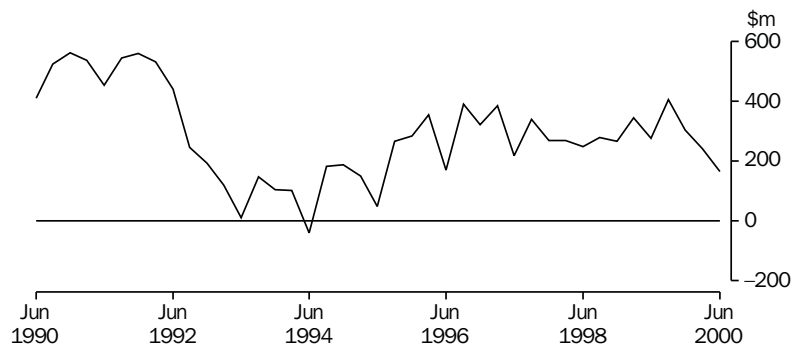
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.4 Balance of Payments Capital Account

The balance on capital account, in original terms, usually records a surplus, largely the result of net immigration. During the period 1995–96 to 1999–2000, the annual surpluses were in the range \$1,074m to \$1,317m. In 1999–2000 the capital account surplus decreased slightly from that of the previous year, to \$1,119m.

BALANCE OF PAYMENTS, CAPITAL ACCOUNT



Source: *Balance of Payments and International Investment Position, Australia (5302)*, Quarterly data.

BALANCE OF PAYMENTS, CAPITAL ACCOUNT

Period	Balance on capital account	
		\$m
	ANNUAL	
1994–95		572
1995–96		1 074
1996–97		1 317
1997–98		1 127
1998–99		1 167
1999–2000		1 119
	QUARTERLY	
1998–99		
March		344
June		277
1999–2000		
September		406
December		306
March		242
June		165

Source: *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, debt forgiveness and the provision of cash when linked to a change of ownership of fixed assets or the transfer in kind of ownership of a fixed asset without a quid-pro-quo.

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).

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, as well as some longer term historical series.

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

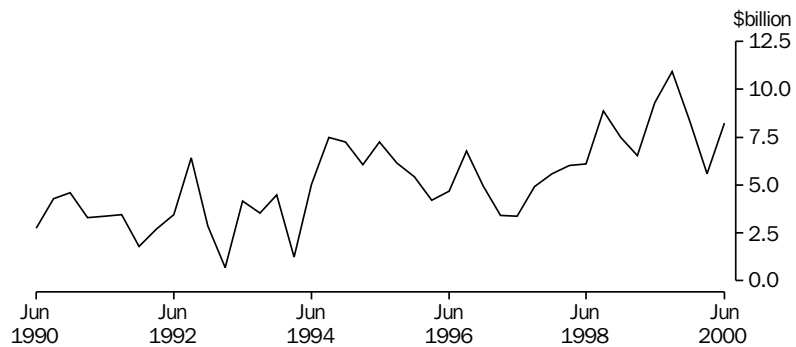
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series.

Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site <URL: <http://www.abs.gov.au>>. Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.5 Balance of Payments Financial Account

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. Because Australia usually has a current account deficit, the balance on the financial account usually records a surplus (or net inflow). The highest ever quarterly net inflow was recorded in the September quarter 1999. The June 2000 quarter recorded a financial account balance of \$8,234m.

BALANCE ON FINANCIAL ACCOUNT



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

BALANCE OF PAYMENTS, FINANCIAL ACCOUNT	
<i>Period</i>	<i>Balance on financial account</i>
	<i>\$m</i>
ANNUAL	
1994–95	28 038
1995–96	20 467
1996–97	18 531
1997–98	22 620
1998–99	32 205
1999–2000	33 099
QUARTERLY	
1998–99	
March	6 519
June	9 324
1999–2000	
September	10 917
December	8 361
March	5 587
June	8 234

Source: *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, 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. As in 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

Explanatory Notes *continued*

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 finance deficits in 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, as well as some longer term historical series.

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

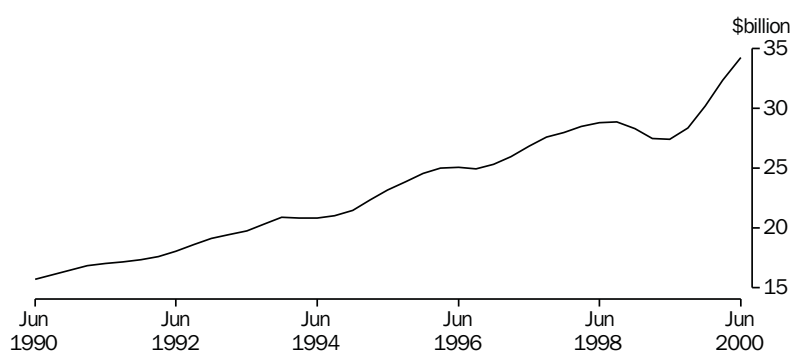
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series.

Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site at <URL: <http://www.abs.gov.au>>. Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.6 Goods and Services Credits

In trend terms, Australia's total goods and services credits (exports) increased during most of the 1990s. The major commodities contributing to this increase were travel services, metal ores and minerals, coal, coke and briquettes and other manufactured goods. Three quarters of successive falls in total goods and services credits were recorded up to the June quarter 1999 coinciding with the Asian economic crises. Since then, exports have returned to an upward trend.

GOODS AND SERVICES CREDITS AT CURRENT PRICES: TREND



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

GOODS AND SERVICES CREDITS AT CURRENT PRICES

Period	Goods credits	Services credits	Total
	\$m	\$m	\$m
ANNUAL			
1994–95	67 101	20 553	87 654
1995–96	76 146	22 949	99 095
1996–97	80 934	24 226	105 160
1997–98	88 538	25 206	113 744
1998–99	85 687	26 156	111 843
1999–2000	97 476	28 298	125 774
QUARTERLY (TREND)			
1998–99			
March	20 915	6 551	27 466
June	20 749	6 649	27 398
1999–2000			
September	21 591	6 787	28 378
December	23 265	6 958	30 223
March	25 185	7 153	32 338
June	26 882	7 358	34 240

Source: *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.

Goods credits refers to all movable goods which change ownership from residents to non-residents. These transactions are valued in f.o.b. (free on board) terms which means that transportation and insurance costs beyond Australia 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 further broken down 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 are transactions in services provided by Australian residents to non-residents. These are 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 services 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 is influenced by the prices charged and on 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. Export demand is also influenced by the level of economic activity in countries that purchase Australian exports.

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 price estimates and chain volume measures.

Further Reading *continued*

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.

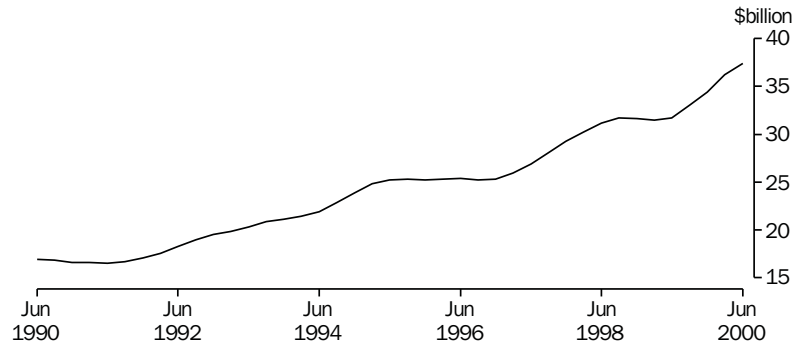
International Trade in Goods and Services, Australia (5368.0)

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.

3.7 Goods and Services Debits

In trend terms, total goods and services debits have generally risen since June quarter 1990. Goods imports more than doubled in the decade to June quarter 2000 while services imports rose by 73%. In value terms the import commodities showing the largest rises were passenger cars, other consumption goods which have not been specifically classified, and fuels. Most of the increase in imports has been due to increases in the quantities of goods and services imported. Over the decade import prices in aggregate rose by only 6%. However, most commodity prices rose more strongly, which was offset by falling prices for computers and telecommunications equipment.

GOODS AND SERVICES DEBITS AT CURRENT PRICES: TREND



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

GOODS AND SERVICES DEBITS AT CURRENT PRICES			
	Goods debits	Services debits	Total
Period	\$m	\$m	\$m
ANNUAL			
1994–1995	-75 317	-22 337	-97 654
1995–1996	-77 729	-23 349	-101 078
1996–1997	-79 438	-24 152	-103 590
1997–1998	-92 084	-26 398	-118 482
1998–1997	-98 427	-28 026	-126 453
1999–2000	-110 807	-30 147	-140 954
QUARTERLY (TREND)			
1998–1999			
March	-24 427	-7 035	-31 462
June	-24 652	-7 040	-31 692
1999–2000			
September	-25 884	-7 135	-33 019
December	-27 080	-7 337	-34 417
March	-28 668	-7 572	-36 240
June	-29 637	-7 813	-37 450

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

Explanatory Notes

Goods and services debits (imports) are real resources acquired from foreign residents.

Goods debits include all movable goods that change ownership from non-residents to residents. These imports are valued in f.o.b. (free on board) terms at the frontier of the exporting country, which excludes the transportation and insurance costs (considered to be services) of bringing the goods from the exporting countries 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*. Each of these categories are in turn further 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 are transactions in services provided by non-residents to Australian residents. These are categorised into groups such as transportation, travel, communication, construction, insurance, financial, computer and information, royalties and licence fees, other business, personal, cultural and

Explanatory Notes *continued*

recreational, and government not elsewhere included. More detailed breakdowns are provided under many of these categories.

The imports of goods and services enables domestic consumers to have access to a wider range of goods and services than can be produced domestically. They also enable Australian producers to specialise in activities in which they have a comparative advantage. Demand for imports is influenced by both the foreign currency price of the imports and the exchange rate. If the Australian dollar depreciates (falls in value), imports become more expensive and consequently there may be a reduction in the demand by Australians for foreign-produced goods and services. Import demand is also influenced by the level of economic activity in Australia.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)

Presents detailed quarterly data on imports of goods and services in original and seasonally adjusted terms at current price estimates and chain volume measures.

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

Provides annual information on imports of goods and services, including detailed breakdown of services imports 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.

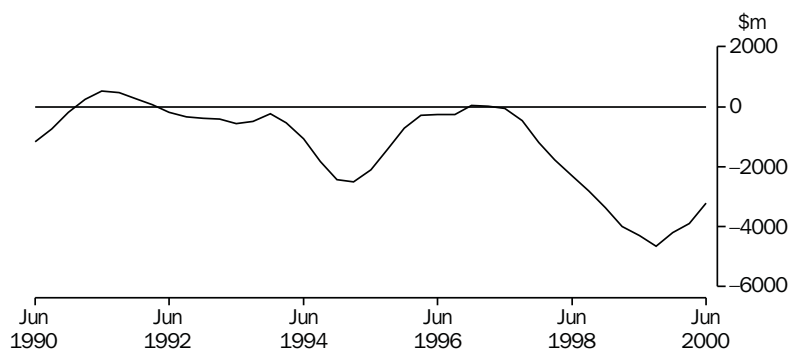
International Trade in Goods and Services, Australia (5368.0)

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.

3.8 Balance on Goods and Services

Australia's balance on goods and services, in trend terms, recorded a surplus of \$517m in June quarter 1991. From December quarter 1993, the balance of goods and services deteriorated rapidly and by March quarter 1995 had reached a deficit of \$2,506m. Subsequent improvements in the balance which resulted in surpluses in December quarter 1996 and March quarter 1997 were short-lived. After the March quarter 1997 the balance on goods and services again deteriorated significantly, reaching a record deficit in March quarter 2000 of \$3,902m. In June quarter 2000, the balance on goods and services was a deficit of \$3,210m.

BALANCE ON GOODS AND SERVICES AT CURRENT PRICES



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

BALANCE ON GOODS AND SERVICES AT CURRENT PRICES

Period	Net goods	Net services	Balance on goods and services
	\$m	\$m	\$m
ANNUAL			
1994–95	-8 216	-1 784	-10 000
1995–96	-1 583	-400	-1 983
1996–97	1 496	74	1 570
1997–98	-3 546	-1 192	-4 738
1998–99	-12 740	-1 870	-14 610
1999–2000	-13 331	-1 849	-15 180
QUARTERLY (TREND)			
1998–99			
March	-3 512	-484	-3 996
June	-3 903	-391	-4 294
1999–2000			
September	-4 293	-348	-4 641
December	-3 815	-379	-4 194
March	-3 483	-419	-3 902
June	-2 755	-455	-3 210

Source: *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.

Further Reading

Balance of Payments and International Investment Position, Australia (5302.0)

Presents detailed quarterly data on exports and imports of goods and services in original and seasonally adjusted terms at current price estimates and chain volume measures.

Further Reading *continued*

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

Provides annual information on exports and imports 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 and imports 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.

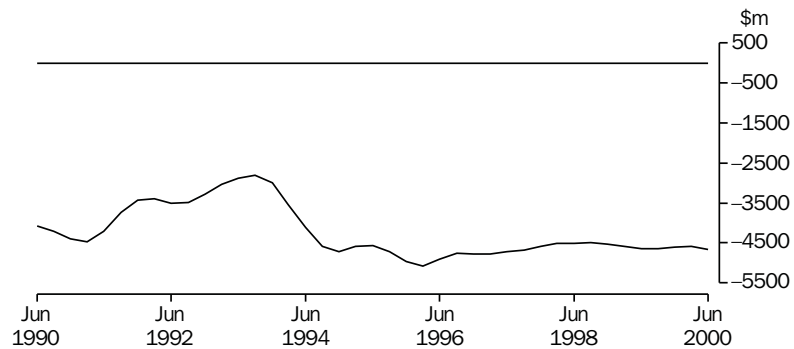
International Trade in Goods and Services, Australia (5368.0)

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.

3.9 Net Income

As Australia usually has net foreign liabilities, it typically has a deficit on income, due to the net interest and dividends payable to non-residents. From a peak in June quarter 1991, Australia's net income deficit decreased substantially reflecting both improving profits on Australia's rising 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 \$2,798m. From December quarter 1993, the income deficit increased dramatically, reaching a record high of \$5,073m in the March quarter 1996. Since then, the income deficit has remained relatively stable.

NET INCOME: TREND



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

NET INCOME			
	<i>Income credits</i>	<i>Income debits</i>	<i>Net income</i>
<i>Period</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>
ANNUAL			
1994–95	6 941	–25 059	–18 118
1995–96	7 140	–26 673	–19 533
1996–97	8 563	–27 870	–19 307
1997–98	10 384	–28 389	–18 005
1998–99	9 998	–28 326	–18 328
1999–2000	12 744	–31 335	–18 591
QUARTERLY (TREND)			
1998–99			
March	2 439	–7 029	–4 590
June	2 504	–7 139	–4 635
1999–2000			
September	2 699	–7 344	–4 645
December	3 002	–7 615	–4 613
March	3 361	–7 936	–4 575
June	3 655	–8 311	–4 656

Source: *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). The sum of the income debits with the income credits gives net income. 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, 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. Compensation of employees refers to wages and salaries earned by employees from employers. In Australia's case, the investment income flows are far greater than those for compensation of employees.

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, as well as some longer term historical series.

Further Reading *continued*

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

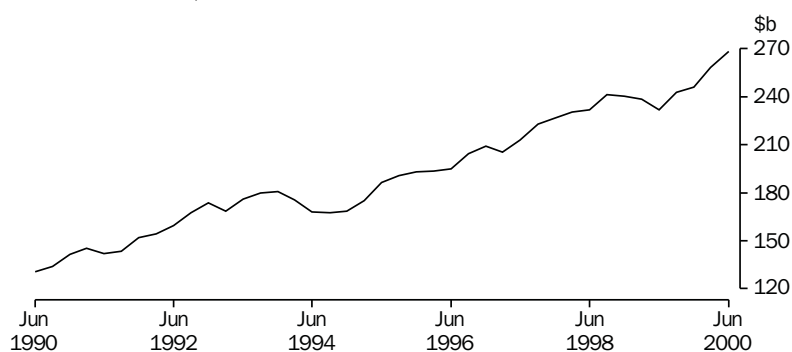
Provides detailed tables on balance of payments and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series.

Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site <URL: <http://www.abs.gov.au>>. Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.10 Foreign Debt

Over the last 10 years, Australia's net foreign debt has more than doubled, from \$130.6b at 30 June 1990 to \$268.1b at 30 June 2000. The ratio of net foreign debt to GDP was 42.4% at 30 June 2000, up on the results of recent years. Net interest income payable on net foreign debt as a percentage of goods and services credits was 9.8% in 1999–2000, up marginally on the previous year and reversing the downward trend of the previous five years.

NET FOREIGN DEBT, LEVEL AT END OF PERIOD



Source: *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)	Reserve assets	Other debt assets	Net foreign debt(a)(b)	Ratio of net foreign debt to GDP(c)	Ratio of net interest to goods and services credits(d)
	\$m	\$m	\$m	\$m	%	%
ANNUAL						
1994–95	264 609	–20 184	–58 112	186 313	39.4	–12.3
1995–96	276 265	–19 060	–62 315	194 890	38.5	–11.5
1996–97	306 196	–22 791	–70 419	212 986	40.0	–11.3
1997–98	342 834	–24 260	–86 942	231 633	41.0	–9.7
1998–99	349 935	–23 954	–93 921	232 059	39.0	–9.3
1999–2000	394 055	–27 948	–97 992	268 115	42.4	–9.8
QUARTERLY						
1998–99						
March	356 138	–23 612	–94 211	238 315	40.5	–9.6
June	349 935	–23 954	–93 921	232 059	39.0	–10.7
1999–2000						
September	359 314	–23 146	–93 587	242 580	40.2	–10.1
December	374 255	–33 577	–94 510	246 168	40.2	–9.6
March	386 876	–27 272	–101 513	258 091	41.5	–9.9
June	394 055	–27 948	–97 992	268 115	42.4	–9.6

(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 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: *Balance of Payments and International Investment Position (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.

The level of debt is often expressed as a percentage of 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.

Explanatory Notes *continued*

There are two important relationships between the level of foreign debt and 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.

While foreign debt is an important indicator in its own right, a comprehensive analysis of Australia's economic situation should also take account of equity assets and liabilities, as well as non-financial assets. All of Australia's assets and liabilities are recorded in the national balance sheet.

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, as well as some longer term historical series.

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.

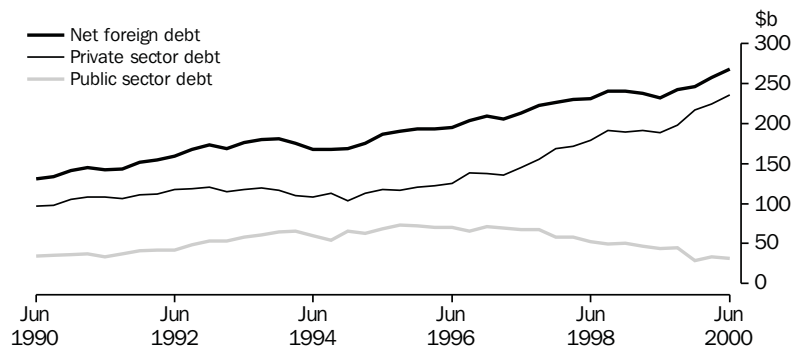
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site <URL: <http://www.abs.gov.au>>.

Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.11 Composition of Net Foreign Debt

At 30 June 2000, net foreign debt of the public sector was \$31.9b (12% of total net foreign debt) and net foreign debt of the private sector was \$236.2b (88% of total 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 2000, non-residents held \$27.8b in domestically issued Australian government securities. Over the period 1994–95 to 1999–2000, net foreign debt of the public sector has more than halved (from \$68.3b at 30 June 1995 to \$31.9b at 30 June 2000). Conversely net foreign debt of the private sector has more than doubled (from \$118.0b to \$236.2b).

COMPOSITION OF NET FOREIGN DEBT, LEVEL AT END OF PERIOD



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

LEVELS OF FOREIGN DEBT AT END OF PERIOD

Period	Public sector debt	Private sector debt	Net foreign debt(a)
	\$m	\$m	\$m
ANNUAL			
1994–95	68 289	118 025	186 313
1995–96	70 165	124 725	194 890
1996–97	67 424	145 562	212 986
1997–98	52 739	178 893	231 633
1998–99	43 694	188 366	232 059
1999–2000	31 867	236 248	268 115
QUARTERLY			
1998–99			
March	46 456	191 859	238 315
June	43 694	188 366	232 059
1999–2000			
September	44 555	198 025	242 580
December	29 158	217 010	246 168
March	33 740	224 352	258 091
June	31 867	236 248	268 115

(a) Equals debt liabilities less reserve assets and other debt assets.

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 Commonwealth, 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.

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. However, a comprehensive analysis of the financial position of the two sectors should also consider their domestic assets and liabilities as well as those with non-residents.

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, as well as some longer term historical series.

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.

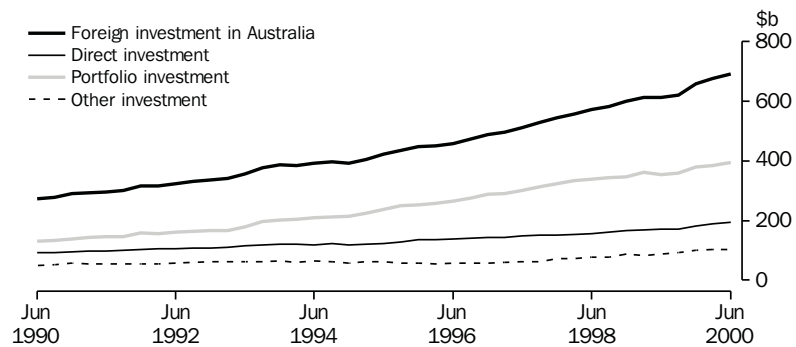
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site <URL: <http://www.abs.gov.au>>. Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.12 Foreign Investment in Australia

The level of foreign investment in Australia at 30 June 2000 was \$691.2b, an increase of more than 60% on the position as at 30 June 1995. Direct investment at 30 June 2000 was \$193.2b (28% of total foreign investment in Australia), portfolio investment was \$395.6b (57%) and other investment was \$102.4b (15%).

Over the period 30 June 1995 to 30 June 2000, the proportional split of total foreign investment in Australia into direct investment, portfolio investment and other investment remained relatively stable. Over this same period, direct investment increased nearly 57% (from \$123.4b at 30 June 1995 to \$193.2b at 30 June 2000), portfolio investment increased 67% (from \$236.3b to \$395.6b) and other investment liabilities increased 62% (from \$63.1b to \$102.4b).

FOREIGN INVESTMENT IN AUSTRALIA, LEVEL AT END OF PERIOD



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

LEVEL OF FOREIGN INVESTMENT IN AUSTRALIA AT END OF PERIOD

Period	Direct	Portfolio	Other	Total
	\$m	\$m	\$m	\$m
ANNUAL				
1994–95	123 409	236 290	63 051	422 750
1995–96	137 236	264 885	56 479	458 600
1996–97	148 707	301 046	62 049	511 802
1997–98	154 953	338 567	78 236	571 755
1998–99	171 574	353 174	88 515	613 264
1999–2000	193 161	395 612	102 399	691 172
QUARTERLY				
1998–99				
March	168 505	362 180	82 608	613 294
June	171 574	353 174	88 515	613 264
1999–2000				
September	170 303	359 266	91 917	621 487
December	181 881	378 923	98 739	659 543
March	188 909	385 646	101 998	676 553
June	193 161	395 612	102 399	691 172

Source: 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. It is broken down into direct, portfolio and other investment.

Direct investment is a category of international investment that reflects the objective of obtaining a long-term 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 an 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 inter-bank 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.

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, as well as some longer term historical series.

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.

Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site <URL: <http://www.abs.gov.au>>.

Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.13

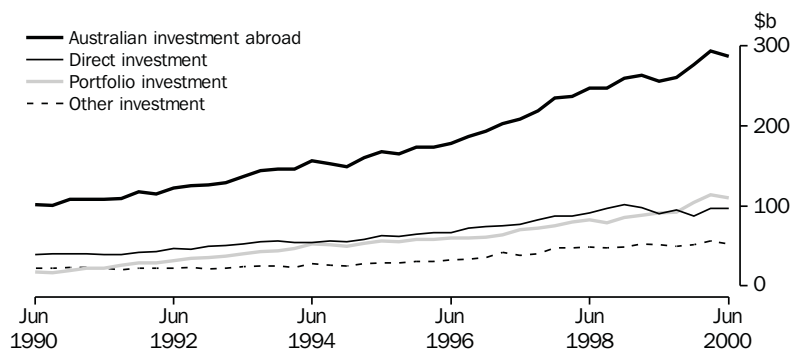
Australian Investment Abroad

At 30 June 2000, Australian investment abroad totalled \$287.4b of which direct investment was \$96.6b (34% of total Australian investment abroad), portfolio investment \$110.0b (38%), reserve assets \$27.9b (10%) and other investment \$52.9b (18%).

Over the period 30 June 1995 to 30 June 2000, direct investment increased 55% (from \$62.4b at 30 June 1995 to \$96.6b at 30 June 2000), portfolio investment 95% (from \$56.3b to \$110.0b), other investment assets 83% (from \$28.9b to \$52.9b) and reserve assets 38% (from \$20.2b to \$27.9b).

The proportional split of total Australian investment abroad into direct investment, portfolio investment, other investment assets and reserve assets remained relatively stable over the period 1994–95 to 1997–98; however in 1998–99 and 1999–2000, there was a slight shift away from direct investment to portfolio investment.

AUSTRALIAN INVESTMENT ABROAD, LEVEL AT END OF PERIOD



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

LEVEL OF AUSTRALIAN INVESTMENT ABROAD AT END OF PERIOD

<i>Period</i>	<i>Direct</i>	<i>Portfolio</i>	<i>Other</i>	<i>Reserve assets</i>	<i>Total</i>
	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>
ANNUAL					
1994–95	-62 356	-56 322	-28 890	-20 184	-167 752
1995–96	-66 296	-59 563	-32 940	-19 060	-177 859
1996–97	-77 368	-70 244	-38 466	-22 791	-208 869
1997–98	-91 201	-82 589	-48 948	-24 260	-246 998
1998–99	-90 273	-90 704	-51 208	-23 954	-256 140
1999–2000	-96 570	-109 963	-52 916	-27 948	-287 397
QUARTERLY					
1998–99					
March	-98 012	-88 751	-52 580	-23 612	-262 955
June	-90 273	-90 704	-51 208	-23 954	-256 140
1999–2000					
September	-94 653	-92 325	-50 093	-23 146	-260 217
December	-87 487	-104 857	-51 082	-33 577	-277 003
March	-96 443	-114 164	-56 183	-27 272	-294 062
June	-96 570	-109 963	-52 916	-27 948	-287 397

Source: *Balance of Payments and International Investment Position (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.

There are four types of Australian investment abroad. Three of these—direct, portfolio and other investment—are also types of foreign investment in Australia. The fourth type is reserve assets. 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.

Because of the netting of assets and liabilities between enterprises in direct investment relationships, Australian investment abroad is less than the total foreign financial claims held by Australia.

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.

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, as well as some longer term historical series.

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.

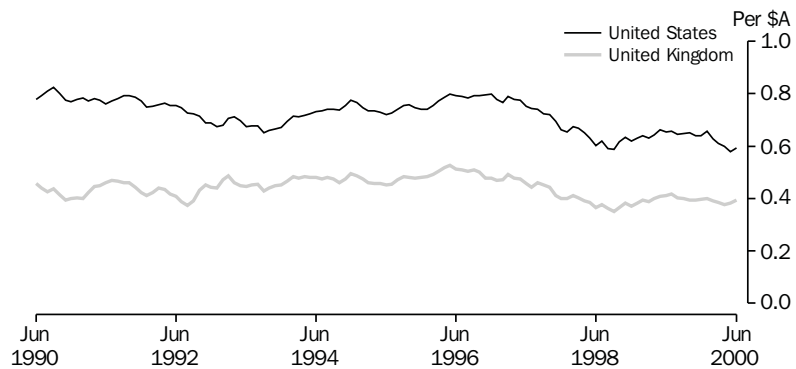
Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods (5331.0), which is available on the ABS Internet site <URL: <http://www.abs.gov.au>>.

Provides a comprehensive description of the concepts, sources and methods for Australia's balance of payments and international investment position statistics.

3.14 Exchange Rates

Over the closing decade of the twentieth century the value of the Australian dollar (\$A) generally declined against the major currencies (US dollar, UK pound, and Japanese yen). After falling early in the 1990s, the \$A had recovered lost ground against both the \$US and the UK pound by mid 1996, before falling again to the end of the century.

SELECTED EXCHANGE RATES PER AUSTRALIAN DOLLAR



Source: *International Trade in Goods and Services, Australia (5368.0), Monthly data.*

EXCHANGE RATES: CURRENCY PER AUSTRALIAN DOLLAR(a)

Period	United States	United Kingdom	Japanese
	dollar	pound	yen
ANNUAL			
1997-98	0.68	0.41	86.02
1998-99	0.63	0.38	77.81
1999-2000	0.63	0.39	67.90
MONTHLY			
1999-2000			
July	0.66	0.42	78.77
August	0.65	0.40	73.13
September	0.65	0.40	69.56
October	0.65	0.39	69.10
November	0.64	0.39	67.01
December	0.64	0.40	65.68
January	0.66	0.40	69.15
February	0.63	0.39	68.78
March	0.61	0.39	65.00
April	0.60	0.38	63.05
May	0.58	0.38	62.58
June	0.59	0.39	63.05

(a) Rates are averages for the reference period.

Source: *International Trade in Goods and Services, Australia (5368.0).*

Explanatory Notes

The price of one currency against another is known as the exchange rate. For example, at the end of June 2000 one Australian dollar could purchase 0.59 United States dollars, 0.39 United Kingdom pounds and 63.05 Japanese yen. 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 buys more of the foreign currency.

Exchange markets 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. Exchange markets also enable the risks associated with holding currencies to be traded.

The value of the exchange rate affects the amounts that Australia receives for its exports and pays for its imports, as most exports and imports are denominated in foreign currencies. 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. Income payments on Australia's foreign assets and liabilities denominated in Australian dollars are also affected by exchange rate movements, as is the repayments on these assets and liabilities. Because of these effects, exchange rates have an important bearing on the balance of payments.

Further Reading

Average Monthly Exchange Rates (5654.0)

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.

Further Reading *continued*

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.

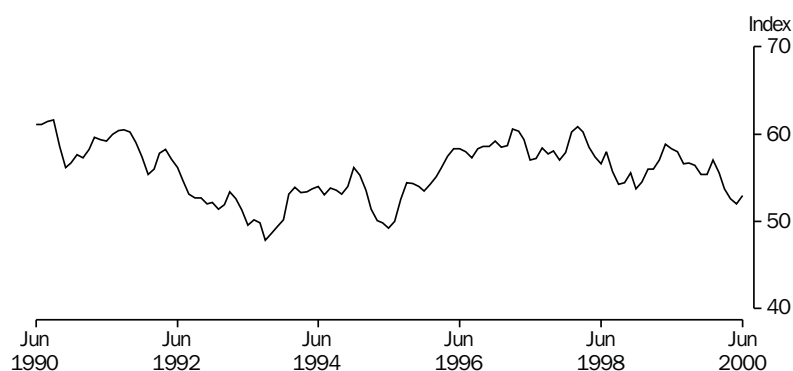
International Trade in Goods and Services, Australia (5368.0)

Contains monthly average exchange rates of the major currencies.

3.15 Trade-weighted Index

The value of the Australian dollar (\$A), as measured against other currencies in the trade-weighted index, during the 1990s was quite volatile. The index fell from a high of 61.6 in September 1990 to 47.8 in September 1993, before recovering over the latter part of the decade to reach 58.3 at June 1999. Since then, it fell again, to 52.9 in June 2000.

TRADE-WEIGHTED INDEX



Source: *International Trade in Goods and Services (5386.0)*, Monthly data.

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

Period	Trade weighted index	United States dollar (per \$A)
ANNUAL		
1997-98	58.3	0.68
1998-99	56.0	0.63
1999-2000	55.2	0.63
MONTHLY		
1999-2000		
July	58.3	0.66
August	56.6	0.65
September	56.7	0.65
October	56.4	0.65
November	55.4	0.64
December	55.4	0.64
January	57.0	0.66
February	55.5	0.63
March	53.7	0.61
April	52.6	0.60
May	52.0	0.58
June	52.9	0.59

(a) Rates are averages for the reference period.

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

Explanatory Notes

The Australian dollar exchange rate is often quoted in terms of its exchange with the United States dollar (\$US).

However, to get a more comprehensive indication of Australia's exchange rate, a trade-weighted index (TWI) is used. The TWI, which is calculated by the Reserve Bank of Australia (RBA), 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 RBA occurred in 1999.

The TWI includes the currencies of 20 countries that account for at least 90% of Australia's trade. Calculation of the TWI is based on the exchange rates for the \$A against the chosen currencies at 4 p.m. for each trading day.

The TWI is an absolute number and does not express the price of any one currency in another.

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 six 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.

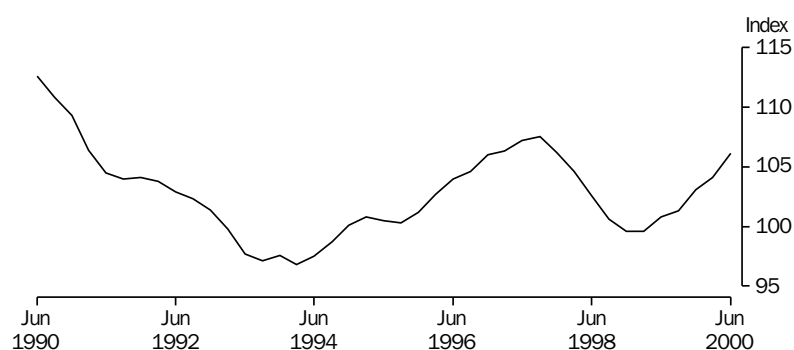
Reserve Bank of Australia Bulletin

Contains information on interest rates for the money market, capital market, banks and other financial institutions.

3.16 Terms of Trade and Indexes of Competitiveness

Australia's terms of trade for goods and services, in trend estimate terms, fell sharply from June quarter 1990 to its lowest level in the decade in September 1993. This fall reflected both declining export prices and strongly rising import prices. Due to decreases in import prices the terms of trade recovered generally for the next four years to peak in September quarter 1997. It decreased again from December 1997 to March 1999 as import prices rebounded, but since then, Australia's terms of trade have been on an upward trend because of rising exports prices.

TERMS OF TRADE FOR GOODS AND SERVICES: TREND



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

TERMS OF TRADE AND INDEXES OF COMPETITIVENESS

Period	Terms of trade(a)	Index of adjusted CPI(a)(b)	Index of adjusted GDP deflator(a)(b)	Index of adjusted unit labour costs(a)(b)
ANNUAL				
1994–95	99.4	106.0	105.1	103.2
1995–96	102.4	114.7	112.7	111.1
1996–97	105.4	123.2	122.4	124.2
1997–98	105.4	109.2	110.4	110.0
1998–99	100.0	100.0	100.0	100.0
1999–2000	104.0	98.7	98.5	98.1
QUARTERLY (ORIGINAL)				
1998–98				
March	100.2	99.4	99.4	98.9
June	100.4	104.2	104.3	104.2
1999–2000				
September	101.4	102.6	102.2	101.5
December	103.5	99.2	98.8	98.5
March	105.7	99.4	99.2	98.8
June	105.9	93.8	93.9	93.6

(a) Base year 1997–98 = 100.0. (b) Adjusted for exchange rate changes. See Explanatory notes for further details.

Source: *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, making it possible to purchase more imports with the same amount of exports. An 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 adjusted CPI index is the ratio of the Australian consumer price index to the weighted geometric average of exchange rate adjusted consumer price indexes for Australia's four major trading partners (United States, Japan, United Kingdom, and West Germany).

The adjusted GDP deflator index is the ratio of the GDP deflator for Australia to the weighted geometric average of exchange rate adjusted GDP deflators for 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)

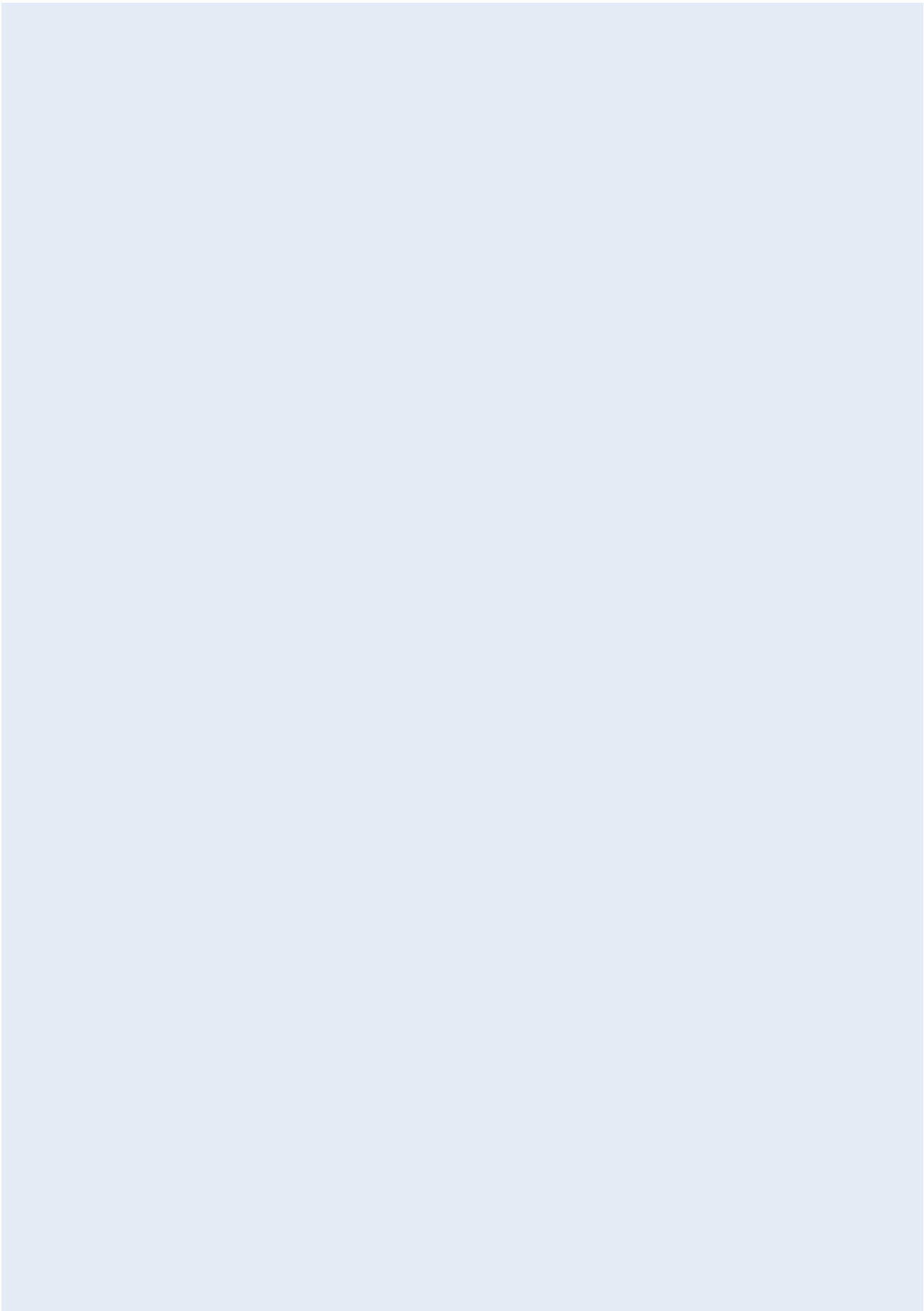
Provides time series for the latest nine years and data for the last nine quarters covering terms of trade and indexes of competitiveness.

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

Provides estimates of the terms of trade as well as price indexes for exports and imports.

Balance of Payments and International Investment Position, Australia (5302.0)

Provides estimates of the terms of trade as well as price indexes for the various components of exports and imports.



CHAPTER 4

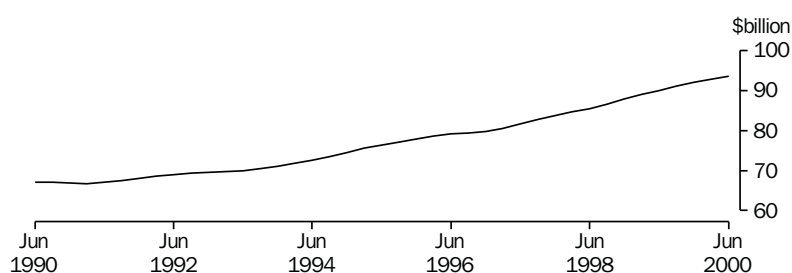
DOMESTIC CONSUMPTION AND INVESTMENT

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4.1 Household Final Consumption Expenditure

Household final consumption expenditure in trend chain volume terms grew solidly during the 1990s. From June quarter 1990 to June quarter 2000, household final consumption expenditure grew at an average annual rate of 3.4%, experiencing decreases only for the period September quarter 1990 to March quarter 1991.

HOUSEHOLD FINAL CONSUMPTION EXPENDITURE, CHAIN VOLUME MEASURES(a):
TREND



(a) Reference year for chain volume measures is 1998–99.

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

SELECTED COMPONENTS OF HOUSEHOLD FINAL CONSUMPTION EXPENDITURE, Chain Volume Measures(a) Trend

Period	Food	Clothing and footwear	Health	Rent and other dwelling services	Total
	\$m	\$m	\$m	\$m	\$m
ANNUAL					
1994–95	37 989	12 503	13 298	57 067	300 309
1995–96	40 287	12 906	13 372	58 901	312 909
1996–97	40 466	12 561	12 815	60 759	321 383
1997–98	41 725	12 968	11 950	62 797	336 880
1998–99	42 789	14 043	12 310	64 941	353 758
1999–2000	43 947	15 115	12 890	67 394	369 516
QUARTERLY (TREND)					
1998–99					
December	10 647	3 483	3 061	16 168	87 946
March	10 745	3 541	3 095	16 301	89 005
June	10 862	3 617	3 133	16 437	90 036
1999–2000					
September	10 966	3 681	3 170	16 588	91 067
December	11 010	3 738	3 206	16 757	92 008
March	11 005	3 799	3 244	16 933	92 861
June	10 966	3 859	3 275	17 110	93 580

(a) Reference year for chain volume measures is 1998–99.

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

Explanatory Notes

Household final consumption expenditure measures current expenditure by households and producers of private non-profit services for households, such as charities, clubs, trade unions and private schools. The items 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.

Household final consumption expenditure makes up over half of expenditure on GDP and is the largest component of aggregate demand. Consequently, changes in household final consumption expenditure from one period to another have a significant impact on movements in GDP.

The level of household final consumption expenditure 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 household final consumption expenditure to either dampen or stimulate the economy by altering interest rates or through taxation or wages policy.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site <URL: <http://www.abs.gov.au>>.

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 household final consumption expenditure.

Australian System of National Accounts (5204.0)

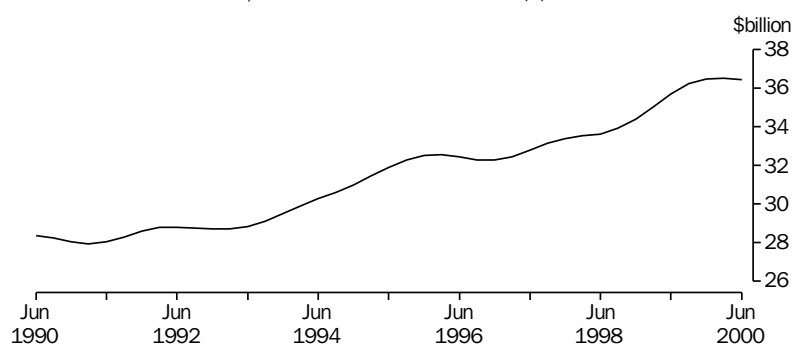
Contains annual data for the last 9 years for household final consumption expenditure.

4.2

Retail Turnover

Total retail turnover (including selected services), in trend chain volume terms, grew from \$28,353m in June quarter 1990 to \$36,452m in June quarter 2000, an increase of 28.6% or an average growth of 2.9% per year. The series recorded a sustained period of strong growth between June quarter 1993 and March quarter 1996. Turnover then fell slightly for three quarters before growth resumed from March quarter 1997 to March quarter 2000. The level of turnover reached \$36,525m in March quarter 2000 but decreased slightly to \$36,452m in June quarter 2000.

TOTAL RETAIL TURNOVER, CHAIN VOLUME MEASURES(a): TREND



(a) Reference year for chain volume measures is 1998-99.

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

TOTAL RETAIL TURNOVER, CHAIN VOLUME MEASURES(a)

Period	Total \$m
ANNUAL (ORIGINAL)	
1994-95	125 056
1995-96	129 847
1996-97	129 685
1997-98	133 817
1998-99	138 930
1999-2000	145 813
QUARTERLY (TREND)	
1998-99	
September	33 938
December	34 418
March	35 022
June	35 706
1999-2000	
September	36 239
December	36 464
March	36 525
June	36 452

(a) Reference year for chain volume measures is 1998-99.

Source: Retail Trade, Australia (8501.0).

Explanatory Notes

The retail trade series presents monthly estimates of turnover for retail (such as grocers, clothing stores, department stores, etc.) and hospitality and selected service businesses (such as cafes and restaurants, hotels and licensed clubs, etc.) for each state and territory.

The principal objective of the retail trade series is to show month to month movements of retail turnover. Turnover includes retail sales; wholesale sales; takings from repairs, meals and hiring of goods (except for rent, leasing and hiring of land and buildings); commissions from agency activity (e.g. commissions received from collecting dry cleaning); and net takings from gaming machines.

Estimates are compiled monthly in current price terms and quarterly in chain volume terms.

The retail trade series dates back to 1962 and is one of the main economic indicator series of the ABS. Retailers, industry associations, economists, government and media use these statistics in conjunction with other economic indicators to help assess current Australian economic performance. Quarterly retail trade estimates, along with other data, are used in the calculation of household final consumption expenditure in the Australian national accounts.

Further Reading

Retail Trade, Australia (8501.0)

Contains monthly estimates of turnover for retail and selected service businesses in original, seasonally adjusted and trend terms. Quarterly estimates of retail turnover in chain volume terms are also provided.

Retail Industry, Australia (8622.0)

Contains details of number of businesses, employment, wages and salaries, income and expenses, operating profit, and selected performance measures by industry.

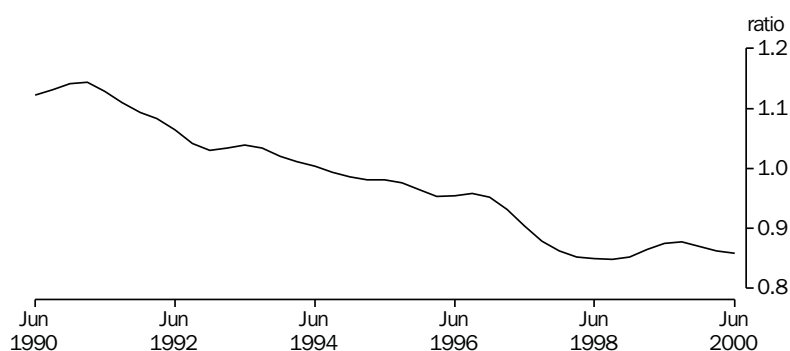
Retail Industry: Commodity Sales, Australia (8624.0)

Contains details of selected retail sales by commodity item by industry.

4.3 Private Non-farm Inventories

The trend private non-farm inventories to total sales ratio generally declined between June quarter 1990 and September quarter 1998, where it reached its lowest ever level of 0.849. The ratio then increased slightly to September quarter 1999, after which it began to fall again. In June quarter 2000 the ratio was 0.858. The trend decrease in the non-farm inventories to total sales ratio is generally attributed to the adoption by businesses of more cost-effective inventory management systems.

PROPORTION OF PRIVATE NON-FARM INVENTORIES TO TOTAL SALES: TREND



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

PROPORTION OF PRIVATE NON-FARM INVENTORIES TO TOTAL SALES(a)

Period	Private non-farm inventory levels—book values(a)	Total sales	Proportion of private non-farm inventories to sales
	\$m	\$m	%
ANNUAL			
1994–95	72 099	294 942	0.244
1995–96	74 872	314 568	0.238
1996–97	75 388	327 092	0.230
1997–98	74 880	351 758	0.213
1998–99	78 025	364 672	0.214
1999–2000	84 038	389 499	0.216
QUARTERLY (TREND)			
1998–99			
December	77 914	91 395	0.852
March	78 943	91 309	0.865
June	80 318	91 768	0.875
1999–2000			
September	81 890	93 419	0.877
December	83 481	95 985	0.870
March	85 051	98 649	0.862
June	86 613	100 970	0.858

(a) Includes for all periods the marketing authorities privatised in July 1999.

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

Explanatory Notes

Private non-farm inventories include goods intended for sale (either of own production or purchased for resale), work in progress, raw materials and stores of all private non-farm businesses. All private non-farm industries are covered, with the major inventory-holding industries being manufacturing, wholesale trade, retail trade and mining.

Private non-farm inventory levels may fluctuate significantly with changes in economic activity. Such periodic fluctuations in the level of non-farm inventories are often referred to as the 'inventories cycle'. It should be noted that there has been a general decline in the private non-farm inventories to total sales ratio since the early 1980s. This decline is generally attributed to businesses adopting more cost-effective inventory management systems.

The private non-farm inventories to total sales ratio compares the value of inventories held by private sector businesses, other than those engaged in agriculture, with the value of total sales of goods in a given period of time. Sales are defined as household final consumption expenditure on goods plus private and public gross fixed capital formation on dwellings, other buildings and structures, and machinery and equipment plus exports of goods.

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

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

Further Reading

Inventories and Sales, Selected Industries, Australia (5629.0)

Contains quarterly estimates of the book value of inventories of non-farm private businesses in both current prices and as chain volume measures, in original, seasonally adjusted and trend terms. Quarterly estimates of sales of goods and services by wholesalers, and sales of goods manufactured or assembled by manufacturers in Australia are also provided, as well as experimental estimates on income from sales of goods and services for services industries.

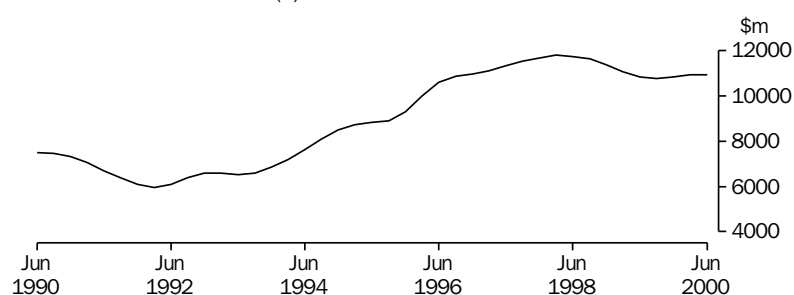
Australian National Accounts: National Income, Expenditure and Product (5206.0)

Contains broad measures of inventories, including the inventories to total sales ratio in seasonally adjusted and trend terms.

4.4 Private New Capital Expenditure

Total actual private new capital expenditure, in trend chain volume terms, fell from \$7,485m in June quarter 1990 to \$5,967m in March quarter 1992. The series then recorded a generally upward trend from June 1992 to reach \$11,799m in March quarter 1998. The series then generally decreased to \$10,952m in June quarter 2000, which was 7.2% below the peak recorded in March quarter 1998.

TOTAL ACTUAL PRIVATE NEW CAPITAL EXPENDITURE,
CHAIN VOLUME MEASURES(a): TREND



(a) Reference year for chain volume measures is 1998–99.

Source: *Private New Capital Expenditure and Expected Expenditure, Australia (5625.0), Quarterly data.*

ACTUAL PRIVATE NEW CAPITAL EXPENDITURE, CHAIN VOLUME MEASURES(a)

Period	Building and structures	Equipment, plant and machinery	Total
	\$m	\$m	\$m
ANNUAL (ORIGINAL)			
1994–95	10 068	23 917	34 186
1995–96	13 394	25 721	38 992
1996–97	15 110	29 142	44 123
1997–98	13 493	33 072	46 585
1998–99	13 709	30 973	44 682
1999–2000	11 619	32 299	43 918
QUARTERLY (TREND)			
1998–99			
September	3 801	7 863	11 653
December	3 639	7 751	11 386
March	3 328	7 730	11 063
June	3 031	7 786	10 825
1999–2000			
September	2 843	7 926	10 775
December	2 795	8 047	10 845
March	2 838	8 120	10 956
June	2 907	8 052	10 952

(a) Reference year for chain volume measures is 1998–99.

Source: *Private New Capital Expenditure and Expected Expenditure, Australia (5625.0).*

Explanatory Notes

The private new capital expenditure series relates to new capital expenditure by private non-farm businesses in Australia.

Capital expenditure may be for assets which will increase production, increase efficiency or replace old equipment. 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, expenditure on second-hand assets is excluded unless these are imported for the first time.

The estimates are broken down by asset type (buildings and structures; equipment, plant and machinery), by industry (mining; manufacturing; and other selected industries), and by state/territory.

The estimates of private new capital expenditure are an important component in the compilation of the Australian national accounts. They are used, along with other data, in measuring private gross fixed capital formation, which forms part of the expenditure based measure of gross domestic product (GDP) and is also shown in the capital account. In compiling the national accounts estimates, acquisitions of second-hand assets are added and disposals of second-hand assets are subtracted.

As well as estimates of actual expenditure, estimates of expected private new capital expenditure for periods up to 18 months in advance are also compiled. Once actual expenditure for a financial year is known, it is useful to compare the expected expenditure with the actual expenditure. The resultant realisation ratios (actual expenditure divided by expected expenditure for the same period) assist in interpreting expectation statistics for future periods and can be applied to make predictions of actual expenditure for a future period.

Private new capital expenditure estimates provide one of the key measures of the performance of the Australian economy. The level of investment in private new capital expenditure has a major impact on the future productive capacity of the economy. It can also have a significant affect on GDP.

Further Reading

Private New Capital Expenditure and Expected Expenditure, Australia (5625.0)

Contains quarterly estimates of actual and expected new capital expenditure by type of asset and selected industry. Original, seasonally adjusted and trend estimates are provided in current price and chain volume terms.

Private New Capital Expenditure, State Estimates (5646.0)

Contains State dissections of the Australian estimates contained in the above publication (5625.0).

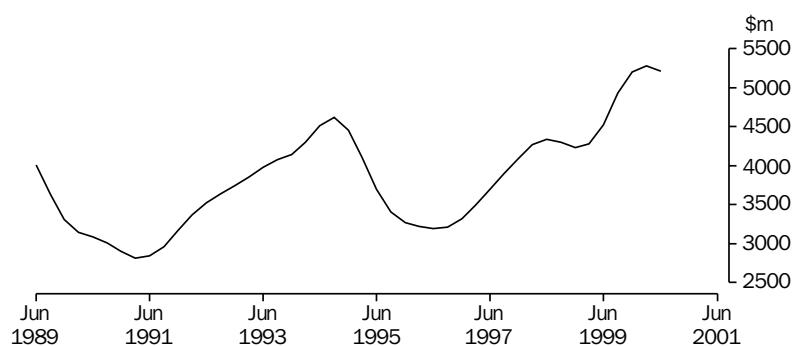
Directory of Capital Expenditure Data Sources and Related Statistics (5653.0)

Contains details of data sources on capital expenditure and related statistics produced by the ABS and other government agencies.

4.5 Residential Building Activity

In chain volume terms, the value of new residential building commencements fell from June 1989 to a low in March quarter 1991 of \$2,817m, then increased strongly to a peak of \$4,618m in September quarter 1994. After a rapid decline from September 1994 quarter to June quarter 1996 quarters, where the value of new residential building commencements was \$3,196m, it grew strongly to \$5,228m in March quarter 2000. The series declined slightly in June quarter 2000, to \$5,209m.

VALUE OF NEW RESIDENTIAL BUILDING COMMENCEMENTS,
CHAIN VOLUME MEASURES: TREND



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

4.5 RESIDENTIAL BUILDING APPROVALS AND COMMENCEMENTS, NUMBER AND VALUE, CHAIN VOLUME MEASURES

Period	Approvals(a)		Commencements	
	no.	Value	no.	Value of(b)
		\$m		\$m
ANNUAL				
1993–94	187 947	19 709	170 977	17 028
1994–95	171 013	19 007	172 439	16 867
1995–96	125 267	15 023	138 539	13 093
1996–97	135 413	16 939	122 092	13 716
1997–98	153 959	19 914	135 608	16 610
1998–99	156 868	20 682	144 173	17 336
1999–2000	173 243	23 609	159 158	20 630
QUARTERLY—TREND UNLESS INDICATED OTHERWISE				
1998–99				
September	38 896	5 129	35 806	4 304
December	38 678	5 038	35 997	4 228
March	38 880	5 112	36 243	4 281
June	40 414	5 411	36 127	4 522
1999–2000				
September	43 433	5 876	35 663	4 933
December	46 637	6 120	36 975	5 204
March	46 057	5 998	40 591	5 284
June	37 116	5 616	45 929	5 209

(a) Data for the number of approvals includes dwelling units created as part of alterations or additions to, or conversions of existing 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 catalogues 8731.0 and 8752.0 for more information. (b) Seasonally adjusted data.

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

Explanatory Notes

A residential building is 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 tends to increase in order to meet higher 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 and/or low interest rates, individuals and investors are more willing to invest in new residential buildings than in periods of economic decline or high interest rates. Other factors which affect investment are the cost of land, labour and building materials. All of these are affected by the prevailing economic climate.

Explanatory Notes *continued*

Residential construction statistics are used by government and private organisations. The housing industry uses building statistics in forecasting the demand and supply of new housing. The government also uses forecasts of residential building activity as one input to determine future policy regarding residential construction in the overall economic context. The statistics are also used to compile the dwellings component of gross fixed capital formation in the national accounts, which forms part of the expenditure measure of gross domestic product (GDP) as well as being shown in the capital account.

The ABS produces a range of statistics relating to residential building, including statistics on the number and value of approvals during a period, the number and value of commencements during a period, and the value of work done during the period. The series are closely related, with approvals tending to lead commencements and work done.

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 pent-up demand becomes realised.

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, stage of construction, value of work done during period and value of work yet to be done; for each State and Territory and for private and public sectors for Australia.

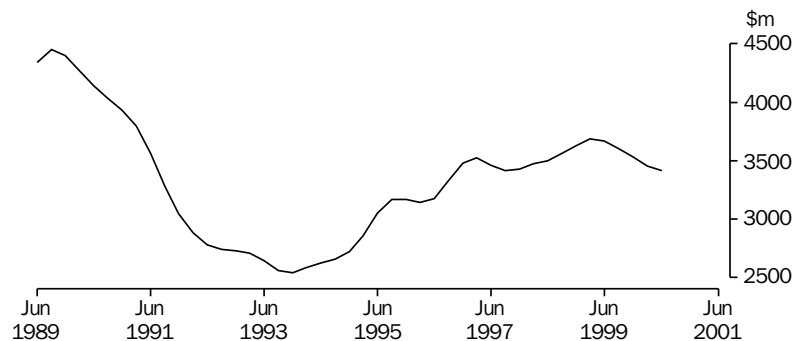
Building Approvals, Australia (8731.0)

Contains monthly information on the number of dwelling units and the value of residential building approved for the private and public sectors.

4.6 Non-residential Building Activity

The value of non-residential building work done, in chain volume terms, recorded variable movement in the 11 year period from June 1989 to June 2000. During the first half of this period the value of work done in non-residential building fell rapidly, from \$4,448m in September quarter 1989 to \$2,544m in December quarter 1993. Since then, the series recovered to reach \$3,685m in March quarter 1999, before falling again to 3,416m in June quarter 2000.

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



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

NON-RESIDENTIAL BUILDING ACTIVITY, CHAIN VOLUME MEASURES

Period	Private sector	Total
	\$m	\$m
ANNUAL		
1993–94	6 751	10 317
1994–95	7 845	11 286
1995–96	9 218	12 655
1996–97	10 222	13 792
1997–98	10 108	13 816
1998–99	10 805	14 550
1999–2000	10 471	14 002
QUARTERLY (TREND)		
1998–99		
September	2 645	3 564
December	2 693	3 632
March	2 735	3 685
June	2 732	3 669
1999–2000		
September	2 696	3 603
December	2 641	3 529
March	2 581	3 455
June	2 553	3 416

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

Explanatory Notes

Non-residential buildings are buildings other than residential buildings and include hotels, shops, factories, offices, etc. Non-residential buildings are used by businesses (both private and public) to produce goods and services.

Construction of non-residential buildings depends on the demand for particular types of buildings as well as on the level of economic activity. While overall economic conditions have an influence on investment decisions, the demand for particular types of buildings can vary considerably, depending on expectations for future activity in the industry in which a particular type of building can be used. For example, the demand for construction of new hotels depends on expected future tourism activity, the demand for factories is based on the outlook of the manufacturing industry and the demand for shops and offices on the current (over or under) supply of these buildings and expectations of future demand.

Construction of community and public service buildings (hospitals, schools, etc.) tends to be more constant and is more affected by government budget considerations than overall economic activity.

Estimates of non-residential building are used by public and private sector analysts as a measure of economic activity and an indicator of business confidence and growth. They are also used in the compilation of the other building component of gross fixed capital formation in the national accounts, which forms part of the expenditure measure of gross domestic product (GDP) as well as being shown in the capital account.

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.

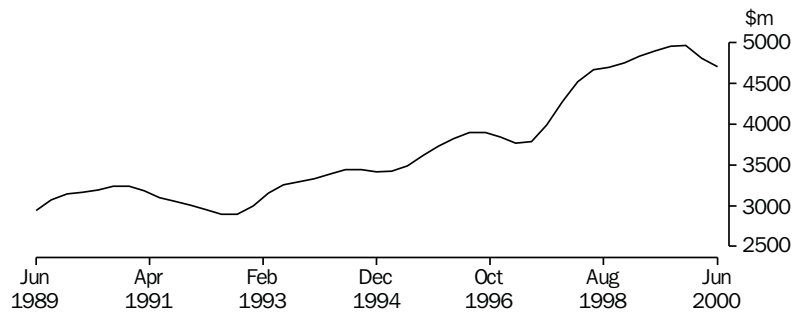
Building Approvals, Australia (8731.0)

Contains monthly information on the number and value of non-residential building by class of building approved.

4.7 Engineering Construction

The value of engineering construction work done in trend chain volume terms rose gradually from \$2,942m in June quarter 1989 to \$3,237m in December quarter 1990. Activity then decreased, falling to \$2,893m in June quarter 1992. Subsequent rapid growth saw the value of engineering construction work rise to \$3,900 in June quarter 1996, after which there was a brief decline in the series to \$3,771m in March quarter 1997. Since then the series has again risen rapidly, to \$4,969m in December quarter 1999, before tailing off to \$4,702 in June quarter 2000.

ENGINEERING AND CONSTRUCTION ACTIVITY, VALUE OF WORK DONE,
CHAIN VOLUME MEASURES(a): TREND



(a) Reference year 1998-99.

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

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

<i>Period</i>	<i>Total private sector</i>	<i>Total</i>
	<i>\$m</i>	<i>\$m</i>
ANNUAL		
1992–93	6 301	12 299
1993–94	7 550	13 446
1994–95	7 230	13 763
1995–96	8 321	15 076
1996–97	9 121	15 295
1997–98	11 220	17 459
1998–99	12 333	19 184
1999–2000	11 947	19 439
QUARTERLY (TREND)		
1998–99		
September	3 052	4 699
December	3 068	4 752
March	3 103	4 837
June	3 109	4 896
1999–2000		
September	3 104	4 958
December	3 065	4 969
March	2 924	4 811
June	2 855	4 702

Explanatory Notes

Engineering construction is infrastructure construction, 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 continue to grow and that the needs of the population are adequately serviced.

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

Engineering construction is a component of gross fixed capital formation in the national accounts, which forms part of the expenditure measure of gross domestic product (GDP) as well as being shown in the capital account.

Further Reading

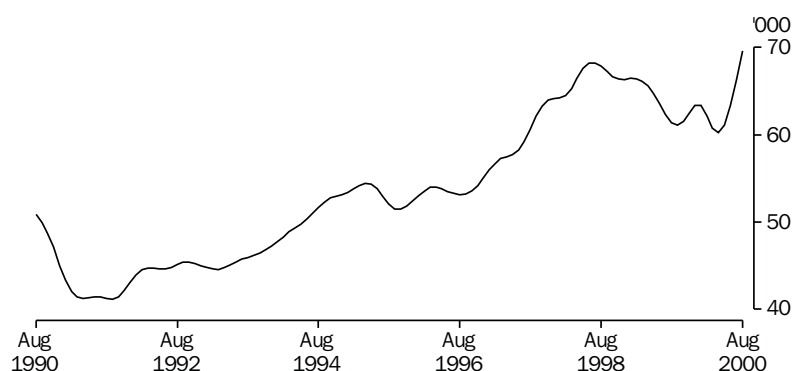
Engineering Construction Activity, Australia (8762.0)

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.

4.8 New Motor Vehicle Registrations

In trend estimate terms, new motor vehicle registrations generally rose from a low in September 1991 to a peak in July 1998, before falling to a low in September 1999. Since then there has been some volatility in the trend associated with the introduction of the new taxation system. Apart from the last few years, movements in motor vehicle registrations have been broadly similar to those in the overall economy.

NEW MOTOR VEHICLE REGISTRATIONS: TREND



Source: New Motor Vehicle Registrations, Australia: Preliminary (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	528 502	110 407	638 909
1995-96	531 778	104 751	636 529
1996-97	557 962	105 890	663 852
1997-98	654 697	117 150	771 847
1998-99	671 513	125 553	797 066
MONTHLY (TREND)			
1999-2000			
August	50 612	10 720	61 332
September	50 072	10 982	61 054
October	50 296	11 235	61 531
November	51 007	11 377	62 384
December	51 962	11 369	63 331
January	52 072	11 264	63 336
February	51 096	11 066	62 162
March	49 927	10 824	60 751
April	49 572	10 621	60 193
May	50 592	10 505	61 097
June	52 886	10 438	63 324
July	55 920	10 392	66 312
August	59 249	10 347	69 596

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

Source: New Motor Vehicle Registrations, Australia: Preliminary (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 the purchase of new motor vehicles. Therefore, new motor vehicle registrations provide an indication of consumer spending.

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.

New Motor Vehicle 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 on motor vehicle usage during a 12 month reference period.

CHAPTER 5

PRODUCTION AND INDUSTRY

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5.1 Productivity

Productivity in the market sector of the economy, as measured by the multifactor productivity index, increased 15.4% from 1990–91 to 1999–2000. Over this period, labour productivity increased by 30.4% and capital productivity declined by 3.3%.

PRODUCTIVITY INDEXES, Market Sector



Source: Australian System of National Accounts (5204.0).

PRODUCTIVITY INDEXES, Market Sector (1998–1999 = 100)

Period	Labour(a)	Capital(b)	Multifactor(c)
1990–91	78.2	103.3	87.6
1991–92	80.6	99.8	88.0
1992–93	82.6	100.0	89.4
1993–94	84.9	101.5	91.3
1994–95	85.2	101.8	91.6
1995–96	88.9	102.5	94.2
1996–97	91.5	100.8	95.2
1997–98	95.9	100.1	97.6
1998–99	100.0	100.0	100.0
1999–2000	102.0	99.9	101.1

(a) Gross product per hour worked. (b) Gross product per unit of capital services. (c) Gross product per combined unit of labour and capital.

Source: Australian System of National Accounts (5204.0).

Explanatory Notes

Productivity is the relationship between economic output 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 that takes account of more than one input (factor). It is expressed as a ratio of output to a combined measure of two or more factor inputs (e.g. capital and labour). MFP measures are typically presented in index number form.

The ABS measures MFP as the ratio of chain volume estimates of market sector GDP to a combined measure of capital services 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 measure 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 produced per unit of capital services 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 System of National Accounts (5204.0)

Contains the multifactor productivity index for the market sector. It also includes associated labour productivity, capital productivity and capital-labour ratio indexes.

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

Occasional Paper: Estimates of Multifactor Productivity, Australia (5233.0)

Describes the ABS MFP indexes, including their limitations. Alternative measures of MFP are described briefly. The methods used to derive estimates of MFP have been upgraded since the occasional paper was released, and so reference should be made to 5216.0 for up-to-date methodological information.

5.2 Industry Economic Activity

Between 1994–95 and 1995–96 there was an increase of 5.7% in Operating profit before tax (OPBT) across all industries in Australia. This was followed by a small decrease in 1996–97, with strong growth averaging 10% recorded for the last two years.

OPERATING PROFIT BEFORE TAX



Source: *Business Operations and Industry Performance, Australia (8140.0), Annual data.*

Operating profit before tax increased by \$10,334m (9.8%) at the all industries level in 1998–99. The Finance and insurance industry reported the highest level of profit at \$35,071m, up 7.2% from 1997–98. The largest increase in profit was in Construction with an increase of 42.5% or \$1,289m brought about in part by a boom in housing construction and renovations. This rise is also attributable to continued Olympic construction. The largest decrease in profit was experienced by Personal and other services (43.9%).

TOTAL OPERATING INCOME BY BROAD INDUSTRY

	1994–95	1995–96	1996–97	1997–98	1998–99
	\$m	\$m	\$m	\$m	\$m
Industry					
Agriculture, forestry and fishing	3 331	4 388	3 742	4 538	4 665
Mining	6 040	6 866	7 563	5 886	7 129
Manufacturing	16 031	13 693	13 072	13 613	13 188
Electricity, gas and water supply	3 824	3 785	4 457	4 903	6 123
Construction	3 287	2 316	3 144	3 036	4 325
Wholesale trade	7 791	6 820	5 956	5 670	7 589
Retail trade	6 251	4 134	4 656	5 937	6 133
Accommodation, cafes and restaurants	1 946	1 582	1 880	2 209	1 818
Transport and storage	2 633	2 905	3 912	4 623	4 505
Communication services	2 868	3 233	1 989	4 388	5 911
Finance and insurance	22 414	32 438	29 710	32 705	35 071
Property and business services	8 613	10 141	9 889	10 497	11 875
Private community services	3 288	2 444	3 395	3 974	3 703
Cultural and recreational services	2 267	948	928	2 176	3 092
Personal and other services	836	911	975	1 455	817
All industries	91 420	96 603	95 266	105 608	115 942

Source: *Business Operations and Industry Performance Australia, Preliminary (8142.0)*.

Explanatory Notes

Annual measures of industry economic activity are available from the ABS Economic Activity Survey (EAS). EAS collects data based on profit and loss and balance sheet accounts of public corporations and private employing businesses in most industries of the Australian economy. Non-employing businesses and the general government sector are excluded. Since 1994–95, estimates using a combination of data from the EAS and business income tax data provided to the Australian Taxation Office have also been produced.

Data for the goods producing industries is collected via industry-specific collections such as the Manufacturing Survey and the Agricultural Finance Survey, which carry additional EAS questions. These data are merged with EAS data for the services industries to give a complete economy wide picture.

EAS output includes details of income and expenditure, profit, assets and liabilities. A number of ratios are provided, including measures of profitability, performance and indebtedness. The estimates are classified by industry. For many subdivisions separate statistics are also available for large businesses and small and medium businesses whose definitions are based on employment and assets.

Explanatory Notes *continued*

EAS data are used to analyse the performance of various industries. They are also an important input into the compilation of supply and use tables, from which annual estimate of gross domestic product (GDP) and input-output tables are derived.

Further Reading

Business Operations and Industry Performance, Australia
(8140.0)

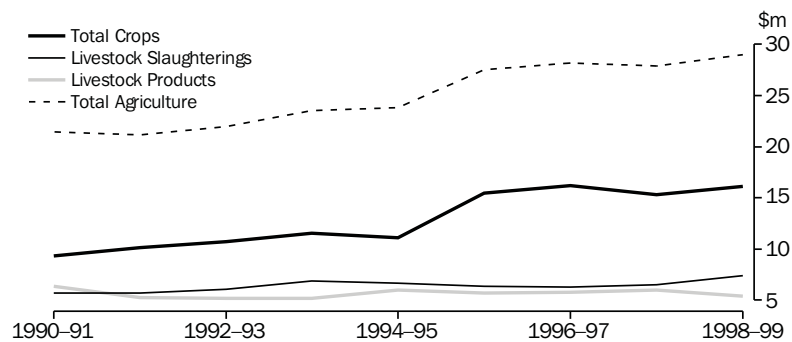
Provides economic statistics, including aggregates and ratios, for public corporations and private employing businesses in most industries of the Australian economy.

5.3 Agricultural Commodity Production

Australia's principal crops in 1998–99 included wheat (21.5m tonnes), barley (6m tonnes), canola (1.7m tonnes), sugar cane (38.5m tonnes) and cotton lint (634,000 tonnes). In terms of livestock, approximately 8.6m cattle (including calves) were slaughtered in 1999–2000, together with 14.3m sheep, 17.5m lambs and 5m pigs. These livestock in total accounted for the production of almost 3m tonnes of red meat.

Changes in the volume of aggregate agricultural production over time can be obtained using chain volume measures. Between 1990–91 and 1998–99, the volume of agricultural production increased by 35%. During this period the volume of total crop output increased by 73%, livestock slaughtering increased by 29%, and livestock products decreased by 15%.

CHAIN VOLUME MEASURES OF AGRICULTURAL PRODUCTION(a)



(a) Reference year for chain volume measures is 1997–1998.

Source: *Livestock Products, Australia (7215.0), Annual data.*

CHAIN VOLUME MEASURE OF FARM PRODUCTION(a)

	Crops	Livestock Slaughtering	Livestock Products	Total Agriculture
	\$'000	\$'000	\$'000	\$'000
1990–1991	9 335	5 736	6 378	21 449
1991–1992	10 164	5 733	5 262	21 159
1992–1993	10 737	6 037	5 215	21 989
1993–1994	11 515	6 856	5 176	23 547
1994–1995	11 131	6 664	5 999	23 794
1995–1996	15 424	6 398	5 713	27 535
1996–1997	16 162	6 276	5 759	28 197
1997–1998	15 328	6 521	6 002	27 851
1998–1999	16 147	7 386	5 418	28 951

(a) Reference year 1997–98.

Source: *Agriculture, Australia (7113.0).*

Explanatory Notes

Quantities of agricultural production are obtained from the annual ABS Agricultural Commodity Survey (ACS), other ABS collections, and some external sources. Most price information is obtained from non-ABS sources such as marketing boards, marketing reports, wholesalers, brokers and auctioneers. The scope of the 1998–99 ACS was establishments undertaking agricultural activity having an estimated value of agricultural operations (EVAO) of \$5,000 or more. The chain volume measures of output relate to that part of agricultural production sold outside the agricultural sector. They exclude the production of seed or plants used for future crops, and feed and fodder consumed or retained on farms.

A rise in the volume of production may not always be in the best interest of the producer. When a commodity has a large share of either the domestic or world market, an increase in supply can cause a fall in the price of the commodity, unless demand also increases. However, 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. Australian producers are more price takers than price makers in the international commodity market.

Further Reading

ABS Publications

Agriculture, Australia (7113.0)

Provides production and value details on land use, crops, horticultural activity and livestock numbers. Also includes financial activity information.

Livestock Products, Australia (7215.0)

Provides statistics on livestock slaughterings, meat production, milk and wool, and export data on live sheep, cattle and meat.

Other publications

Australian Commodities Forecasts and Issues

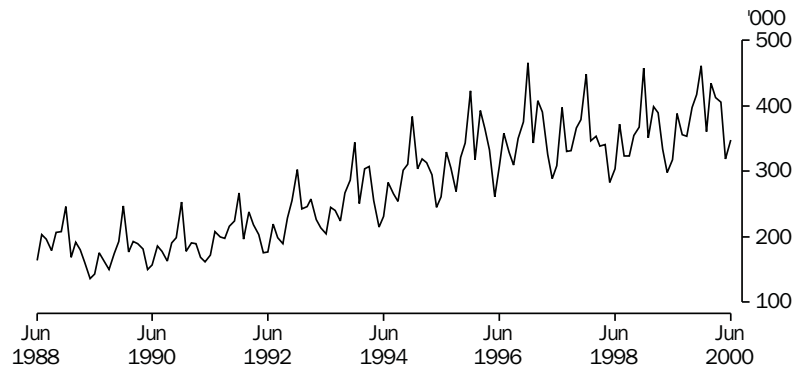
Contains Australian Bureau of Agricultural and Resource Economics (ABARE) forecasts and historical data for agriculture and resource commodities. Includes data on quantity and value of production, quantity and value of exports, value of imports of selected commodities, annual and quarterly prices and world production and consumption, stocks and trade for selected commodities.

5.4 Tourism

Overseas short-term visitor arrivals into Australia during the twelve months ended 30 June 2000 increased 8.5% on the corresponding period ended 30 June 1999, which in turn increased 1.6% on the previous year.

The accommodation industry's guest room capacity increased by 4.1% in the 12 months ended June 2000, compared to the previous year. Overall demand for rooms in licensed hotels, motels and guest houses and serviced apartments grew 6.1% during the same period with occupancy rates increasing by 0.9 percentage points.

SHORT-TERM OVERSEAS VISITOR ARRIVALS



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

TOURISM

Period	Hotels, Motels, Guest Houses and Serviced Apartments(a)			Number of short-term overseas arrivals
	Capacity (guest rooms)(b)	Room Nights Occupied	Room Occupancy rates(c)	
	no.	'000	%	'000
ANNUAL				
1997-98	176 092	36 529	58.0	4 220.0
1998-99	185 303	38 557	58.1	4 288.0
1999-2000	192 830	40 897	59.0	4 651.8
MONTHLY				
1999				
January	n.a.	3 214.1	56.7	351.0
February	n.a.	3 004.5	58.7	398.6
March	183 861	3 367.1	59.1	389.0
April	n.a.	3 272.5	59.1	334.1
May	n.a.	3 120.8	54.6	298.1
June	185 303	3 033.9	54.8	317.1
July	n.a.	3 417.8	59.5	388.5
August	n.a.	3 418.9	59.4	355.6
September	186 840	3 559.0	63.6	353.1
October	n.a.	3 827.5	65.3	397.0
November	n.a.	3 577.3	62.9	416.3
December	190 079	3 008.8	51.1	460.8
2000				
January	n.a.	3 259.7	55.3	360.8
February	n.a.	3 223.0	58.3	434.6
March	191 123	3 605.3	60.9	411.9
April	n.a.	3 466.8	60.1	405.6
May	n.a.	3 327.7	55.8	319.3
June	192 830	3 205.5	55.5	347.9

(a) For establishments with 15 or more rooms. (b) All capacity data are at end of period. (c) Room occupancy rates are averages over the period.

Source: *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. It 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. However, international tourism is also significant. The receipts from international tourism (which are shown in the balance of payments), now exceed 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 on the capacity, occupancy rates and takings of tourist accommodation 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.

A tourism satellite account (TSA) provides the most comprehensive measures of the economic importance of tourism, as well as linkages between tourism and other economic activity, compiled within a national accounting framework. The ABS has produced a TSA in respect of 1997–98. This TSA showed that tourism contributed 4.5% of Australia's gross domestic product (GDP).

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.

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.

Further Reading *continued*

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.

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.

Tourism Theme Page on the ABS website

<URL: <http://www.abs.gov.au>>. Contains information on ABS Tourism-related topics plus affiliated tourism web linkages.

Australian National Accounts: Tourism Satellite Account

(5249.0). Contains comprehensive information on the economic impact of tourism.

CHAPTER 6

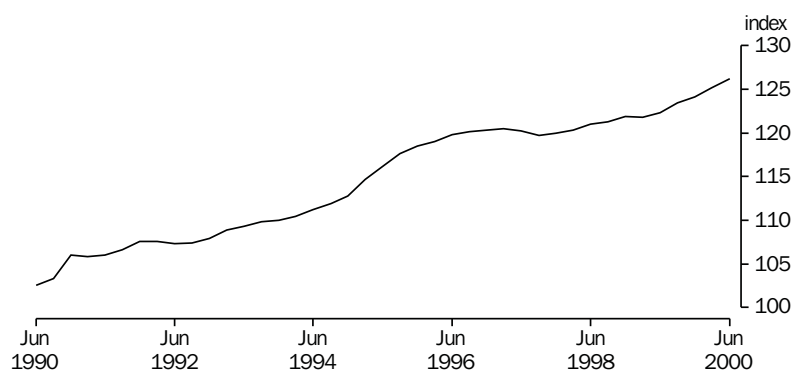
PRICES AND INCOME

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6.1 Consumer Price Index

The All Groups Consumer Price Index (CPI) recorded an average annual rate of growth of 2.8% from June quarter 1990 to June quarter 1994. There was then a 2 year period of relatively higher inflation between June quarter 1994 and June quarter 1996 when the average annual rate of growth was 3.9%. Since then, the rate of growth in the All Groups CPI has slowed considerably recording an average annual rate of growth of 1.2% from June quarter 1996 to June quarter 2000. During the period September quarter 1997 to March Quarter 1998, the All Groups CPI recorded small negative annual growth rates. In June quarter 2000, the All Groups CPI recorded annual growth of 3.2% and growth of 0.8% on the previous quarter.

CONSUMER PRICE INDEX: ALL GROUPS



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

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

<i>Period</i>	<i>Food</i>	<i>Clothing and footwear</i>	<i>Housing</i>	<i>All groups</i>
ANNUAL AVERAGE				
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
1997–98	121.8	107.4	94.5	120.3
1998–99	126.5	106.7	95.8	121.8
1999–2000	129.2	105.5	99.9	124.7
QUARTERLY				
1997–98				
June	123.1	107.3	94.5	121.0
1998–99				
September	124.7	107.0	94.8	121.3
December	126.0	106.9	95.5	121.9
March	127.5	106.3	96.2	121.8
June	127.8	106.7	96.6	122.3
1999–2000				
September	120.8	107.1	95.9	119.7
December	128.9	105.2	99.6	124.1
March	129.1	104.8	100.7	125.2
June	130.2	105.7	101.2	126.2

(a) Weighted average of eight capital cities.

Source: Consumer Price Index, Australia (6401.0).

Explanatory Notes

The Consumer Price Index (CPI) has been specifically designed as a general measure of price inflation for the household sector as a whole. The simplest way of thinking about the CPI is to imagine a *basket of goods and services* comprising items typically bought by Australian households. As prices vary, the total cost of this basket will also vary. The CPI is simply a measure of the changes in the cost of this fixed basket over time.

This basket of goods and services has been selected to represent purchases by all metropolitan private households and covers expenditure on the following broad items: food; alcohol and tobacco; clothing and footwear; housing; household furnishings, supplies and services; health; transportation; communication; recreation; education; as well as on some other miscellaneous items. To ensure the basket remains representative of current spending habits, it is revised about every five years.

Explanatory Notes *continued*

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 then 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 is used by the Reserve Bank of Australia in determining monetary policy; it is used to index Social Security and superannuation payments; it is used to adjust excise and customs duty on alcohol, tobacco and petroleum products; and it is used in a range of business contracts for price adjustment.

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 the face of changing market conditions (for instance, buying chicken instead of beef when beef prices are high). 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. A 'cost of living index' would also include things such as mortgage interest charges, which are currently excluded from the CPI.

Further Reading

Consumer Price Index, Australia (6401.0)

Presents quarterly movements in retail prices of goods and services commonly purchased by metropolitan private households. Indexes are published for each of the State capitals, Canberra and Darwin.

A Guide to the Consumer Price Index, 14th Series (6440.0)

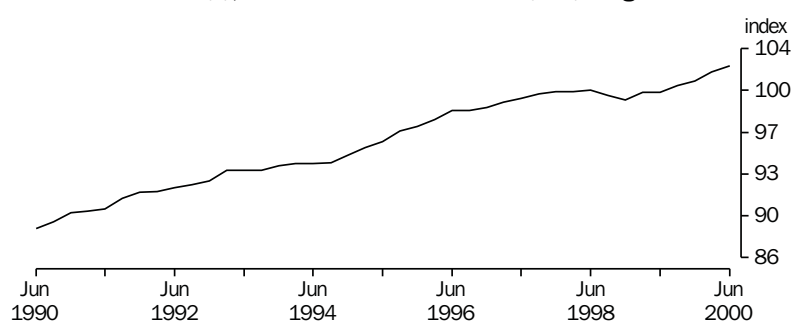
Contains information designed to promote the understanding of the CPI. It includes what the CPI is, to whom the CPI relates and how it is calculated. This publication is available for free on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

6.2

National Accounts—Chain Price Index

The chain price index for GDP recorded an average quarterly rate of growth of 0.4% from June quarter 1990 to June quarter 1998. This was followed by 2 quarters of small negative growth. Since then, the chain price index for GDP has recorded average quarterly rates of growth similar to those recorded in the early 1990s. In June quarter 2000, the chain price index for GDP increased by 0.5% on the previous quarter. The annual growth for 1999–2000 compared with the previous year was 1.6%.

CHAIN PRICE INDEX (a), GROSS DOMESTIC PRODUCT (GDP): **Original**



(a) Chain price indexes are annually reweighted Laspeyres price indexes.

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

CHAIN PRICE INDEX(a) (1998–99=100.0)

Period	GDP (Index)
ANNUAL	
1994–95	95.1
1995–96	97.7
1996–97	99.2
1997–98	100.3
1998–99	100.0
1999–2000	101.6
QUARTERLY (ORIGINAL)	
1998–99	
December	99.6
March	100.2
June	100.2
1999–2000	
September	100.8
December	101.2
March	102.0
June	102.5

(a) Chain price indexes are annually reweighted Laspeyres price indexes.

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

Explanatory Notes

Chain price indexes are one of a suite of price indexes published by the ABS that measure price change. The consumer price index and all the producer and international trade price indexes also do this. However, the national accounts chain price indexes have some useful features that the other price indexes do not share. First, they encompass the whole of the economy, and second, they are annually reweighted chain Laspeyres price indexes.

Chain price indexes can be thought of as a series of indexes measuring price change from a base year to quarters in the following year using current price values in each base year as weights. These indexes, which each span one year, are linked together to form a continuous time series. The time series is subsequently referenced to 100.0 in the reference year (currently 1998–99).

When calculated for the major national accounting aggregates, such as GDP or domestic final demand, chain price indexes relate to a broader range of goods and services in the economy than that represented by any of the individual consumer or producer price indexes published by the ABS. The chain price index for GDP measures the price change of all the goods and services produced in Australia, while the chain price index for domestic final demand measures the price change of the final expenditure on goods and services in Australia.

Unlike quarterly implicit price deflators (IPD), which are derived by dividing a chain volume measure into its current price equivalent, chain price indexes reflect only pure price change. Quarterly IPDs are also affected by compositional change.

Chain price indexes are used by analysts in both the public and private sector to understand the extent of inflation in the economy.

Further Reading

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

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 chain price indexes for several series, including domestic final demand and gross domestic product.

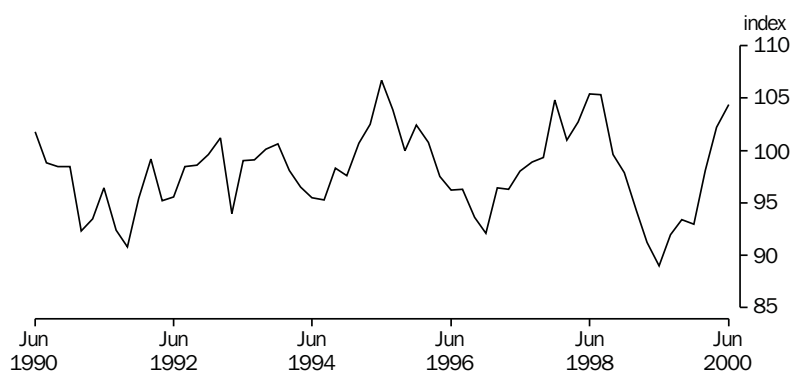
Australian System of National Accounts (5204.0)

Contains annual chain price indexes for several series, including domestic final demand and gross domestic product.

6.3 RBA Commodity Price Index

The Reserve Bank of Australia (RBA) index of commodity prices has fluctuated during the period 1997 and 2000, reaching a high of 105.9 in May 2000 and a low of 88.1 in May 1999 (1994–95 = 100.0). In June 2000, the series recorded 104.2.

RESERVE BANK OF AUSTRALIA INDEX OF COMMODITY PRICES



Source: Reserve Bank of Australia, Monthly data.

RBA INDEX OF COMMODITY PRICES(a) (1994–95= 100.0)

Period	All items
ANNUAL	
1997–98	101.8
1998–99	96.7
1999–2000	96.3
MONTHLY	
1998–99	
April	91.2
May	88.1
June	89.0
1999–2000	
July	88.5
August	92.0
September	91.8
October	93.4
November	93.6
December	93.0
January	92.7
February	98.1
March	99.8
April	102.4
May	105.9
June	104.2

(a) Monthly average data.

Source: Reserve Bank of Australia Bulletin.

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. To make the index easier to understand and more relevant the RBA made the following changes to the index in 1998:

- the index is now calculated as a fixed-weight Laspeyeres index;
- the index was rebased from 1989–90 to 1994–95; and
- crude oil was excluded.

The updated index was spliced onto the previous index at July 1989.

There are 17 commodities included in the index representing approximately 75% of Australia's commodity exports. The weights given to each commodity can vary over time to allow for changes in the composition of exports.

Indexes for rural and non-rural components are calculated as well as for total commodities. In June 2000 rural commodities made up 33.2% of the overall index, with beef and veal, wool, wheat and sugar being the main rural commodities. Non-rural commodities make up the rest of the index, with gold, coking and steaming coal, iron ore and aluminium 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 Reserve Bank of Australia commodity price index for rural, non-rural and all items. See article in the September 1998 issue for an explanation of the index.

Reserve Bank of Australia Index of Commodity Prices

A monthly Reserve Bank of Australia press release that provides the commodity price index.

6.4 Prices Received and Paid by Farmers

From 1991–92 to 1994–95, the farmers' terms of trade index rose to a peak of 118.1 (1997–98 = 100.0), as prices received increased more rapidly than prices paid. The terms of trade index has since declined to 94.5 in 1999–2000. Prices paid have continued to increase while prices received have fallen.

FARMERS' TERMS OF TRADE INDEX



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

INDEXES OF PRICES RECEIVED AND PAID BY FARMERS (1997–98 = 100.0)

Period	Prices received	Prices paid	Farmers' terms of trade(a)
	ANNUAL		
1991–92	94.5	90.7	104.2
1992–93	93.7	89.5	104.8
1993–94	97.4	91.1	106.9
1994–95	112.0	94.9	118.1
1995–96	111.2	99.4	111.9
1996–97	101.6	99.3	102.3
1997–98	100.0	100.0	100.0
1998–99	96.1	100.0	96.1
1999–2000	97.6	103.3	94.5

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

Source: *Indexes of Prices Received and Paid by Farmers (ABARE)*.

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 fixed baskets of goods and services that farmers sell and purchase, respectively. ABARE revised the method for calculating farm, price and production indexes in October 1999. The indexes for the different groups of farm commodities are now calculated on a chained weight basis using Fishers' ideal index with a reference year of 1997–98.

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 increases 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 in the projection of income levels for producers of specific commodities. These forecasts are subsequently used by the Government in developing various agricultural and trade policies.

Further Reading

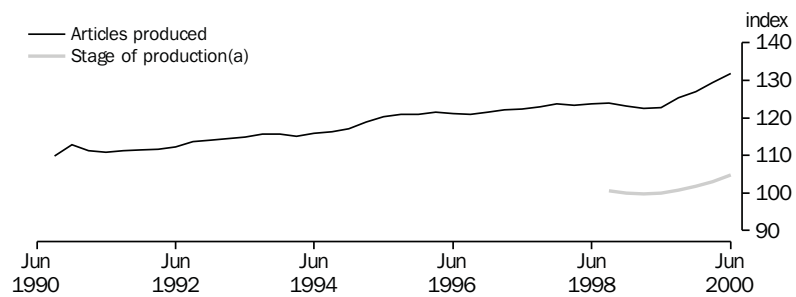
Agricultural Industries, Financial Statistics, Australia (7507.0)
Contains detailed information for farm businesses about turnover, expenses, profitability, capital spending, asset values, indebtedness and net worth. The information is available for individual agricultural industries at the State and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

Australian Commodities
Contains Australian Bureau of Agricultural and Resource Economics (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.

6.5 Producer Price Indexes

From the beginning of the 1990s to the end of 1999–2000 the Price Indexes of Articles Produced by Manufacturing Industry recorded small but steady increases. Between September quarter 1996 and the June quarter 2000 the index increased by 8.9%. The Producer Price Index Stage of Production measure recorded a 4.4% increase for Final commodities between September quarter 1998 (the start of the series) and the June quarter 2000.

PRODUCER PRICE INDEXES



(a) Stage of Production is a new series which commenced in September 1998.

Source: *Prices Indexes of Articles Produced by Manufacturing Industry, Australia (6412.00)*, Quarterly data.

Stage of Production Producer Price Indexes, Australia (6426.0), Quarterly data.

SELECTED PRODUCER PRICE INDEXES, ALL GROUPS

Period	Price index of articles produced by manufacturing	Price index of materials used in manufacturing	Price index of materials used in building (other than house building)	Price index of materials used in house building	Stage of production producer price indexes (final commodities)	Producer price indexes for selected service industries, Transport (freight) & storage division	Producer price indexes for selected service industries, Property & business services division
ANNUAL AVERAGE							
1996–97	121.8	106.0	113.2	116.1	—	—	—
1997–98	123.4	107.0	114.2	118.2	—	—	—
1998–99	123.1	105.9	115.2	119.5	100.0	100.0	100.0
1999–2000	128.4	115.8	116.1	122.8	102.6	100.2	105.6
QUARTERLY							
1998–99							
September	124.0	107.5	114.8	119.4	100.5	100.1	98.7
December	123.2	105.8	115.2	119.7	99.9	100.0	99.9
March	122.5	104.2	115.2	119.5	99.7	100.3	99.8
June	122.8	106.1	115.4	119.2	99.9	99.6	101.6
1999–2000							
September	125.3	108.3	115.2	120.5	100.8	99.5	103.4
December	127.0	113.6	115.4	121.5	101.7	99.5	105.0
March	129.3	117.8	116.4	123.8	103.0	100.4	105.8
June	131.8	123.5	117.4	125.5	104.9	101.2	108.0

Source: Price Indexes 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 Capital Cities (6407.0), Price Index of Materials Used in House Building, Six State Capital Cities (6408.0).

Explanatory Notes

Producer price indexes measure movements in the prices of goods for various parts of the Australian economy. They are important economic indicators. The most comprehensive producer price indexes are the 'stage of production' indexes which show the supply of commodities to the Australian economy categorised according to their role in the production chain. They cover both domestically produced and imported commodities. There are three separate stages of production. Preliminary (Stage 1) commodities are used in the production of intermediate (Stage 2) commodities; in turn intermediate (Stage 2) commodities flow into the production of final (Stage 3) commodities. This framework allows for analyses of price changes as commodities flow through the production process. Price changes for earlier stages of production may be indicators of possible future price changes for later stages.

The sectoral indexes relate to four broad sectors of the Australian economy: service industry, building industry, manufacturing industry and the coal mining industry. The producer price indexes measure changes in prices of materials

Explanatory Notes *continued*

used in the production processes for each of the sectors, as well as output prices of selected service industries and 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 for economic analysis and for adjusting prices in business contracts. The indexes are also used as input into the compilation of other ABS statistics, such as volume 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.

Further Reading *continued*

Stage of Production Producer Price Indexes, Australia (6426.0)

Presents producer price index numbers for the supply of commodities to the Australian economy in a 'stage of production' framework. The indexes cover both domestically produced and imported commodities, individually and in aggregate. They represent an alternative arrangement of the various ABS producer price index series.

Producer Price Indexes for Selected Service Industries, Australia (6423.0)

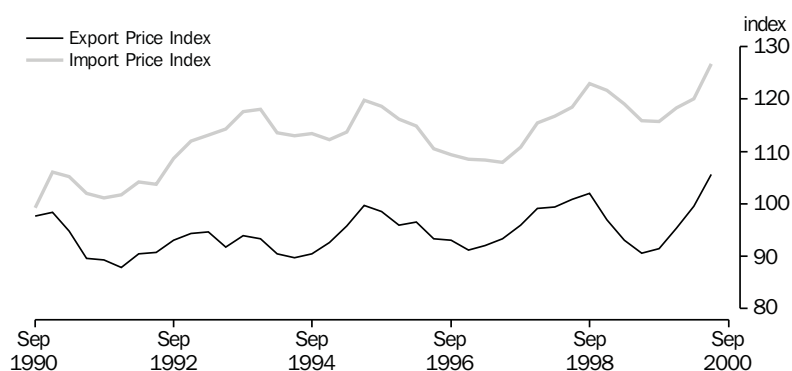
Presents producer price indexes for the output of the Transport (freight) & Storage Division, and the Property & Business Services Division of the Australian and New Zealand Standard Industrial Classification (ANZSIC).

6.6

International Trade Price Indexes

Over the past ten years movements in both the export and import price indexes have been variable, largely reflecting variations in the value of the Australian dollar against the major trading currencies. By June quarter 2000, import prices were 26.9% above what they were ten years earlier, while over the same period export prices had increased by 3.6%.

EXPORT AND IMPORT PRICE INDEXES



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

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

<i>Period</i>	<i>Export price index</i>	<i>Import price index</i>
ANNUAL AVERAGE		
1996–97	92.4	108.6
1997–98	98.9	115.4
1998–99	95.7	119.9
1999–2000	98.0	120.2
QUARTERLY		
1998–99		
September	102.0	122.9
December	96.9	121.7
March	93.1	119.1
June	90.6	115.9
1999–2000		
September	91.5	115.8
December	95.4	118.3
March	99.5	120.1
June	105.7	126.7

Source: *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 imports to and exports 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, as many of the goods imported and exported by Australia are priced in foreign currencies. 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 volume estimates of the national accounts.

Further Reading

Export Price Index, Australia (6405.0)

Measures changes in free on board (f.o.b.) Australian port-of-origin prices of merchandise exports.

Import Price Index, Australia (6414.0)

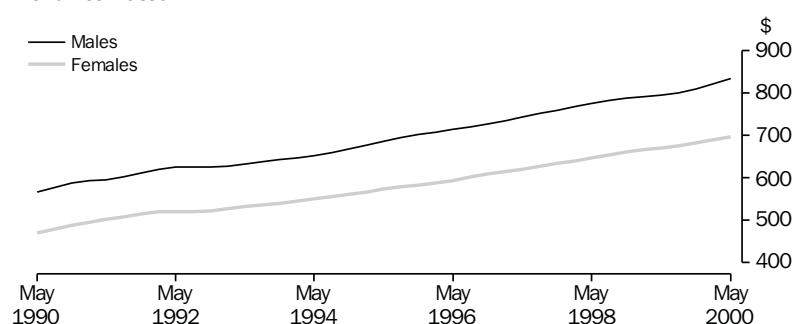
Measures price movements of imports of merchandise landed in Australia.

Information Paper: Review of the Import Price Index and Export Price Index, Australia (6424.0).

6.7 Average Weekly Earnings

In May 2000, trend average weekly ordinary time earnings for full-time adults was \$783.70. The figure for males was \$835.00 and the figure for females was \$697.70. During the period May 1999 to May 2000 male full-time adult average ordinary time earnings increased by 5.1%, while the corresponding estimate for females increased by 4.0%. Both series increased steadily throughout most of the 1990's.

AVERAGE WEEKLY ORDINARY TIME EARNINGS, FULL-TIME ADULTS: Trend Estimates



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

AVERAGE WEEKLY ORDINARY TIME EARNINGS, Full-time adults, Australia: Trend

Period	Males	Females	Persons
	\$	\$	\$
ANNUAL AVERAGE(a)			
1994-95	673.2	564.3	634.1
1995-96	705.1	585.9	662.6
1996-97	731.9	612.0	688.7
1997-98	763.7	637.2	716.8
1998-99	789.0	663.2	742.7
1999-2000	817.0	686.9	768.7
QUARTERLY			
1998-99			
February	791.4	666.2	745.2
May	794.6	671.1	749.0
1999-2000			
August	800.6	676.5	754.8
November	810.4	683.1	763.3
February	822.1	690.4	773.1
May	835.0	697.7	783.7

Explanatory Notes

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

Average weekly earnings can change when wages change as a result of National Wage Case outcomes, enterprise bargaining agreements between employers and employees, and other pay setting outcomes.

A change in average weekly earnings is not necessarily due solely to changes in wage rates, but may also 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 workforce, the occupational make-up of the workforce and the amount of overtime all affect average weekly earnings.

Further Reading

Average Weekly Earnings, Australia (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.

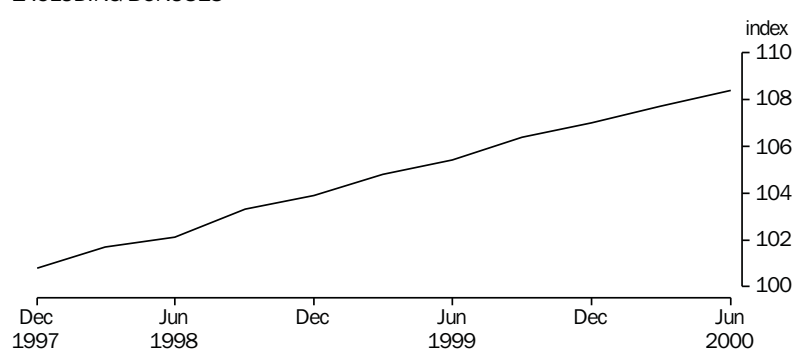
Average Weekly Earnings, States and Australia (6302.0)

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 and Territory.

6.8 Wage Cost Index

The Wage Cost Index (WCI) was compiled for the first time for the December quarter 1997 (with a base of September quarter 1997 = 100.0). For the June quarter 2000, the total hourly rates of pay excluding bonuses index for Australia was 108.4, reflecting quarterly growth from March 2000 of 0.6% and annual growth of 2.8% from June 1999.

QUARTERLY INDEX NUMBERS, TOTAL HOURLY RATES OF PAY EXCLUDING BONUSES



Source: Wage Cost Index, Australia (6345.0), Quarterly data.

TOTAL HOURLY RATES OF PAY EXCLUDING BONUSES

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
INDEX NUMBERS									
1997									
September	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December	100.7	100.7	100.9	100.8	100.9	100.4	101.2	100.2	100.8
1998									
March	101.8	101.6	101.7	101.5	102.0	101.1	101.8	101.1	101.7
June	102.1	102.1	102.2	101.9	102.6	101.4	102.2	101.4	102.1
September	103.6	103.2	103.2	103.2	103.4	102.4	103.0	102.8	103.3
December	104.1	103.8	103.9	103.8	104.0	102.9	104.0	103.3	103.9
1999									
March	105.3	104.5	104.6	104.6	104.7	103.9	104.7	104.1	104.8
June	105.9	105.1	105.1	104.7	105.4	104.6	105.0	104.4	105.4
September	107.0	106.1	106.3	105.9	106.1	105.5	105.8	105.6	106.4
December	107.5	106.8	107.1	106.8	106.7	106.0	106.7	106.0	107.0
2000									
March	108.2	107.6	107.6	107.4	107.5	106.5	107.2	106.6	107.7
June	109.0	108.3	108.0	108.1	108.0	106.9	107.5	107.0	108.4

Source: Wage Cost Index, Australia (6345.0)

Explanatory Notes

The WCI measures labour market related changes in the wage and salary component of the price of labour. The WCI can change as a result of minimum wage case outcomes, enterprise bargaining and individual agreements between employers and employees, other formal and informal pay setting outcomes and other labour market related forces, for example skill shortages. It is not affected by:

- changes in the nature of work performed (for example, different tasks or responsibilities);
- changes in the quantity of work performed (for example, increases in hours worked);
- changes in the characteristics of the job occupant (for example, age, apprenticeship year, successful completion of training or qualifications, grade or level, experience, etc);
- changes resulting from the individual performance of a job occupant.

The WCI measures changes over time in wage and salary rates of pay for employee jobs, unaffected by changes in the quality or quantity of work performed. It provides an accurate measure of movements in the price of labour services, and so differs from the Average Weekly Earnings measure which is an aggregate measure affected by changes in the composition of the wages and salaries segment of the labour force.

Four sets of indexes are produced—ordinary time hourly rates of pay, including and excluding bonuses, and total hourly rates of pay, including and excluding bonuses. Individual indexes are compiled for various combinations of State/Territory, sector, broad industry group and broad occupation group.

Governments, unions, employer groups, researchers and private bodies use the WCI as a guide to changes in wage and salary rates. It is used for adjusting business contracts as well as for economic analysis.

Further Reading

Wage Cost Index, Australia (6345.0)

Contains quarterly indexes measuring changes in wage and salary costs for employee jobs, classified by State and Territory, sector (private/public), industry and occupation.

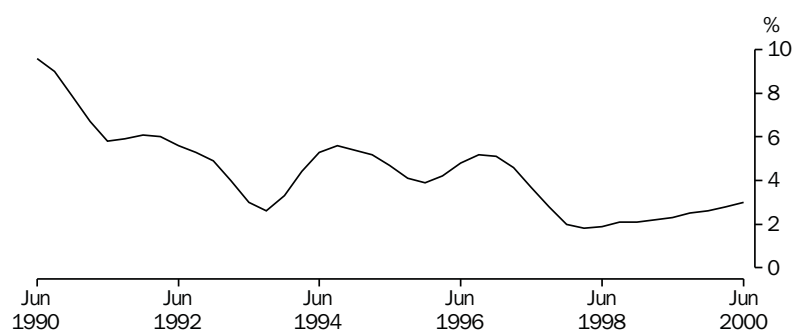
Information Paper: Wage Cost Index, Australia (6346.0)

Provides more information on the methodology and construction of the WCI.

6.9 Saving

The household saving ratio in trend terms generally fell over the period from June quarter 1990 to March quarter 1998, when it recorded an historic low of 1.8%. The ratio subsequently rose marginally to 3.0% in June quarter 2000.

HOUSEHOLD SAVING RATIO: TREND



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

HOUSEHOLD SAVING

Period	Saving (a)	Household disposable income	Household saving ratio
	\$m	\$m	%
ANNUAL			
1994–95	13 941	296 740	4.7
1995–96	12 137	313 913	3.9
1996–97	15 029	330 264	4.6
1997–98	7 087	342 136	2.1
1998–99	8 303	362 060	2.3
1999–2000	10 322	383 635	2.7
QUARTERLY (TREND)			
1998–99			
December	1 890	89 808	2.1
March	2 031	91 162	2.2
June	2 172	92 481	2.3
1999–2000			
September	2 302	93 788	2.5
December	2 478	95 142	2.6
March	2 704	96 583	2.8
June	2 928	98 018	3.0

(a) Saving is derived as a balancing item.

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

Explanatory Notes

Saving is the excess of income over outlays 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 will increase productive capacity of the economy and enable it to produce a greater quantity of goods and services in the future. Saving can be calculated for the nation as a whole and for each sector, such as the household sector.

Household disposable income is the amount of income that households have available for spending after deducting from total income any taxes paid, interest and other property income payments and current transfers. Household net saving is calculated by deducting household final consumption expenditure and consumption of fixed capital from household disposable income. The ratio of household net saving to household net disposable income is called the household saving ratio.

If total net saving in the domestic economy and 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.

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 System of National Accounts (5204.0)

Contains a detailed presentation of the national accounts for the last nine years, including details of national and sectoral saving.

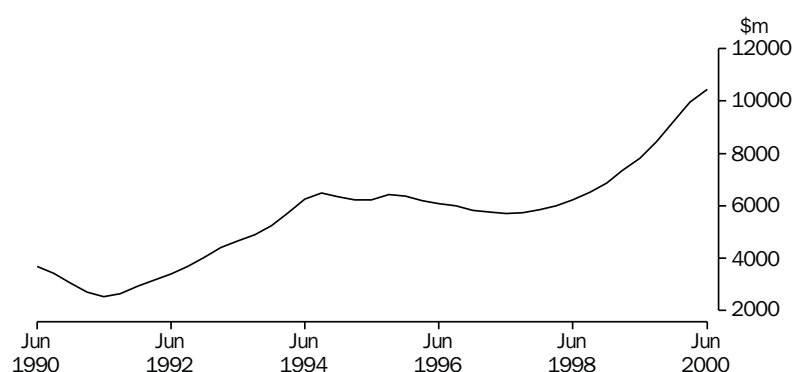
Australian National Accounts: National Income, Expenditure and Product (5206.0)

Contains quarterly measures of national saving and saving for the general government and household sectors.

6.10 Company Profits

Total company profits before income tax for companies with more than 30 employees, in trend current price terms, fell to \$2,523m in June quarter 1991, and then grew steadily to \$6,474m in September quarter 1994. The series then generally fell to June quarter 1997, when it stood at \$5,710m. The series then recorded a period of strong growth, reaching \$10,462m in June quarter 2000, which was an increase of 83.2% from June quarter 1997.

TOTAL COMPANY PROFITS BEFORE INCOME TAX: TREND



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

COMPANY PROFITS BEFORE INCOME TAX

Period	Mining	Manufacturing	Wholesale and retail trade	Other selected industries	Total
	\$m	\$m	\$m	\$m	\$m
ANNUAL (ORIGINAL)					
1994-95	4 668	13 010	4 691	2847	25 216
1995-96	5 950	10 771	4 174	3942	24 836
1996-97	5 862	10 125	3 962	3105	23 055
1997-98	5 207	11 626	4 466	2826	24 127
1998-99	4 883	10 936	5 403	6727	27 950
1999-2000	9 812	12 632	5 646	8286	36 376
QUARTERLY (TREND)					
1998-99					
September	1 190	2 976	1 134	1204	6 504
December	1 089	2 947	1 307	1536	6 879
March	1 111	2 943	1 476	1832	7 362
June	1 340	3 010	1537	1943	7 830
1999-2000					
September	1 787	3 164	1500	1999	8 450
December	2 334	3 385	1427	2065	9 211
March	2 834	3 579	1385	2160	9 958
June	3 116	3 716	1354	2276	10 462

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

Explanatory Notes

The company profits series measure profits, depreciation and net interest paid of companies (i.e. incorporated business enterprises) employing more than 30 people in the private sector in Australia. For the purpose of the series, branches of overseas companies operating in Australia are included but overseas branches of Australian companies are excluded.

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. This series provides quarterly statistics by broad industry, including mining, manufacturing, wholesale trade, retail trade, transport and storage, services to finance and insurance, property and business services, and other services.

Certain industries are excluded from this series, including agriculture, forestry, fishing and hunting; finance; insurance, government administration and defence; education; health and community services; and private households employing staff. Public sector business units (i.e. all departments, authorities and other organisations owned and/or controlled by the Commonwealth, state and local governments) are also excluded.

The company profits series is used by private and government analysts to assess the profit performance of the private incorporated trading sector and as a short-term indicator of economic activity. These statistics contribute to informed decision-making regarding future economic policy for this sector and the economy as a whole. They are also used as an input into the compilation of the gross operating surplus item in the national accounts, which is part of the income measure of gross domestic product (GDP).

Further Reading

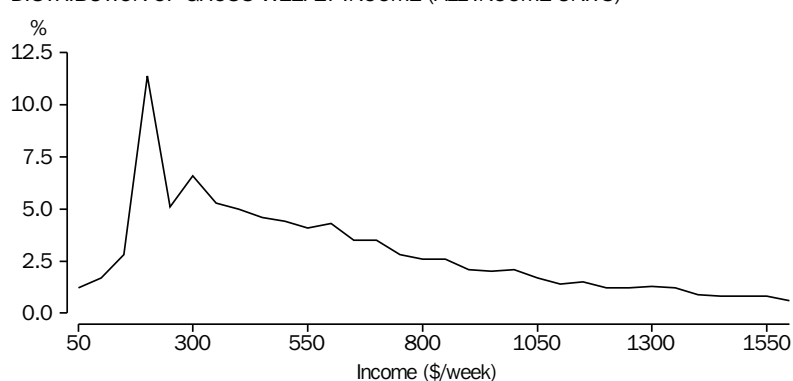
Company Profits, Australia (5651.0)

Provides quarterly estimates of company profits, depreciation and interest paid and received for companies that employ more than 30 people. Estimates are presented by industry in current prices and in original, seasonally adjusted and trend terms.

6.11 Household Income Distribution

In 1997–98 there were approximately nine million income units living in private dwellings in Australia. While their mean gross weekly income was \$658, the median (i.e. the midpoint when all units are ranked in ascending order of income) was considerably lower at \$499. This difference reflects the typically asymmetric distribution of income where a large number in the population have relatively low incomes and a smaller number of units have relatively very high incomes.

DISTRIBUTION OF GROSS WEEKLY INCOME (ALL INCOME UNITS)



Source: *Income Distribution, Australia* (6523.0).

The degree of inequality in the income distribution of all income units—as measured by each income quintile’s share of income—remained almost unchanged between 1994–95 and 1997–98, with no significant change in the shares of total income received by the income quintile groups over the four years. The Gini-coefficient in 1997–98 was 0.446 and it was also not significantly different from that of the previous years.

PERCENTAGE INCOME SHARE FOR INCOME QUINTILES

Gross weekly income quintile	1994–95	1995–96	1996–97	1997–98
Lowest	3.6	3.8	3.8	3.8
Second	9.3	9.1	9.4	9.0
Third	15.2	15.0	15.2	15.0
Fourth	24.0	23.7	24.0	23.9
Highest	47.9	48.3	47.5	48.3
All income units	100	100	100	100

Source: *Income Distribution, Australia* (6523.0).

The analysis above relates to gross income. Similar analysis can be done using disposable income (gross income after tax and the Medicare levy are deducted) or equivalent income. Equivalent income is disposable income adjusted to reflect the

needs of different income units (for example, the needs of a couple with two dependent children are greater than say a single person income unit). The distribution of equivalent income data is more equal than for gross income. In 1997–98, the Gini-coefficient for equivalent income was 0.343 compared with 0.446 for gross income.

Australia has been included in the Luxembourg Income Study (LIS) of 21 OECD countries which covers the majority of countries in the European Union, Norway, the United States of America, Canada, Japan, Taiwan and Israel. The average Gini-coefficient for these 21 countries in the 1990s was 0.290 compared with Australia's Gini-coefficient of 0.317 in 1994. This indicates that the income distribution in Australia is more unequal than most of the 21 countries in the LIS. Of the 21 countries, Sweden's distribution was most equal (0.222 in 1995) and the United States was most unequal (0.375 in 1997)

Source: Smeeding T. M. 2000 'Changing Income Inequality in OECD Countries: Updated results from the Luxembourg Income Study', in R.Hauser and I. Becker (eds), The Personal Distribution of Income in An International Perspective, Springer-Verlag, Berlin.

Explanatory Notes

Three methods are commonly used to summarise the distribution of income between income units—frequency distributions, income shares and Gini-coefficients.

The Gini-coefficient is a single statistic which summarises the dispersion of income across the entire income distribution. The Gini-coefficient ranges between zero and one. It has a value of zero when income is distributed equally, that is, when all incomes are equal. It has a value of one when one income unit receives all the income

An income unit is one person or a group of related persons within a household, whose command over income is assumed to be shared. Income sharing is assumed to take place within married (registered or de facto) couples, and between parents and dependent children.

For the purpose of income distribution analysis, income is defined as regular and recurring cash receipts including moneys received from wages or salary, government pensions and allowances, and other regular receipts such as superannuation, workers' compensation, child support, scholarships, profit or loss from own business or partnership and property income.

Further Reading

Income Distribution, Australia (5623.0)

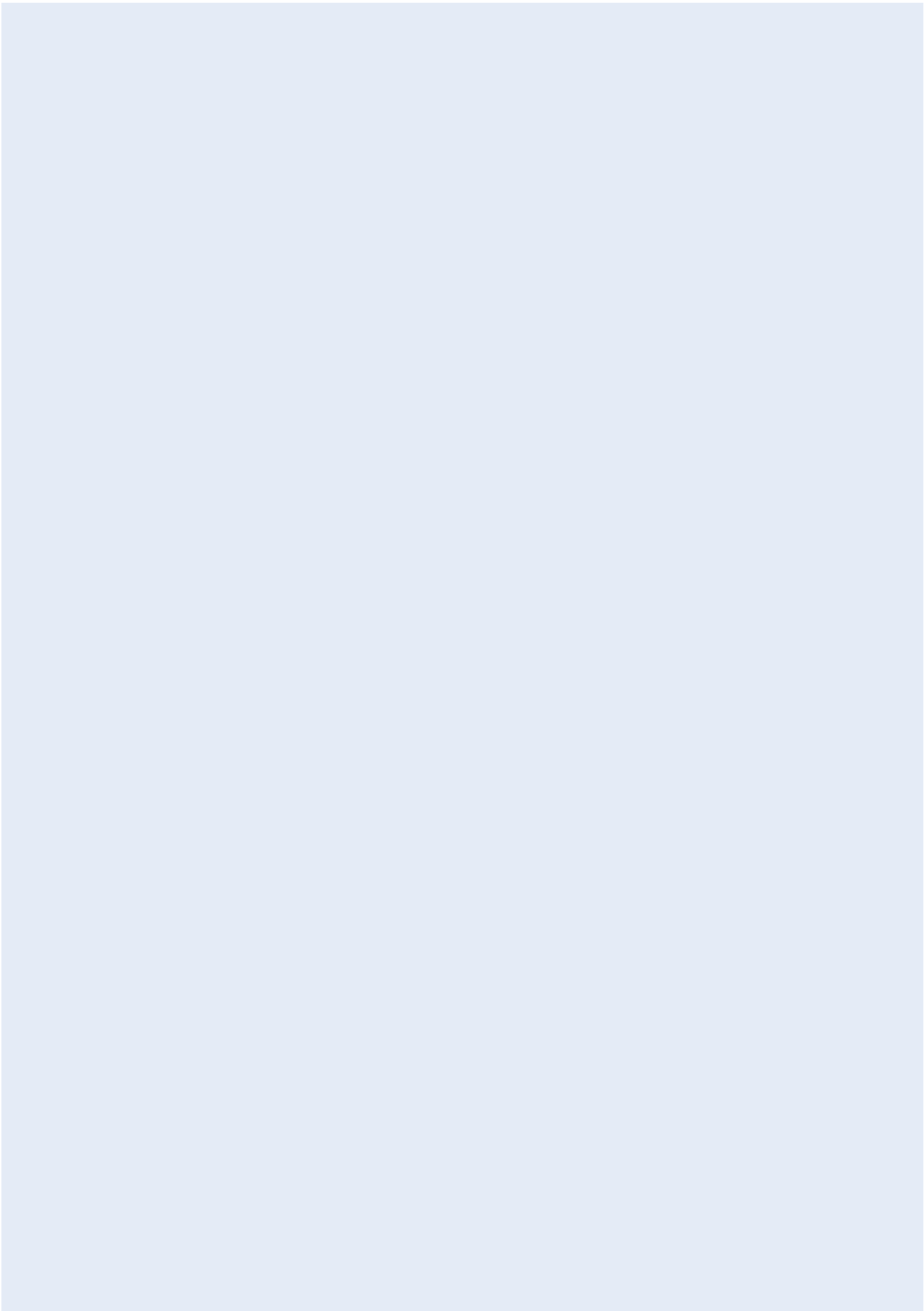
Details are presented on the distribution of income in Australia, and on the various characteristics of income units (married couple, one parent and one-person units), their composition, and the principal source of income, age and employment status of reference person.

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. Provides definitions and classifications of components. Shows links with other conceptual frameworks such as the national accounts.

Household Expenditure Survey, Australia: the Effects of Government Benefits and Taxes on Household Income (6537.0)

Describes and provides results from the study of the effects of government benefits and taxes on household income as revealed by the Household Expenditure Survey.

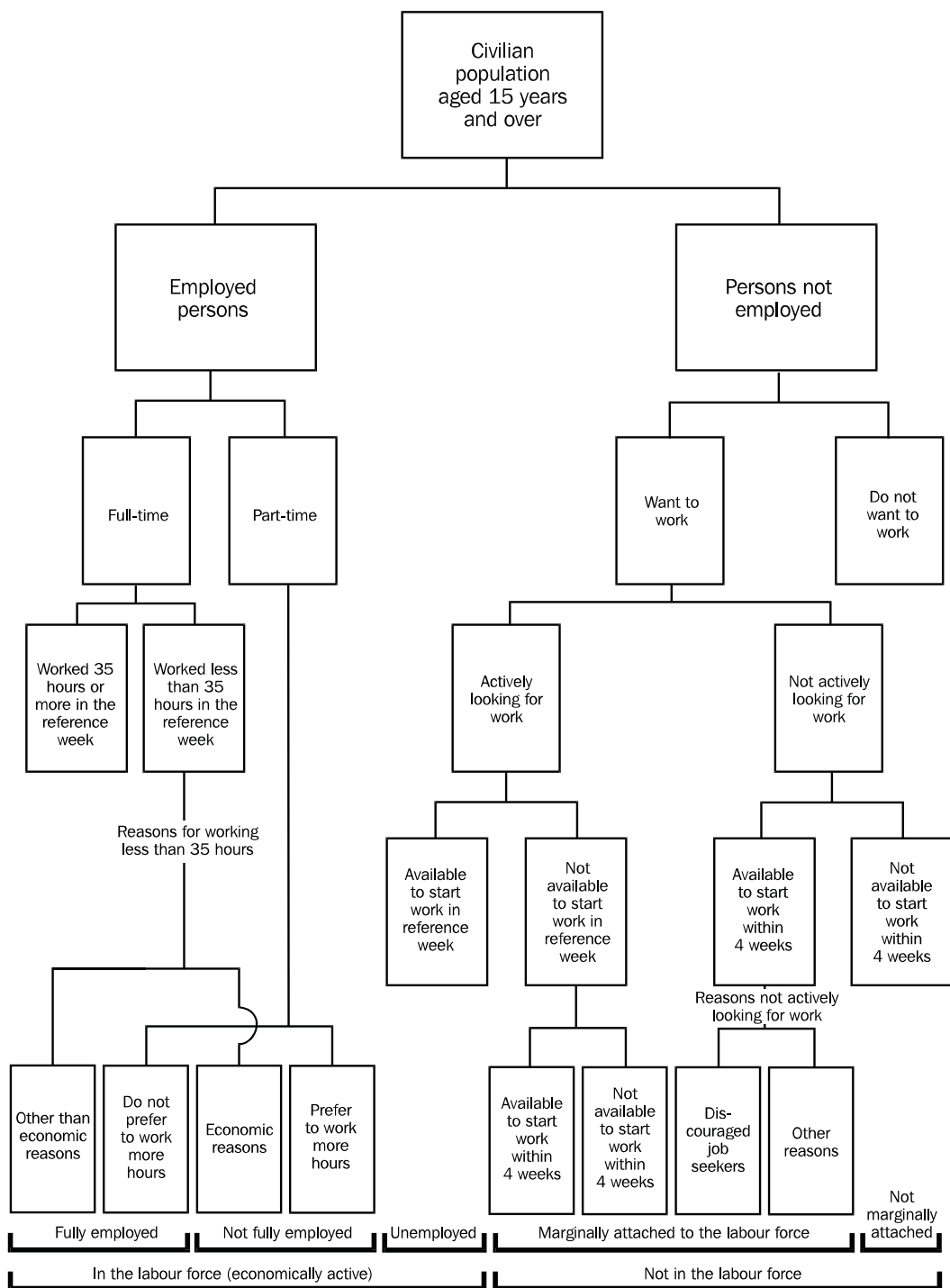


CHAPTER 7

LABOUR FORCE AND DEMOGRAPHY

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7.1 Labour Force Framework



Explanatory Notes

The labour force framework is a map of the population from a labour supply perspective. The ABS Labour Force Survey uses the framework to measure the national labour supply available for the production of goods and services, just as the national accounts provide a measure of the value of that production.

The Labour Force Survey classifies the civilian population aged 15 or more (and hence above compulsory schooling age) as (a) currently economically active (the *labour force*, comprised of the *employed* plus the *unemployed*), and (b) not currently active (those *not in the labour force*). The labour force represents the supply of labour at a given point in time, compatible with national accounts measures of economic activity.

The framework and the survey concepts and definitions are closely comparable with the recommendations of the International Labour Organisation, developed through successive Resolutions of the International Conference of Labour Statisticians.

Labour force statistics such as estimates of employment and unemployment are used to monitor national economic performance, contribute to the formation of national accounts data, and aid the development and monitoring of labour market policy at national and international levels.

To ensure that all economic activity is covered, a practical minimum quantity of work is required (one hour or more per week): this also ensures that unemployment is only measured for those completely without work. Of those completely without work, to be considered unemployed a person must have taken active steps to obtain work and be currently available for work. Otherwise the person is classified as not in the labour force. Thus, the employed, the unemployed and not in the labour force are mutually exclusive and exhaustive measures of the population aged 15 or more.

These basic categories do not fully describe the diversity of non-utilisation or under-utilisation of the labour supply in a complex labour market. From a socioeconomic perspective, they do not describe the *underemployed* (persons working part-time because they could not find a full-time job; or working short-time for reasons imposed by the economic environment like temporary slowdowns in orders or shortages of materials); or the *marginally attached* and *discouraged job seekers* (persons who want work but are either not actively seeking it or are not currently available for work). Measures of these non-utilisation and under-utilisation aspects of labour are

Explanatory Notes *continued*

also accommodated in the labour force framework. Statistics on these aspects are collected through regular supplementary surveys to the monthly Labour Force Survey.

The supply of labour is complex and no single statistic is capable of providing a definitive picture of the labour market.

Further Reading

Information Paper: Measuring Employment and Unemployment (6279.0)

Provides information about the monthly Labour Force Survey, the Australian labour force framework and measuring employment, unemployment and underemployment.

Labour Force, Australia (6203.0)

Contains monthly estimates of employment, unemployment, unemployment rate and labour force participation rate, classified by State and Territory, State capital city, sex, age, school and tertiary attendance, full-time/part-time, duration of unemployment, country of birth and year of arrival in Australia, industry and occupation.

Persons Not in the Labour Force, Australia (6220.0)

Annual. Contains estimates of persons not in the labour force classified by whether they wanted to work, whether looked for work in the last 12 months, reasons for not actively looking for work, main activity, time since last job and details of that job. Characteristics of persons with marginal attachment to the labour force and discouraged jobseekers are included.

Underemployed Workers, Australia (6265.0)

Annual. Provides information on hours-related underemployment. Persons who worked less than 35 hours in the week prior to the survey, who would have preferred to work more hours, were asked about whether they were looking for work with more hours, available to start work with more hours, their experience in looking for work with more hours, the duration of the current period of insufficient work, and the number of extra hours preferred.

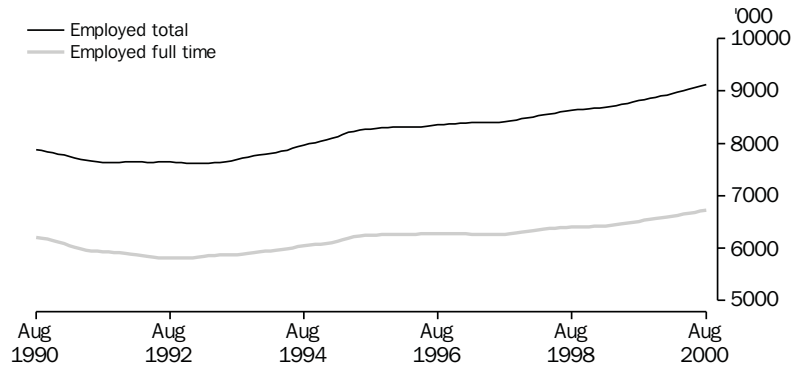
Standards for Statistics on Core Labour Force Variables (1288.0)

Discusses ABS standards for labour force statistics, including the international background, ABS labour force survey concepts, definitions, classifications, and questionnaires.

7.2 Employment

The trend in full-time and total employment decreased in the early 1990s following the 1990–91 economic down-turn. For full-time employment, a slow recovery commenced in September 1992. Growth flattened from mid 1995 to mid 1997, then resumed rising. Increasing at 0.2 per cent per month or better since March 1999, the trend estimate of full-time employment stood at 6.72m in August 2000 (0.91m or 16% above the September 1992 low). In contrast, total employment continued falling until January 1993. Since then, the increase in total employment has been generally stronger than for full-time employment, rising to 9.12m in August 2000, 1.50m or 20% above the January 1993 low point.

EMPLOYED PERSONS: TREND



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

EMPLOYED PERSONS

Period	Full-time aged 15-19 years	Full-time aged 20+ years	Total full-time	Total part-time	Total
	'000	'000	'000	'000	'000
TREND (AUGUST)					
1995	237.7	6 011.0	6 248.7	2 023.5	8 272.2
1996	236.6	6 045.6	6 282.2	2 073.4	8 355.5
1997	220.1	6 045.3	6 265.4	2 148.1	8 413.5
1998	216.8	6 189.8	6 406.6	2 222.2	8 628.8
1999	238.4	6 274.0	6 512.4	2 301.6	8 814.0
TREND (MONTHLY)					
1999-2000					
September	239.4	6 291.4	6 530.9	2 307.2	8 838.0
October	239.9	6 307.2	6 547.1	2 312.7	8 859.8
November	239.9	6 321.9	6 561.7	2 318.8	8 880.5
December	239.2	6 336.6	6 575.7	2 326.5	8 902.2
January	238.5	6 351.7	6 590.3	2 334.4	8 924.7
February	238.5	6 367.7	6 606.2	2 341.3	8 947.5
March	239.3	6 385.5	6 624.8	2 348.0	8 972.8
April	240.7	6 405.0	6 645.7	2 355.6	9 001.3
May	242.4	6 425.1	6 667.5	2 364.7	9 032.2
June	243.9	6 444.3	6 688.3	2 375.6	9 063.8
2000-01					
July	244.9	6 462.1	6 707.0	2 387.4	9 094.4
August	245.5	6 475.3	6 720.8	2 398.4	9 119.2

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

Explanatory Notes

The Labour Force Survey collects Australia's official estimates of employment and unemployment each month by interviewing a sample of some 63,000 persons in private households and other dwellings (e.g. hotels, motels). The survey covers the usually resident civilian population of Australia aged 15 or more.

Employed persons are those aged 15 years and over who, during the reference week, (a) worked one hour or more for payment of any kind or profit in a job, business or farm, or (b) worked one 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.

Employment is an indicator of economic activity, although turning points in the employment series tend to lag turning points in the business cycle.

Explanatory Notes *continued*

Government departments, financial markets, industry organisations and academic analysts use the series to monitor the economy's performance and to develop economic and labour market policy. Employment (and unemployment) data are also used as social indicators by government departments, research organisations and welfare organisations.

Further Reading

Information Paper: Measuring Employment and Unemployment (6279.0)

Provides information about the monthly Labour Force Survey, the Australian labour force framework and measuring employment, unemployment and underemployment.

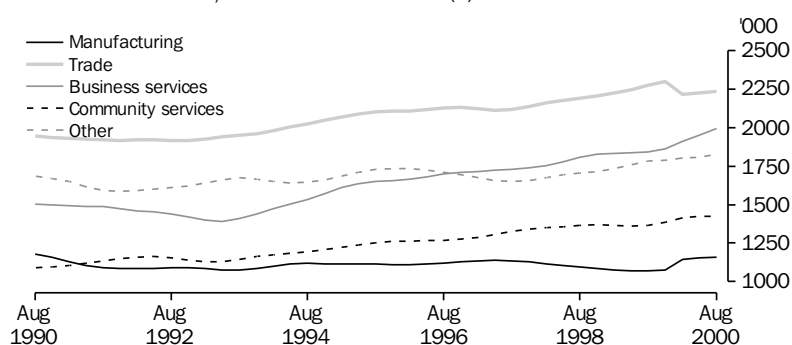
Labour Force, Australia (6203.0)

Contains monthly estimates of employment, unemployment, unemployment rate and labour force participation rate, classified by State and Territory, State capital city, sex, age, school and tertiary attendance, full-time/part-time, duration unemployed, country of birth and year of arrival in Australia, industry and occupation.

7.3 Employed Persons by Industry

Despite a break in series arising from changes to coding techniques in February 2000, employment in Business services has grown strongly since mid-1993 compared with the slower rate of growth in both Trade and Community services, and the effectively flat trend in Manufacturing.

EMPLOYED PERSONS, SELECTED INDUSTRIES(a): TREND



(a) Data for February 2000 onwards are not strictly comparable with earlier periods.

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

EMPLOYED PERSONS BY SELECTED INDUSTRY(a)

Period	Agriculture, forestry, and fishing	Manufacturing	Trade(b)	Business services(c)	Community services(d)	Other industries(e)
	'000	'000	'000	'000	'000	'000
ANNUAL AVERAGE (TREND)						
1995	409.2	1 113.8	2 101.8	1 649.2	1 251.8	1 728.5
1996	419.3	1 119.3	2 125.1	1 698.4	1 268.9	1 709.7
1997	432.0	1 136.6	2 116.7	1 727.3	1 323.5	1 649.0
1998	414.5	1 093.4	2 189.8	1 808.1	1 365.6	1 705.3
QUARTERLY (TREND)						
1998-99						
November	416.0	1 084.1	2 206.5	1 825.5	1 369.8	1 715.3
February	423.7	1 075.2	2 226.0	1 834.6	1 365.6	1 732.3
May	432.8	1 071.7	2 246.0	1 838.1	1 359.4	1 759.4
1999-2000						
August	436.5	1 069.7	2 275.6	1 843.9	1 365.7	1 782.6
November	434.2	1 076.7	2 300.5	1 863.4	1 385.3	1 787.4
February	439.9	1 142.3	2 217.2	1 910.9	1 413.5	1 800.4
May	441.0	1 153.4	2 226.6	1 952.3	1 422.6	1 809.1
2000-01						
August	443.8	1 158.1	2 237.7	1 994.0	1 425.5	1 826.2

(a) Data for February 2000 onwards are not strictly comparable with earlier periods. (b) Trade includes Wholesale trade; Retail trade; and Accommodation, cafes and restaurants. (c) Business services includes Transport and storage; Communication services; Finance and insurance; and Property and business services. (d) Community services includes Health and community services; Cultural and recreational services; and Personal and other services. (e) Other industries includes Mining; Electricity, gas and water supply; Construction, Government administration and defence; and Education.

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

Explanatory Notes

In the Labour Force Survey, for each employed person's main job, the kind of industry, business or service carried out by that person's employer is collected and classified to industry according to the Australian and New Zealand Standard Industry Classification (ANZSIC.)

New coding techniques introduced in February 2000 have resulted in a break in series for Labour Force Survey data classified by industry. For employment estimates at the industry division level, the estimated difference in estimates from the old to the new method varied markedly in size and in statistical significance across the ANZSIC classification. For example, under the new coding method, employment in Wholesale trade was estimated to be 13% lower. In percentage terms, this was the greatest difference at the ANZSIC division level. A significant proportion of responses previously coded to Wholesale trade were coded to Manufacturing and to Retail trade by the new method. There were also significant movements between Manufacturing and Retail trade, resulting in a 5% increase for Manufacturing and a 2% decline in Retail trade.

The ABS also collects information on employee jobs and earnings from a sample survey of employers. That survey provides employee data classified by industry, public/private sector and by State. Information on employment in specific industries is also collected in a number of annual or periodic censuses or surveys of those particular industries.

Estimates of employed persons classified by industry (together with estimates of unemployed persons by industry of employer in previous job) provide insights into changes in the economy for labour market and industry policy planning.

Further Reading

Information Paper: Measuring Employment and Unemployment (6279.0)

Provides information about the monthly Labour Force Survey, the Australian labour force framework and measuring employment, unemployment and underemployment.

Labour Force, Australia (6203.0)

Contains monthly estimates of employment, unemployment, unemployment rate and labour force participation rate, classified by State and Territory, State capital city, sex, age, school and tertiary attendance, full-time/part-time, duration of unemployment, country of birth and year of arrival in Australia, industry and occupation.

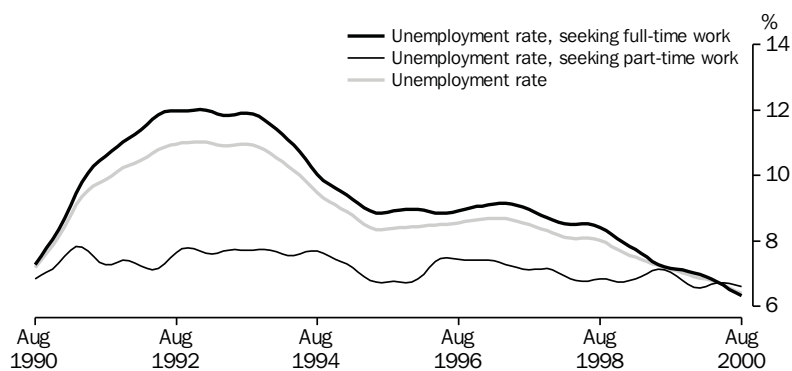
Wage and Salary Earners, Australia (6248.0)

Contains estimates of employees by sex, full-time/part-time, industry and public/private sector. Estimates of gross earnings classified by industry and sector are also shown. Estimates are available for Australia, States and Territories.

7.4 Unemployment and Labour Force Participation

Following the recession in 1990–91, the overall trend unemployment rate rose rapidly to reach 11% in August 1992. It stayed around that level until October 1993. The unemployment rate decreased from late 1993 but still remained above 8% until August 1998. Since then, the trend has fallen relatively steadily, to 6.4% in August 2000. The trend full-time unemployment rate followed a similar pattern. It peaked at 12.0% between July 1992 and February 1993 then generally fell to 6.3% in August 2000.

UNEMPLOYMENT RATE, PERSONS: TREND



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

LABOUR FORCE STATUS OF CIVILIAN POPULATION: PERSONS

<i>Period</i>	<i>Unemployed</i> '000	<i>Employed</i> '000	<i>Labour force</i> '000	<i>Civilian population aged 15+ years(a)</i> '000	<i>Unemployment rate</i> %	<i>Participation rate</i> %
TREND (AUGUST)						
1995	755.2	8 272.2	9 027.4	14 160.3	8.4	63.8
1996	782.1	8 355.5	9 137.6	14 375.3	8.6	63.6
1997	781.5	8 413.5	9 195.1	14 581.1	8.5	63.1
1998	752.3	8 628.8	9 381.1	14 794.8	8.0	63.4
1999	677.3	8 814.0	9 491.2	15 018.9	7.1	63.2
TREND (MONTHLY)						
1990–2000						
September	673.8	8 838.0	9 511.9	15 037.4	7.1	63.2
October	670.1	8 859.8	9 529.9	15 059.2	7.0	63.3
November	665.8	8 880.5	9 546.3	15 081.0	7.0	63.3
December	661.2	8 902.2	9 563.4	15 102.9	6.9	63.3
January	657.8	8 924.7	9 582.5	15 120.3	6.9	63.4
February	656.0	8 947.5	9 603.5	15 137.7	6.8	63.4
March	654.6	8 972.8	9 627.3	15 155.1	6.8	63.5
April	651.1	9 001.3	9 652.4	15 172.5	6.7	63.6
May	644.9	9 032.2	9 677.1	15 190.0	6.7	63.7
June	637.5	9 063.8	9 701.3	15 207.5	6.6	63.8
2000–01						
July	630.1	9 094.4	9 724.4	15 225.7	6.5	63.9
August	623.2	9 119.2	9 742.5	15 243.9	6.4	63.9

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

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

Explanatory Notes

The ABS Labour Force Survey provides monthly unemployment estimates.

Broadly, the *unemployed* are those in the labour force who are not employed but who are actively looking for work and are available to start work. Unemployment estimates provide a measure of the degree of oversupply of labour. This oversupply is usually compared with the demand for labour expressed as employment plus job vacancies.

The *unemployment rate* for any group is defined as the number of unemployed persons expressed as a percentage of the labour force (employed plus unemployed). This measure of labour under-utilisation is an important indicator of the performance of the economy. A high rate of unemployment indicates limited employment opportunities in an over-supplied labour market. A low rate of unemployment indicates a tight labour market, potential scarcity of skilled labour and possible future cost pressures from wage demands by workers.

The *labour force 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 proportion of the population who form the labour supply. The participation rate is important because it affects the size of the labour force and measures such as the unemployment rate which are derived as percentages of the labour force.

While turning points in the unemployment level, unemployment rate and participation rate series lag turning points in general economic activity, trends in these series over time serve as indicators of the performance of the economy at large. Estimates of unemployment levels, duration of unemployment and of the unemployment rate for different groups of people, (e.g. younger people, older people, females etc.) can also be used to identify areas of social concern. Annual measures of underemployment and marginal attachment can be used to shed more light on the diversity of labour under-utilisation.

Further Reading

Information Paper: Measuring Employment and Unemployment (6279.0)

Provides information about the monthly Labour Force Survey, the Australian labour force framework and measuring employment, unemployment and underemployment.

Labour Force, Australia (6203.0)

Contains monthly estimates of employment, unemployment, unemployment rate and labour force participation rate, classified by State and Territory, State capital city, sex, age, school and tertiary attendance, full-time/part-time, duration unemployed, country of birth and year of arrival in Australia, industry and occupation.

Labour Force Projections, Australia (6260.0)

Projections of the labour force and labour force participation rates for Australia for each year to 2016, classified by sex and age group. Includes detailed notes on methodology used.

Persons Not in the Labour Force, Australia (6220.0)

Annual. Contains estimates of persons not in the labour force classified by whether they wanted to work, whether looked for work in the last 12 months, reasons for not actively looking for work, main activity, time since last job and details of that job. Characteristics of persons with marginal attachment to the labour force and discouraged jobseekers are included.

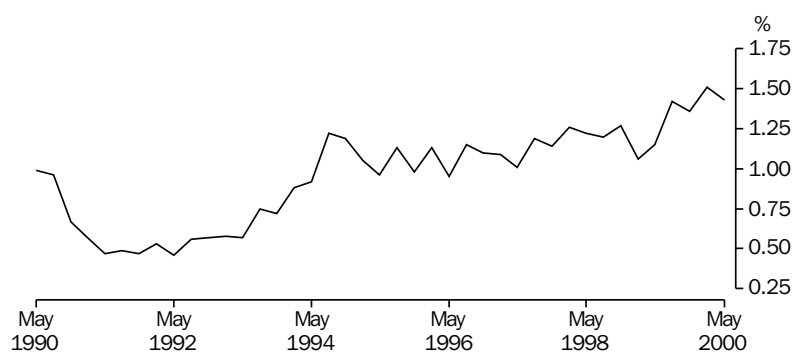
Underemployed Workers, Australia (6265.0)

Annual. Provides information on hours-related underemployment. Persons who worked less than 35 hours in the week prior to the survey, who would have preferred to work more hours, were asked about whether they were looking for work with more hours, available to start work with more hours, their experience in looking for work with more hours, the duration of the current period of insufficient work, and the number of extra hours preferred.

7.5 Job Vacancies

The job vacancy rate declined sharply in 1990 and early 1991, falling from 0.99% in May 1990 to 0.47% in May 1991. It then increased steadily for the next 2 years before rising sharply to 1.22% in August 1994. Since then it has fluctuated, but has shown an upward trend. In May 2000 it stood at 1.43%.

JOB VACANCY RATE: TREND



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

JOB VACANCIES

Period	Manufacturing	All industries	Job vacancy rate
	'000	'000	%
ANNUAL AVERAGE			
1994-95	12.8	76.6	1.11
1995-96	10.3	73.4	1.05
1996-97	8.2	77.4	1.09
1997-98	8.9	90.0	1.20
1998-99	9.6	360.5	1.17
1999-2000	14.2	108.2	1.43
QUARTERLY			
1998-99			
February	10.3	82.8	1.06
May	12.2	88.9	1.15
1999-2000			
August	14.1	110.0	1.42
November	14.0	103.2	1.36
February	16.4	112.7	1.51
May	12.2	106.8	1.43

Source: Job Vacancies, 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 decreases. 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 strong economic growth tend to be characterised by an increase in job vacancies.

A job vacancy is a job available for immediate filling and for which recruitment action has taken place. 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. Jobs available only to persons employed by the enterprise or organisation are excluded.

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

Further Reading

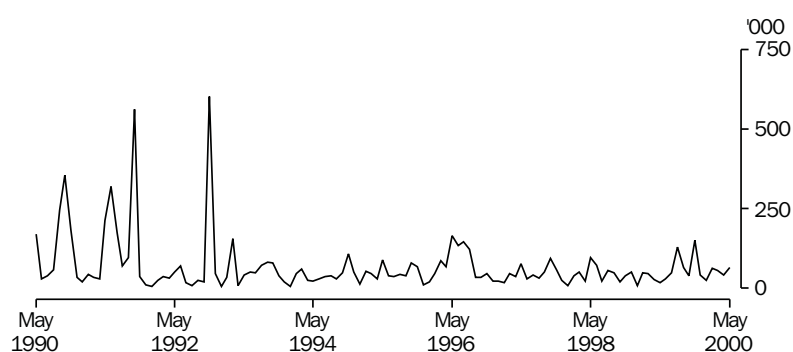
Job Vacancies, Australia (6354.0)

Contains quarterly estimates of the number of job vacancies and job vacancy rates by sector, industry and State and Territory.

7.6 Industrial Disputes

The number of working days lost due to industrial disputes was 790,000 in the 12 months to June 2000. This was the highest level recorded since 1995–96, when 800,700 working days were lost. However it was still considerably lower than the levels recorded in the early years of the 1990s.

WORKING DAYS LOST



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

INDUSTRIAL DISPUTES IN PROGRESS, AUSTRALIA

Period	Disputes	Employees involved	Working days lost	Working days lost per '000 employees(a)
	no.	'000	'000	no.
ANNUAL				
1994–95	649	344.7	579.7	86
1995–96	598	480.2	800.7	115
1996–97	495	510.8	640.1	90
1997–98	428	354.6	591.8	82
1998–99	659	277.2	412.0	56
1999–2000	749	577.7	790.1	104
MONTHLY				
1999–2000				
July	84	36.4	48.0	n.a.
August	89	166.8	130.2	n.a.
September	74	61.9	64.9	n.a.
October	72	19.4	40.4	n.a.
November	73	51.2	150.2	n.a.
December	71	14.1	41.1	n.a.
January	67	17.4	25.6	n.a.
February	84	71.9	63.7	n.a.
March	80	27.5	56.6	n.a.
April	64	47.7	42.2	n.a.
May	85	60.9	66.0	n.a.
June	77	58.6	61.2	n.a.

(a) The basis for the calculation of working days lost per thousand employees was changed in January 1995 to use estimates taken from the ABS Labour Force survey only.

Source: *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.

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

Statistics on industrial disputes are used by government departments, industrial relations authorities, employer organisations, and trade unions, as broad indicators of the level of industrial disputation and the development of industrial relations policy.

Further Reading

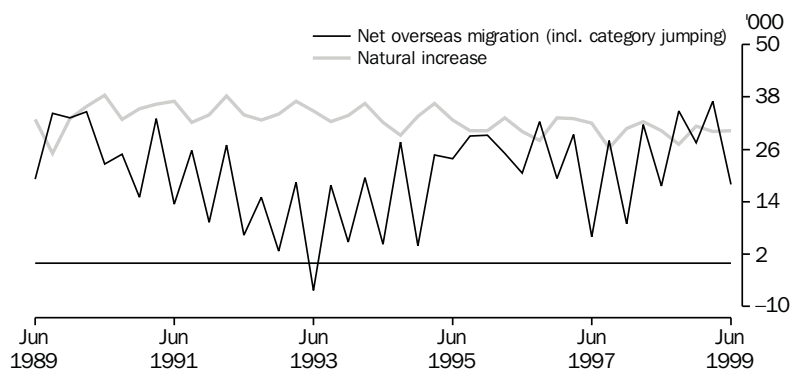
Industrial Disputes, Australia (6321.0)

Provides monthly estimates of number of disputes, employees involved, working days lost and working days lost per thousand employees in disputes involving stoppages of work of ten working days or more, classified by State, industry, duration of disputes, cause and method of settlement.

7.7 Population Change

Australia's population grew at an average annual rate of 1.2% between June 1989 and June 1999. Natural increase has been the main contributor to Australia's population growth on an annual basis since 1981–82 except in 1987–88 and 1988–89 when net overseas migration was higher. The highest population growth rates of the 1990s were recorded in these two years. While natural increase remained fairly stable during the decade, net overseas migration fluctuated quite substantially in response to changes in government policy. At 30 June 1999 Australia's population was almost 19 million, an increase of 13% on the estimate 10 years earlier.

COMPONENTS OF POPULATION CHANGE



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

ESTIMATED RESIDENT POPULATION AND COMPONENTS OF POPULATION CHANGE(a)

<i>Period</i>	<i>Natural increase</i>	<i>Net overseas migration</i>	<i>Total increase(b)</i>	<i>Total population at end of period</i>
	'000	'000	'000	'000
YEAR ENDED 30 JUNE				
1993-94	134.8	46.5	187.6	17 854.7
1994-95	132.0	80.1	217.0	18 071.8
1995-96	124.0	104.1	239.0	18 310.7
1996-97	126.4	87.1	213.4	18 524.2
1997-98	119.9	86.4	206.2	18 730.4
1998-99	119.1	117.3	236.4	18 966.8
QUARTERLY				
1997-98				
September	26.4	28.0	54.4	18 578.5
December	30.9	8.9	39.8	18 618.3
March	32.3	31.7	64.1	18 682.4
June	30.3	17.7	48.0	18 730.4
1998-99				
September	27.2	34.8	62.0	18 792.4
December	31.4	27.4	58.8	18 851.2
March	30.1	37.1	67.2	18 918.4
June	30.4	18.0	48.4	18 966.8

(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) for intercensal discrepancy. A description of the intercensal discrepancy is given in Demographic Estimates and Projections: Concepts, Sources and Methods, Statistical Concepts Library, ABS website, <URL: <http://www.abs.gov.au>>. (b) Usual residence basis.

Source: 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 that for births, deaths, overseas and interstate migration.

Changes in Australia's population are caused by 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 stay from short-term to permanent or long-term or vice versa. Therefore the net overseas migration component of the population is adjusted for such changes so that the population estimates truly represent the resident population at any point in time.

Population estimates have wide application by both government and private enterprise. Population estimates are used by the Government to determine the number of seats allocated to each State and Territory 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.

The ABS also produces population projections for Australia, for each State and Territory and for capital cities/balance of States based on a range of specified assumptions.

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 births, deaths, overseas and interstate migration as well as marriages and divorces are also included.

Population by Sex and Age, States and Territories of Australia (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.

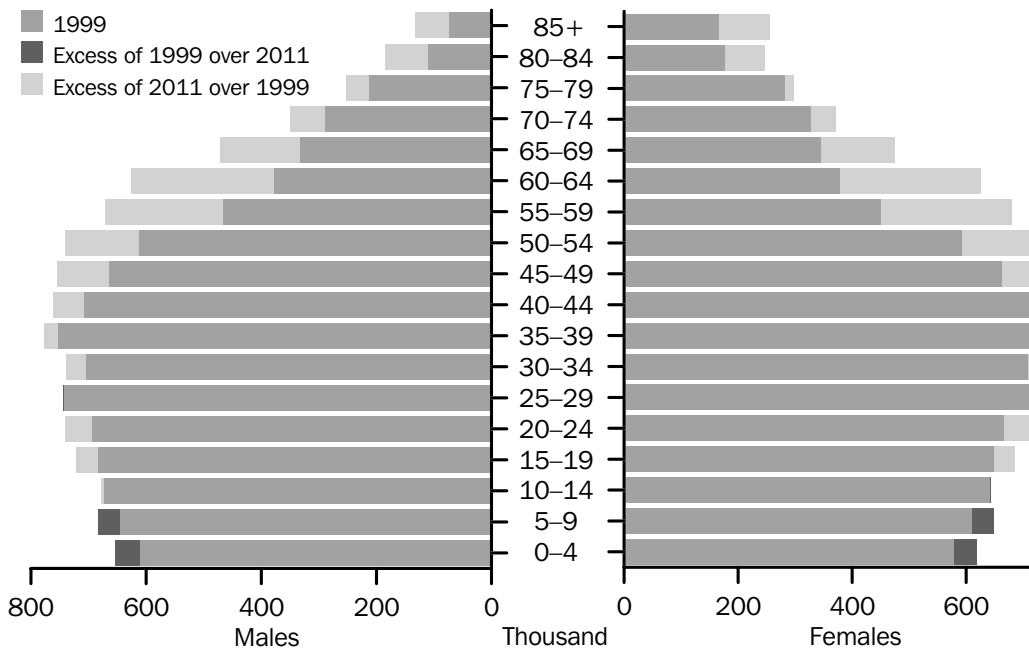
Population Projections, Australia (3222.0)

Contains projections of the resident population of Australia, each State and Territory and capital city and balances of State by age and sex for each year to 2051.

7.8 Population Structure

The two main features of Australia's population at the moment are low fertility rates and the ageing of the population. Since 1990, the total fertility rate has fallen steadily and is now at the lowest level ever recorded (1.8 babies per woman in 1998). Falling fertility and increasing longevity are the main causes of the ageing of the population. The median age of the population in 1999 was 34.9 years. Based on certain assumptions about fertility, mortality and migration (series II of the projections), the median age of the population is projected to increase to 38.5 by 2011. At June 1999 the number of persons aged 65 years or more was 2.3m, or 12.2% of the total population. This is projected to increase to 3.0m or 14.3% of the total population in the year 2011. The proportion of children aged 0–14 years is projected to decrease from 20.7% of the total population at June 1999 to 17.7% in the year 2011.

AUSTRALIAN POPULATION: AGE AND SEX DISTRIBUTION 1999 AND 2011



Population by Age and Sex, Australian States and Territories (3201.0) and Population Projections, Australia (3222.0)

DEMOGRAPHY

Year ended 31 December	Total fertility rate	Life expectancy at birth(a)		Infant mortality rate	Net overseas migration
		Males	Females		
1993	1.86	75.0	80.9	6.1	34 800
1994	1.85	75.0	80.9	5.9	55 500
1995	1.83	75.0	80.8	5.7	106 900
1996	1.80	75.2	81.1	5.8	97 400
1997	1.78	75.6	81.3	5.3	72 400
1998	1.76	75.9	81.5	5.0	111 600

(a) From 1995, life expectancy at birth values refer to the three years ending in the reference year. From 1995, the life tables were constructed jointly by the Australian Government Actuary and the ABS.

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

Explanatory Notes

Demographic data assist researchers and policy makers in studying the characteristics of the population and in understanding how these characteristics have changed over time.

The total fertility rate represents the number of children a woman would bear during her lifetime if she experienced current age-specific fertility rates at each age of her reproductive life. It is obtained by summing age-specific birth rates.

Age-specific birth rates are the number of live births registered for each age during the calendar year, per 1,000 of the female estimated resident population of the same age at 30 June.

Life expectancy refers to the average number of additional years a person of a given age and sex might expect to live if the age-specific death rates of the given period continued throughout his/her lifetime. Life expectancy is often used to indicate changes in the health status of a community or to make comparisons between communities.

The infant mortality rate measures the number of deaths of children under one year of age in a calendar year per 1,000 live births in the same calendar year, and is also a key indicator of the health of a community.

Net overseas migration is net permanent and long-term overseas migration plus an adjustment for the effect of change in stay from short-term to permanent or long-term or vice versa.

Natural increase is the excess of births over deaths. Net overseas migration and natural increase are the two components of Australia's population change.

The ABS also produces population projections for Australia, for each State and Territory and for capital cities/balance of States based on a range of specified assumptions.

Further Reading

Australian Demographic Statistics (3101.0)

Contains quarterly estimates of the population by States, Territories and Australia. Details of births, deaths, overseas and interstate migration, as well as marriages and divorces.

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.

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.

Causes of Death, Australia (3303.0)

Contains annual data on the causes of death by selected age groups.

Marriages and Divorces, Australia (3310.0)

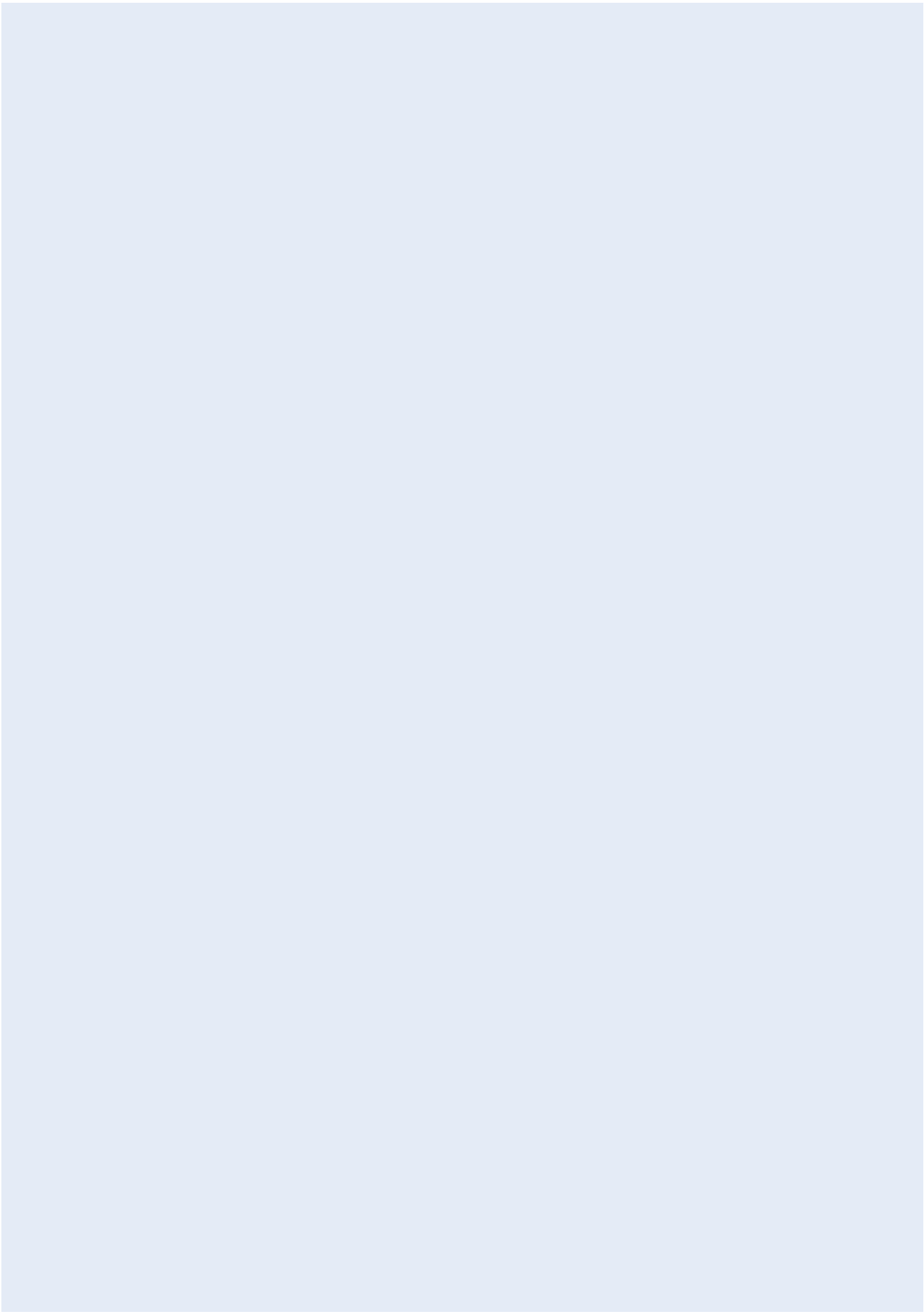
Presents details of marriages and divorces and includes estimates of the population by marital status.

Migration, Australia (3412.0)

Gives details on the breakdown of net overseas migration and includes estimates of the population by country of birth.

Population Projections, Australia (3222.0)

Contains projections of the resident population of Australia, each State and Territory and capital city and balances of State by age and sex for each year to 2051.



CHAPTER 8

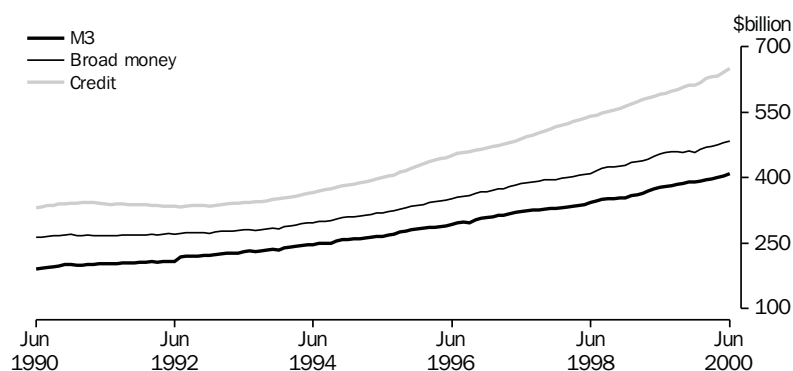
FINANCIAL MARKETS

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8.1 M3, Broad Money and Credit

Over the period from 1987 to 2000 the amount of money in circulation in the Australian economy, as measured by the broad money supply, increased from \$187.3b in August 1987 to \$483.2b in June 2000. Money supply grew rapidly from 1988 to 1990 after which growth slowed until mid-1993. Strong growth was then recorded from late 1993 to 2000.

M3, BROAD MONEY AND CREDIT: SEASONALLY ADJUSTED



Source: Reserve Bank of Australia, Monthly data.

SELECTED FINANCIAL AGGREGATES

Period	M3(a)	Broad money(b)	Total credit(c)
	\$m	\$m	\$m
SEASONALLY ADJUSTED			
June 1995	265 199	319 224	401 143
June 1996	292 373	351 799	450 273
June 1997	323 205	386 088	488 872
June 1998	343 216	409 326	540 634
June 1999	377 794	454 079	591 628
1999-2000			
July	379 273	457 835	592 864
August	381 502	459 669	597 487
September	385 025	458 877	602 104
October	386 643	457 408	607 287
November	389 879	460 819	612 538
December	389 581	458 270	611 780
January	392 358	464 484	616 895
February	394 385	469 127	626 952
March	396 320	470 945	630 597
April	399 937	474 765	633 019
May	404 663	479 706	641 751
June	409 145	483 159	650 418

(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 NBFIs. (c) Loans, advances and bills discounted to the private sector (does not include loans to other financial intermediaries).

Source: Reserve Bank of Australia Bulletin.

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 definitions of the measures are as follows:

Currency is notes and coins on issue less holdings of notes and coins by all banks and the Reserve Bank.

M1 is currency plus current deposits with banks.

M3 is M1 plus other deposits of the private non-banks with banks.

Broad money is M3 plus borrowings from the private sector by non-bank depository corporations less holdings of currency and deposits of non-bank depository corporations.

Credit is 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 and other alternative means of payment such as EFTPOS; hence the reduced focus on this aggregate.

Between 1976 and 1985 the authorities established targets for M3 growth as part of monetary policy. Relationships between money and credit, economic growth and inflation are complex. In the period following deregulation of the financial system, these relationships changed and targeting was discontinued. Monetary aggregates are now treated as one of a set of economic indicators and the authorities target economic growth, employment and inflation directly.

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 Reserve Bank of Australia press release containing Australia's financial aggregates.

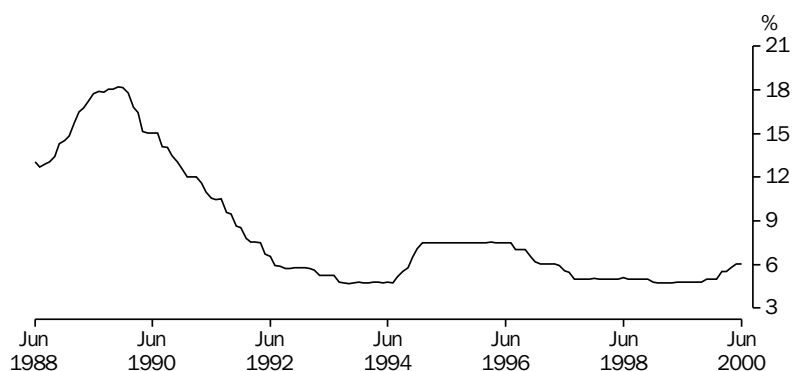
Reserve Bank of Australia Bulletin

Contains monthly levels of selected monetary aggregates for Australia. The Bulletin also contains feature articles of interest on this topic.

8.2 Interest Rates

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 increased to around 7.50% between January 1995 and July 1996 before decreasing again to 4.74% in February 1999. Since then the call rate gradually increased to approximately 6.00% in June 1999.

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	Bank accepted bills—90 day(c)	Commonwealth government 10-year Treasury bonds
	%	%	%	%
ANNUAL				
June 1995	7.51	10.70	7.55	9.21
June 1996	7.51	10.80	7.57	8.88
June 1997	5.57	9.00	5.35	7.05
June 1998	5.07	8.05	5.32	5.58
June 1999	4.80	7.95	4.93	6.27
MONTHLY				
1999–2000				
July	4.76	7.95	4.89	6.24
August	4.76	7.95	4.92	6.35
September	4.78	7.95	5.01	6.30
October	4.79	7.95	5.31	6.63
November	4.99	8.15	5.44	6.64
December	5.01	8.20	5.65	6.96
January	5.01	8.25	5.66	7.16
February	5.51	8.75	5.80	6.65
March	5.50	8.75	5.89	6.36
April	5.78	9.00	6.04	6.39
May	6.02	9.30	6.31	6.27
June	n.a.	9.30	6.23	6.16

(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 Bulletin (RBA).

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 lender's funds.

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. that have a temporary shortfall.

The Reserve Bank of Australia operates in the short-term money market (by borrowing and lending funds itself) in order to influence the cash rate. 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 Reserve Bank, 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. Broadly speaking, this is what is meant by monetary policy.

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.

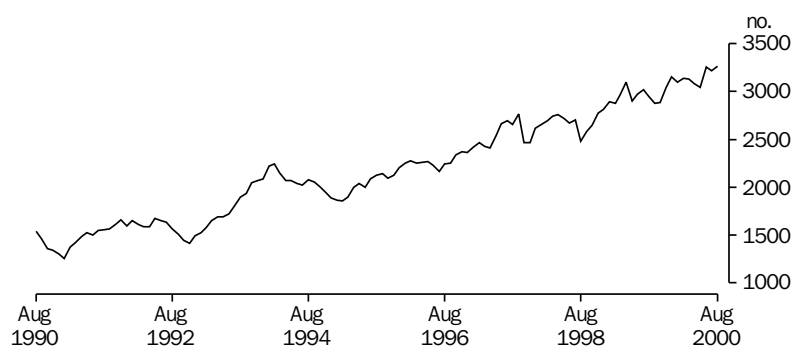
Reserve Bank of Australia Bulletin

Contains information on interest rates for the money market, capital market, banks and other financial institutions.

8.3 Share Price Indexes

The All Ordinaries index generally increased steadily between August 1990 and August 2000, with stronger upward trends from April 1995. The main exceptions to general increase were in October 1997 and August 1998 when the index turned down sharply.

ALL ORDINARIES INDEX (31 DECEMBER 1979 = 500.0)



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

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

Period	All industrials	All resources	All ordinaries
ANNUAL			
1997-98	4 689.0	1 037.4	2 668.4
1998-99	5 188.1	1 209.8	2 968.9
1999-2000	5 696.7	1 323.2	3 257.6
MONTHLY			
1999-2000			
July	5 253.2	1 259.3	3 019.9
August	5 115.7	1 254.1	2 951.9
September	4 928.4	1 302.3	2 881.1
October	5 027.7	1 191.2	2 885.1
November	5 294.1	1 270.3	3 044.0
December	5 403.4	1 416.9	3 152.5
January	5 376.8	1 301.8	3 096.0
February	5 596.7	1 125.7	3 135.8
March	5 559.7	1 166.3	3 133.3
April	5 434.6	1 200.0	3 085.1
May	5 330.4	1 216.0	3 040.6
June	5 696.7	1 323.2	3 257.6
2000-01			
July	5 621.3	1 303.2	3 213.6
August	5 676.1	1 365.1	3 261.7

(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, Monthly data.

Explanatory Notes

Share price indexes provide an indication of price movements for listed shares on the Australian Stock Exchange (ASX). One of the most important of these is the All Ordinaries index. Share prices reflect business confidence in general, as well as expectations in specific industries.

On 3 April 2000 Standard & Poors took over the management of the ASX Indices. The All Ordinaries now includes 500 stocks being selected solely by market capitalisation (the market value of shares on issue, calculated using the number of shares multiplied by the share price for each company).

Another important index is the all resources index which measures the movement in share prices for leading mining and oil companies. There are also 24 sub-indexes for specific sectors within the share market.

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. However, accumulation indexes, which indicate total pre-tax returns (after reinvesting dividends) from investments in listed shares, are also calculated.

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.

Australian Stock Exchange Fact Book 2000

Contains statistics to 31 December 1999.

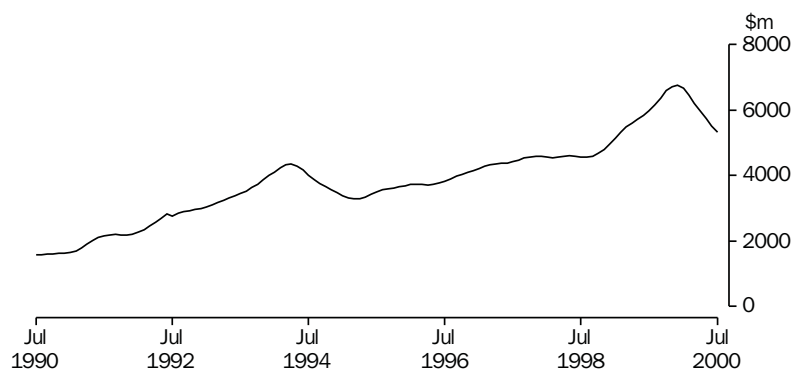
Australian Stock Exchange Website

<URL: <http://www.asx.com.au>>.

8.4 Home Loans

The trend series for secured finance commitments to individuals for owner occupied housing has shown two major periods of activity since July 1990. The series peaked at \$4,351m in April 1994 before declining to a value of \$3,283m in March 1995. The series then increased gradually until November 1998, after which it grew very strongly until December 1999, when the series high of \$6,752m was recorded. This recent peak in housing finance commitments was due to a combination of the strength in the construction finance commitments series, as borrowers sought to organise the completion of housing construction work before the introduction of The New Taxation System in July 2000, and an environment of buoyant household sector confidence. A weakening construction finance series, along with rising interest rates, has contributed to the recent steep decline in the series from its December 1999 peak.

TOTAL HOUSING FINANCE FOR OWNER OCCUPATION: **TREND**



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

SECURED HOUSING FINANCE COMMITMENTS TO INDIVIDUALS(a)

Period	Construction of dwellings	Purchase of newly erected dwellings	Purchase of established dwellings(b)	Total	New bank home loans interest rate(c)
	\$m	\$m	\$m	\$m	%
ANNUAL					
1994-95	7 275.3	2 224.6	32 806.1	42 306.0	10.50
1995-96	6 086.1	2 178.1	35 414.4	43 678.5	9.75
1996-97	6 649.1	2 653.9	40 676.3	49 979.3	7.20
1997-98	8 380.5	2 907.4	43 374.8	54 662.7	6.70
1998-99	9 355.8	2 801.6	49 342.4	61 499.9	6.50
1999-2000	10 616.7	2 840.8	61 494.8	74 952.3	7.80
MONTHLY (TREND)					
1998-99					
May	858.0	234.6	4 621.0	5 713.6	6.50
June	874.8	236.2	4 712.2	5 823.2	6.50
1999-2000					
July	897.5	238.0	4 833.8	5 969.3	6.55
August	928.4	238.9	4 984.4	6 151.7	6.55
September	967.4	240.1	5 161.9	6 369.4	6.55
October	1 005.7	242.1	5 335.5	6 583.3	6.55
November	1 027.5	244.2	5 449.3	6 721.0	6.80
December	1 024.0	244.7	5 483.1	6 751.8	6.80
January	989.7	243.4	5 427.4	6 660.5	6.80
February	925.7	239.7	5 294.8	6 460.2	7.30
March	845.8	234.2	5 130.4	6 210.4	7.30
April	763.4	228.0	4 974.8	5 966.2	7.55
May	686.0	220.2	4 826.2	5 732.4	7.80
June	617.7	212.2	4 688.7	5 518.6	7.80
2000-01					
July	558.3	204.0	4 569.8	5 332.1	7.80

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

Source: *Housing Finance for Owner Occupation, Australia (5609.0), Monthly data and Reserve Bank of Australia Bulletin.*

Explanatory Notes

The housing finance series represents the monthly value of commitments by financial institutions to provide finance for the purchase of owner occupied housing. The value of finance commitments may increase as the number of commitments increases, or as the average size of all commitments increases. A finance commitment usually (but not always) precedes the provision of finance by the lender to the borrower. For example, a lender may make a commitment to lend a specified amount for the construction of a dwelling, and then progressively provide the finance over a number of months as construction work is completed.

Not all housing purchases are financed by a loan from a financial institution. A dwelling may be bought without the need for a loan, or a loan may be obtained from a family member, a solicitor or an accountant (or other non-financial entities).

Monetary policy influences the interest rate lenders charge housing finance borrowers. When monetary policy is tightened, short term interest rates rise, and there is upward pressure on the cost of borrowing. When monetary policy is loosened, short term interest rates fall, and there is downward pressure on borrowing costs. Interest rates have an important bearing on the demand for housing finance.

Further Reading

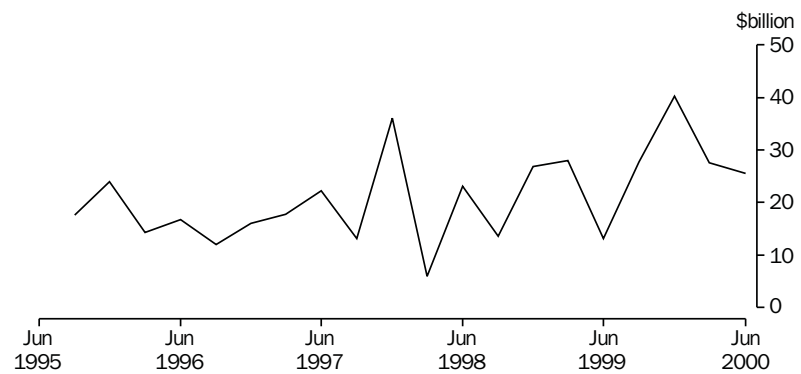
Housing Finance for Owner Occupation, Australia (5609.0)
Presents data on secured finance commitments to individuals for construction of dwellings, purchase of new and established dwellings by banks, permanent building societies and other lenders.

Finance, Australia (5611.0)
Contains comprehensive information on the Australian finance sector.

8.5 Financial Accounts

Total demand for credit by the non-financial sectors during the year ended June 2000 was \$121.0b. At the end of 30 June 2000, total credit market outstandings were \$1567.3b. The fall in demand for credit for the most recent two quarters has been the result of decreasing demand by all non-financial sectors, coupled with the repayment of debt by both Commonwealth and State and Local governments.

TOTAL DEMAND FOR CREDIT



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

Financial Markets

DEMAND FOR CREDIT (\$b)

<i>Period</i>	<i>1995–96</i>	<i>1996–97</i>	<i>1997–98</i>	<i>1998–99</i>	<i>1999–2000</i>
Total funds raised on conventional credit markets by non-financial domestic sectors	73.1	75.3	92.7	81.4	121.0
<i>Private non-financial corporations</i>					
Bills of exchange	6.9	-0.4	3.7	3.1	5.1
One name paper	1.7	1.2	-0.4	0.4	-1.6
Bonds	2.9	2.0	4.7	5.9	6.8
Loans and placements	14.3	12.5	24.6	12.9	9.0
Shares and other equity (a)	20.7	31.3	22.1	28.8	39.7
<i>National public non-financial corporations</i>					
Bills of exchange	0.2	—	—	0.1	0.1
One name paper	0.6	0.5	0.2	-0.1	-0.3
Bonds	-0.7	-0.4	1.1	0.6	2.5
Loans and placements	-0.3	2.8	-3.4	0.2	-0.1
Shares and other equity (a)	-0.2	-0.7	14.3	-0.3	16.1
<i>State and local public non-financial corporations</i>					
Bills of exchange	0.2	—	—	0.1	0.1
Bonds	0.6	0.5	0.2	-0.1	-0.3
Loans and placements	-0.7	-0.4	1.1	0.6	2.5
<i>National general government</i>					
One name paper	0.9	-1.8	-2.6	-2.6	-1.9
Bonds	5.9	4.0	-11.9	-6.4	-10.8
<i>State and local general government</i>					
Bonds	—	—	—	—	0.1
Loans and placements	-7.9	-3.7	-0.1	-3.2	-3.5
<i>Households</i>					
Bills of exchange	-0.8	-0.6	0.1	0.5	0.1
Loans and placements	31.3	30.4	41.6	42.3	59.2

(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. Also excluded are all non-market funding arrangements, such as debt and equity claims between related companies, levels of government, and governments and their trading enterprises, as are some types of financial instruments, such as trade debts, not considered to be part of an organised market.

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

Australian National Accounts: Concepts, Sources and Methods (5216.0), which is available in the Statistical Concepts Library on the ABS Internet site at <URL: <http://www.abs.gov.au>>.

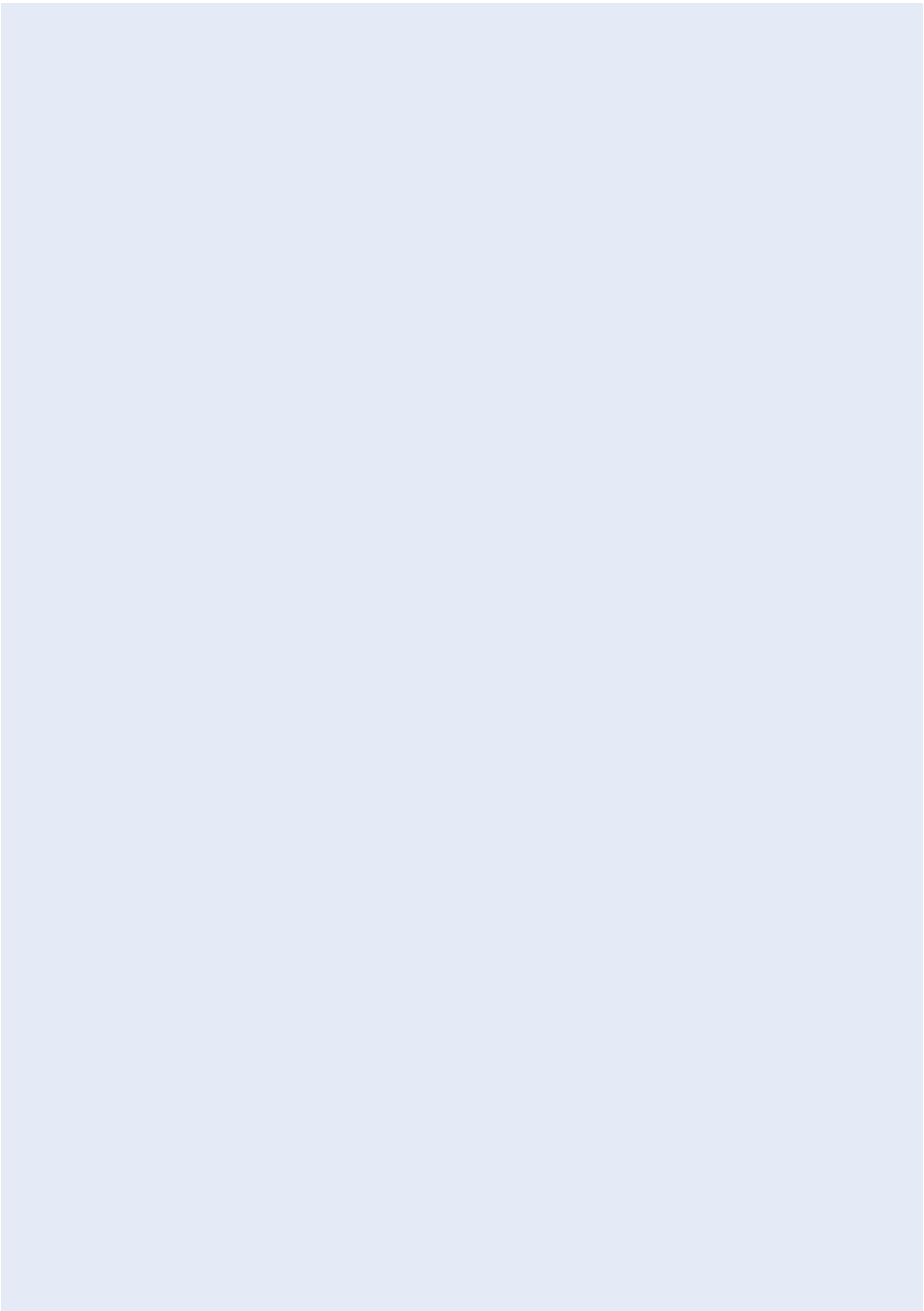
Contains a detailed explanation of the Australian system of national accounts, which includes financial accounts, including major concepts and definitions.

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.

Finance, Australia (5611.0)

Contains comprehensive information on the Australian finance sector.



CHAPTER 9

INTERNATIONAL COMPARISONS

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International Comparisons

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

Care must be taken when comparing economic indicators between countries. Statistical systems vary considerably between countries, which affects the comparability of data.

Australian and other government statistical agencies throughout the world produce and present national accounts based on the principles contained in the *System of National Accounts 1993* (SNA93). Although a number of other international standards have been developed for specific areas of economic statistics, such as the International Monetary Fund's *Balance of Payments Manual* and *A Manual on Government Finance Statistics*, the SNA93 has the central position in the standard setting process for economic statistics generally. However, the degree to which SNA93 is implemented varies considerably between countries.

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

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

Further Reading

Australian Economic Indicators (1350.0)

A comprehensive, monthly compendium of economic statistics including international comparisons. Generally presents statistics for the last nine years.

OECD Economic Outlook

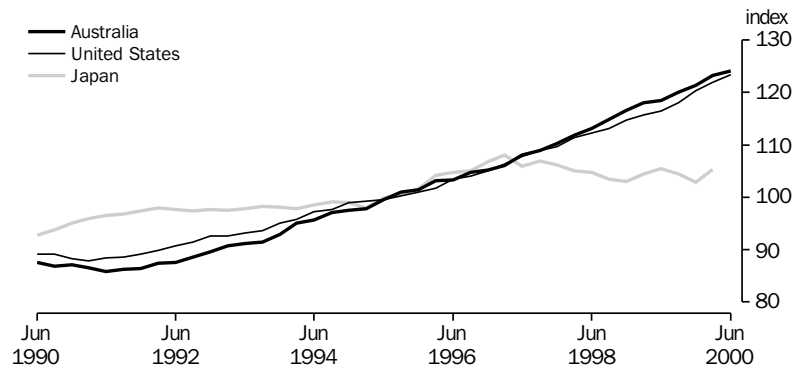
Presents data on OECD member countries, published in June and December of each year, including employment/unemployment, current account balance, inflation and GDP.

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.

9.1 Real Gross Domestic Product Volume Index

REAL GROSS DOMESTIC PRODUCT VOLUME INDEXES: SEASONALLY ADJUSTED



Source: OECD, Quarterly data

REAL GROSS DOMESTIC PRODUCT VOLUME INDEXES(a) (1995 = 100.0)

Period	United States	Japan	Germany	United Kingdom	OECD Major 7	Australia
ANNUAL						
1994–95	98.8	99.0	99.3	99.0	99.0	98.0
1995–96	101.6	102.7	100.2	101.2	101.4	102.2
1996–97	105.8	106.4	101.6	104.2	104.7	106.0
1997–98	110.6	105.7	103.5	107.8	107.7	111.1
1998–99	115.0	104.1	104.6	109.9	110.2	117.0
1999–2000	120.9	n.y.a	107.2	112.9	n.y.a	122.2
QUARTERLY (SEASONALLY ADJUSTED)						
1998–99						
September	113.2	103.5	104.2	109.4	109.0	114.8
December	114.7	103.0	104.2	109.5	109.7	116.6
March	115.7	104.5	105.1	109.9	110.7	118.0
June	116.4	105.5	105.0	110.7	111.4	118.5
1999–2000						
September	118.1	104.5	105.9	111.8	112.4	120.1
December	120.4	102.8	106.7	112.6	113.5	121.3
March	121.9	105.3	107.5	113.2	114.9	123.2
June	123.4	n.y.a	108.8	114.2	n.y.a	124.1

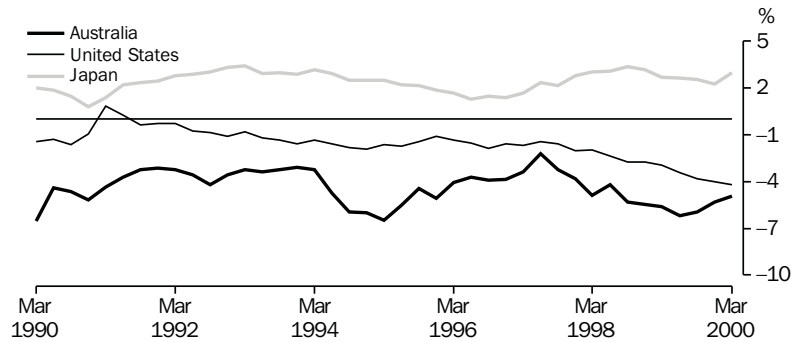
(a) Data for Japan measures real gross national product.

Source: Organisation for Economic Co-operation and Development (OECD) and Australian Bureau of Statistics (ABS).

9.2

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)

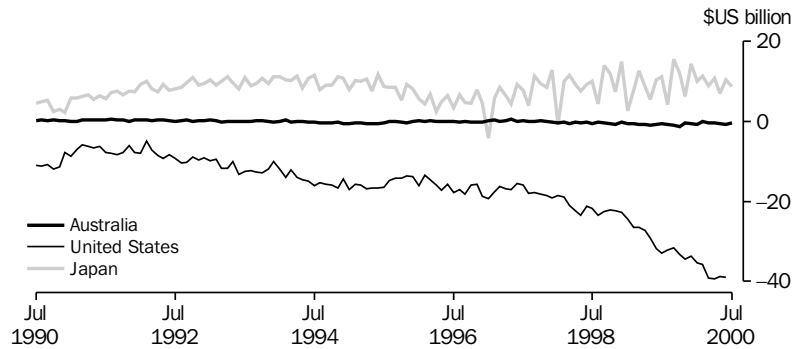
Period	United States	Japan	United Kingdom	Australia
ANNUAL				
1993-94	-1.5	3.0	-1.0	-3.6
1994-95	-1.8	2.4	-0.2	-6.0
1995-96	-1.4	1.7	-0.5	-4.3
1996-97	-1.6	1.7	0.6	-3.3
1997-98	-2.0	2.8	0.2	-4.0
1998-99	-3.0	3.0	-0.7	-5.6
QUARTERLY (SEASONALLY ADJUSTED)				
1998-99				
September	-2.8	3.4	0.9	-5.3
December	-2.8	3.2	-0.6	-5.5
March	-2.9	2.7	-1.9	-5.6
June	-3.4	2.6	-1.2	-6.2
1999-2000				
September	-3.8	2.5	-1.2	-6.0
December	-4.0	2.2	-0.7	-5.3
March	-4.2	3.0	-1.7	-4.9

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

Source: Organisation for Economic Co-operation and Development and ABS.

9.3 Balance on Merchandise Trade

BALANCE ON MERCHANDISE TRADE: SEASONALLY ADJUSTED



BALANCE ON MERCHANDISE TRADE(a)

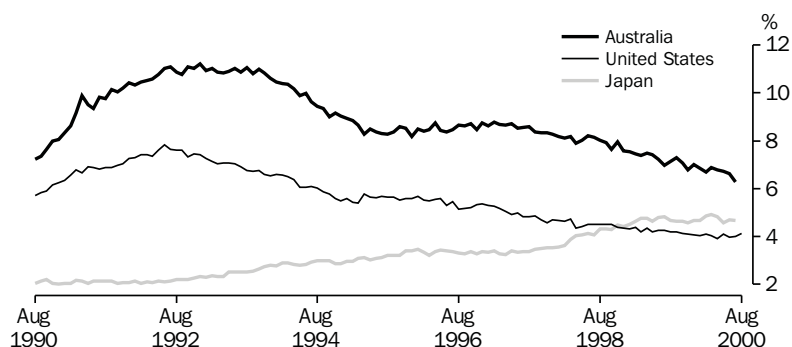
Period	United States	Japan	Germany	United Kingdom	Australia
	\$USb	\$USb	\$USb	\$USb	\$USb
ANNUAL					
1994–95	-193.4	117.1	50.8	-20.8	-5.5
1995–96	-180.4	78.8	59.2	-27.2	-1.4
1996–97	-206.3	61.6	67.1	-23.5	0.1
1997–98	-233.0	100.1	71.0	-34.1	-1.9
1998–99	-300.4	109.5	70.1	-50.1	-7.3
1999–2000	-425.8	121.0	62.8	-51.8	-7.9
MONTHLY (SEASONALLY ADJUSTED)					
1998–99					
May	-29.2	5.4	4.3	-3.1	-1.0
June	-31.9	10.3	6.1	-4.9	-0.7
1999–2000					
July	-33.0	11.0	6.7	-4.3	-0.7
August	-32.2	4.1	3.7	-3.6	-0.7
September	-31.6	15.5	5.7	-3.4	-0.9
October	-33.3	11.9	5.4	-4.3	-1.3
November	-34.4	6.1	6.0	-4.8	-0.4
December	-33.8	14.3	6.3	-4.7	-0.7
January	-35.5	9.9	4.2	-5.0	-0.9
February	-35.8	11.3	6.0	-4.4	-0.1
March	-39.1	8.8	5.5	-4.0	-0.4
April	-39.4	10.8	4.4	-4.8	-0.3
May	-38.8	6.9	3.8	-4.3	-0.7
June	-38.9	10.4	5.2	-4.2	-0.8
2000–01					
July	n.y.a.	8.6	n.y.a.	n.y.a.	-0.4

(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. The OECD now publish this data in US billions.

Source: Organisation for Economic Co-operation and Development and ABS.

9.4 Unemployment Rates

STANDARDISED UNEMPLOYMENT RATES: SEASONALLY ADJUSTED



Source: OECD, Monthly data.

UNEMPLOYMENT RATE(a)

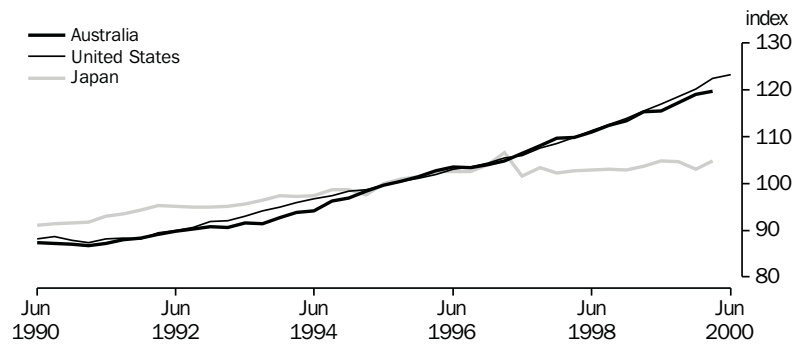
	United States	Japan	Germany	United Kingdom	OECD Major 7	Australia
Period	%	%	%	%	%	%
ANNUAL						
1994–95	5.7	3.0	8.2	9.1	6.8	8.9
1995–96	5.6	3.3	8.5	8.5	6.8	8.4
1996–97	5.2	3.3	9.4	7.7	6.7	8.6
1997–98	4.7	3.7	9.9	6.6	6.5	8.3
1998–99	4.4	4.5	8.9	6.2	6.3	7.6
1999–2000	4.1	4.7	8.6	n.y.a.	6.0	6.9
MONTHLY (SEASONALLY ADJUSTED)						
1998–99						
June	4.3	4.8	8.8	6.0	6.2	7.2
1999–2000						
July	4.3	4.8	8.8	6.0	6.2	7.0
August	4.2	4.7	8.8	6.0	6.1	7.1
September	4.2	4.6	8.8	6.0	6.1	7.3
October	4.1	4.6	8.8	6.0	6.0	7.1
November	4.1	4.6	8.7	5.9	6.0	6.8
December	4.1	4.7	8.7	6.0	6.0	7.0
January	4.0	4.7	8.6	5.9	5.9	6.9
February	4.1	4.9	8.5	5.9	6.0	6.7
March	4.1	4.9	8.4	5.7	5.9	6.9
April	3.9	4.8	8.5	5.7	5.8	6.8
May	4.1	4.6	8.4	5.5	5.8	6.7
June	4.0	4.7	8.4	n.y.a.	5.8	6.6
2000–01						
July	4.0	4.7	8.4	n.y.a.	5.8	6.3
August	4.1	n.y.a.	n.y.a.	n.y.a.	n.y.a.	6.4

(a) All series are OECD standardised unemployment rates.

Source: Organisation for Economic Co-operation and Development and Australian Bureau of Statistics.

9.5 Private Consumption Expenditure Volume Index

PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEXES:
SEASONALLY ADJUSTED



Source: OECD, Quarterly data.

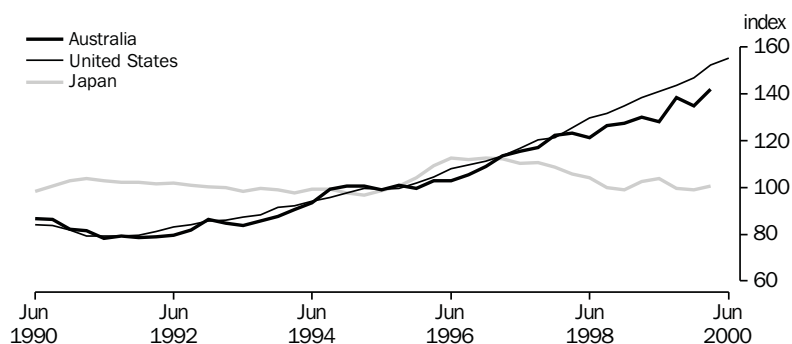
PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEXES (1995 = 100.0)

Period	United States	Japan	Germany	United Kingdom	Australia
ANNUAL					
1994-95	98.6	98.7	99.0	99.2	97.8
1995-96	101.6	101.9	100.4	101.7	102.0
1996-97	104.8	103.7	101.5	105.4	104.7
1997-98	109.3	102.8	102.3	110.0	109.6
1998-99	114.7	103.6	104.9	114.2	114.2
1999-2000	121.1	n.y.a.	106.9	119.0	119.2
QUARTERLY (SEASONALLY ADJUSTED)					
1998-99					
December	113.9	102.9	104.3	113.2	113.4
March	115.5	103.7	106.0	115.1	115.3
June	117.0	104.9	105.7	116.2	115.5
1999-2000					
September	118.5	104.7	106.2	117.1	117.3
December	120.2	103.0	106.7	118.8	119.0
March	122.4	104.8	106.7	119.6	119.7
June	123.3	n.y.a.	108.1	120.6	120.8

Source: Organisation for Economic Co-operation and Development.

9.6 Private Fixed Capital Investment Volume Index

PRIVATE FIXED CAPITAL INVESTMENT VOLUME INDEXES:
SEASONALLY ADJUSTED



Source: OECD, Quarterly data.

PRIVATE FIXED CAPITAL INVESTMENT VOLUME INDEXES(a) (1995 = 100.0)

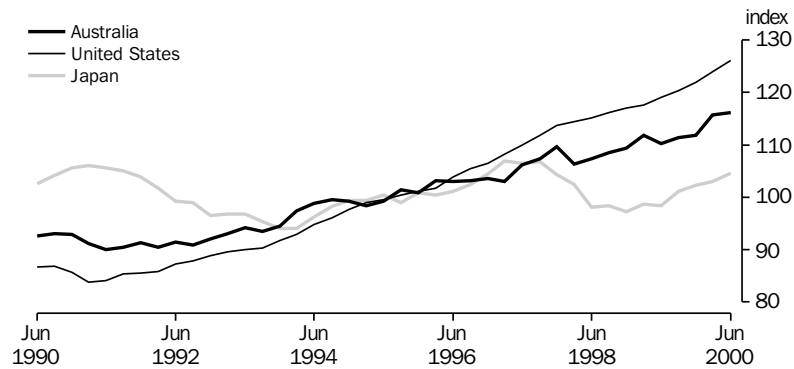
Period	United States	Japan	Germany	United Kingdom	Australia
ANNUAL					
1994-95	98.0	98.1	101.1	98.5	99.8
1995-96	103.5	106.6	98.5	102.5	101.6
1996-97	112.7	111.8	100.3	107.8	110.8
1997-98	124.2	107.2	101.8	118.9	121.1
1998-99	136.4	101.3	103.4	128.4	128.0
1999-2000	149.4	n.y.a.	107.1	132.6	140.1
QUARTERLY (SEASONALLY ADJUSTED)					
1998-99					
December	134.7	99.1	101.9	126.7	127.6
March	138.3	102.4	104.0	129.8	130.0
June	141.0	103.7	104.8	131.3	128.1
1999-2000					
September	143.5	99.6	107.0	132.1	138.4
December	146.7	99.0	106.2	133.6	135.0
March	152.3	100.5	108.3	132.1	142.1
June	155.3	n.y.a.	107.0	132.4	144.9

(a) Fixed capital investment volume indexes for Germany and the United Kingdom are for gross domestic fixed investment.

Source: Organisation for Economic Co-operation and Development and Australian Bureau of Statistics.

9.7 Industrial Production Volume Index

INDUSTRIAL PRODUCTION VOLUME INDEXES: SEASONALLY ADJUSTED



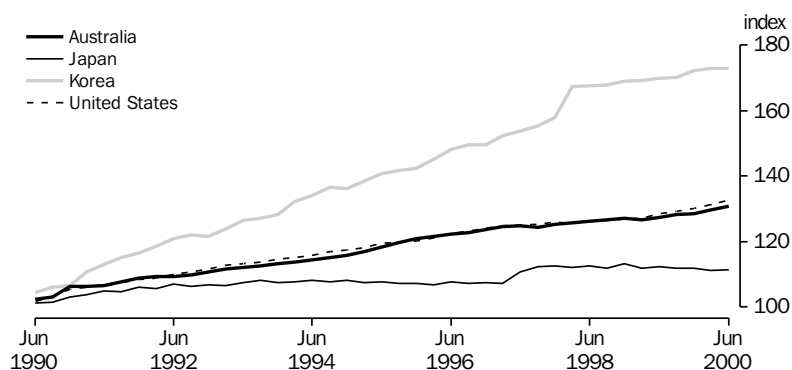
INDUSTRIAL PRODUCTION VOLUME INDEXES (1995 = 100.0)

Period	United States	Japan	Germany	United Kingdom	OECD Major 7	Australia
ANNUAL						
1994–95	98.1	99.4	100.6	99.6	98.9	99.1
1995–96	101.8	100.3	99.5	100.6	100.8	102.1
1996–97	107.5	105.1	102.1	101.6	104.8	104.0
1997–98	113.8	102.9	107.2	102.6	108.7	107.7
1998–99	117.4	98.2	108.7	102.7	109.5	110.0
1999–2000	123.1	102.7	n.y.a.	104.3	114.3	113.8
QUARTERLY (SEASONALLY ADJUSTED)						
1998–99						
December	117.0	97.3	107.9	102.6	109.0	109.4
March	117.6	98.7	108.0	102.0	109.6	111.9
June	119.0	98.4	109.3	102.8	110.3	110.2
1999–2000						
September	120.4	101.1	111.6	104.3	112.3	111.4
December	121.9	102.3	112.6	104.4	113.6	111.9
March	123.9	103.0	113.6	103.6	114.8	115.7
June	126.1	104.6	n.y.a.	105.0	116.7	116.2

Source: Organisation for Economic Co-operation and Development and Australian Bureau of Statistics.

9.8 Consumer Price Index

CONSUMER PRICE INDEXES, ALL GROUPS EXCLUDING HOUSING



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

CONSUMER PRICE INDEXES, ALL GROUPS EXCLUDING HOUSING(a) (1989–90 = 100.0)

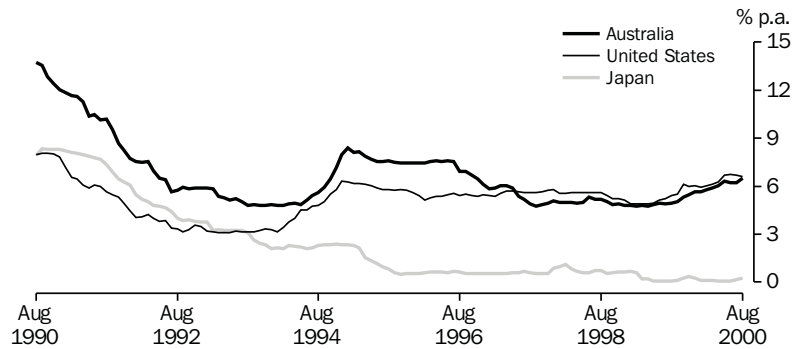
Period	United States	Japan	Germany	Canada	United Kingdom	Hong Kong	Republic of Korea	Taiwan	New Zealand(b)	Australia
ANNUAL										
1994–95	118.0	107.8	115.8	113.4	124.8	150.7	138.0	119.1	110.5	116.5
1995–96	120.9	107.3	117.0	116.0	128.3	159.5	144.4	122.5	111.9	121.1
1996–97	124.3	108.2	118.2	118.8	131.5	166.8	151.3	125.7	113.7	123.9
1997–98	125.8	112.4	120.3	120.6	134.6	173.0	162.1	127.2	114.9	125.4
1998–99	127.2	112.4	120.7	122.0	137.2	171.2	169.0	128.2	116.9	126.9
1999–2000	130.9	111.6	121.8	125.0	139.3	165.8	172.1	129.3	118.7	129.4
QUARTERLY										
1998–99										
December	126.8	113.2	120.5	121.4	136.9	172.8	168.9	129.9	116.5	127.1
March	127.1	111.9	120.4	121.7	137.1	169.2	169.2	127.5	117.1	126.7
June	128.4	112.4	120.9	123.4	138.6	168.5	169.9	127.5	117.6	127.3
1999–2000										
September	129.2	111.9	121.3	124.4	138.4	166.8	170.1	128.4	117.8	128.3
December	130.2	111.9	121.2	124.5	139.1	166.5	172.3	129.6	118.2	128.6
March	131.3	111.1	122.2	124.9	139.1	164.6	172.9	128.9	118.9	129.7
June	132.8	111.4	122.4	126.2	140.7	165.1	172.9	130.3	119.8	130.8

(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 Consumer Price Indexes, and index which excludes housing is used for the purpose of international comparisons of consumer price indexes. (b) From March quarter 1994 the statistics for New Zealand refer to 'all groups excluding housing and credit services'.

Source: Consumer Price Index, Australia (6401.0).

9.9 Short-term Interest Rates

SHORT-TERM INTEREST RATES



SHORT-TERM INTEREST RATES (% per annum)(a)

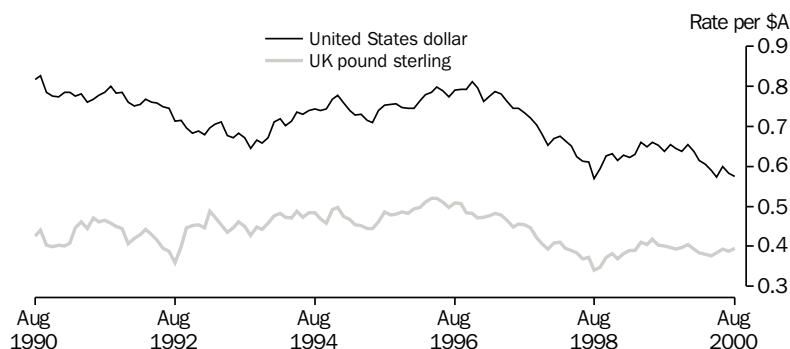
Period	United States	Japan	Germany	United Kingdom	Australia
ANNUAL					
1994–95	5.90	1.18	5.94	6.63	7.55
1995–96	5.46	0.57	5.48	5.84	7.57
1996–97	5.66	0.61	5.70	6.66	5.35
1997–98	5.60	0.58	5.62	7.62	5.32
1998–99	5.13	0.07	5.12	5.12	4.93
1999–2000	6.73	0.08	6.75	6.13	6.23
MONTHLY					
1998–99					
June	5.13	0.07	5.12	5.12	4.93
1999–2000					
July	5.24	0.08	5.25	5.07	4.89
August	5.41	0.07	5.41	5.17	4.92
September	5.50	0.12	5.51	5.32	5.01
October	6.13	0.28	6.15	5.94	5.31
November	6.00	0.34	6.04	5.78	5.44
December	6.05	0.26	6.11	5.96	5.65
January	5.95	0.12	5.99	6.05	5.66
February	6.01	0.10	6.04	6.15	5.80
March	6.14	0.11	6.16	6.15	5.89
April	6.28	0.08	6.29	6.20	6.04
May	6.71	0.07	6.70	6.23	6.31
June	6.73	0.08	6.75	6.13	6.23
2000–01					
July	6.67	0.18	6.69	6.11	6.20
August	6.61	0.27	6.65	6.13	6.49

(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: Organisation for Economic Co-operation and Development.

9.10 Exchange Rates

SELECTED EXCHANGE RATES



Source: Reserve Bank of Australia, Monthly data.

EXCHANGE RATES(a)

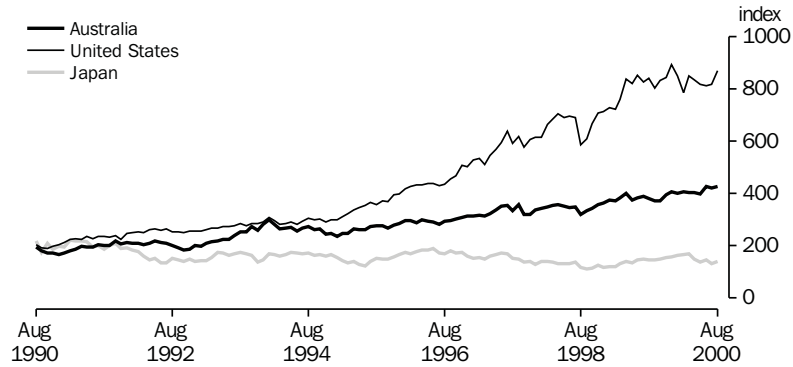
Period	United States (Dollar)	Japan (Yen)	Euro(b)	United Kingdom (Pound)	New Zealand (Dollar)
ANNUAL					
1994–95	0.71	60.08	—	0.45	1.06
1995–96	0.79	86.48	—	0.51	1.16
1996–97	0.75	85.20	—	0.45	1.10
1997–98	0.61	86.16	—	0.37	1.19
1998–99	0.66	79.66	0.64	0.42	1.25
1999–2000	0.60	63.19	0.63	0.39	1.28
MONTHLY					
1998–99					
June	0.66	79.66	0.64	0.42	1.25
1999–2000					
July	0.65	75.09	0.61	0.40	1.23
August	0.64	70.68	0.61	0.40	1.23
September	0.65	69.47	0.61	0.40	1.26
October	0.64	67.68	0.61	0.39	1.26
November	0.64	64.92	0.63	0.40	1.24
December	0.65	66.94	0.65	0.40	1.25
January	0.64	68.20	0.65	0.39	1.29
February	0.61	67.72	0.63	0.38	1.26
March	0.61	63.77	0.63	0.38	1.22
April	0.59	62.91	0.65	0.38	1.21
May	0.57	61.16	0.62	0.38	1.25
June	0.60	63.19	0.63	0.39	1.28
2000–01					
July	0.58	63.65	0.63	0.39	1.28
August	0.57	61.20	0.64	0.39	1.33

(a) Rates are for the last trading day of the reference period. (b) On January 1, 1999 eleven European Union nations launched the euro, a single currency giving control of interest rate and exchange rate policy to the European Central Bank. The euro was immediately available for electronic financial and business transactions, but euro coins and notes will not be issued to the general public until January 2002. The participating nations are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. Britain, Denmark and Sweden chose not to adopt the euro, while Greece failed to meet the requirements for entry.

Source: Reserve Bank of Australia.

9.11 Share Price Index

SHARE PRICE INDEXES

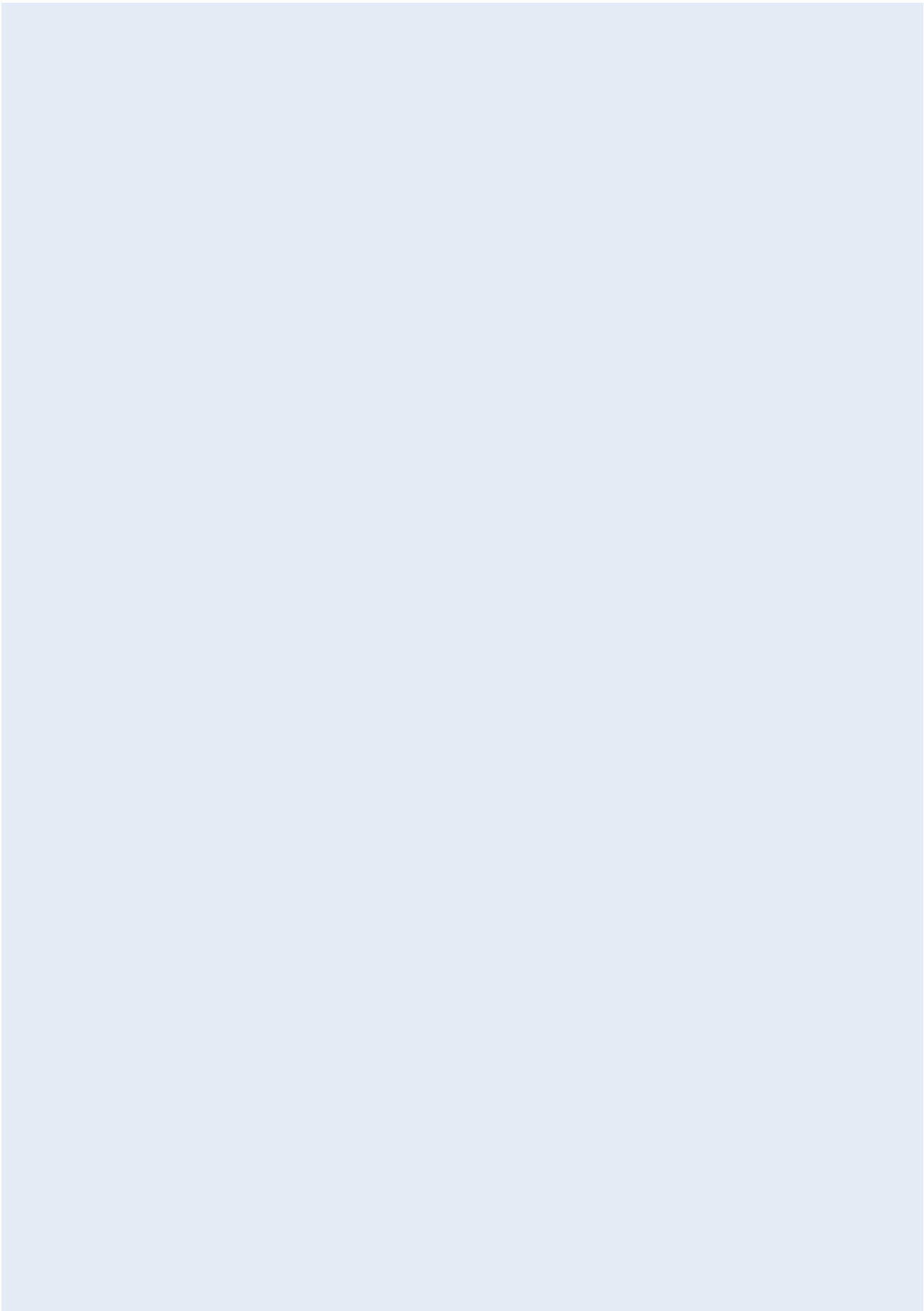


Source: Reserve Bank of Australia, Monthly data.

SHARE PRICE INDEXES (31 JANUARY 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—								
1994–95	354.1	121.1	189.9	251.9	674.5	691.2	643.9	260.8
1995–96	439.1	187.9	225.0	277.1	807.4	826.0	592.9	289.9
1996–97	596.3	171.8	327.5	303.1	1113.3	1146.3	536.6	352.5
1997–98	695.7	132.0	703.6	384.8	625.9	958.3	214.5	345.0
1998–99	852.6	146.2	641.7	407.4	991.4	1074.9	635.7	383.9
1999–2000	811.9	145.2	823.0	372.8	1183.6	1049.2	591.2	428.1
MONTHLY								
1998–99								
June	852.6	146.2	641.7	407.4	991.4	1074.9	635.7	383.9
1999–2000								
July	828.1	148.9	608.7	406.0	966.1	930.1	698.1	390.5
August	841.6	145.4	628.9	409.2	987.7	1035.6	675.2	381.7
September	803.3	146.8	614.4	383.0	932.8	964.6	602.0	372.5
October	833.9	149.6	659.2	379.9	971.2	997.1	600.1	373.0
November	845.4	154.8	703.5	396.5	1126.5	980.1	717.5	393.6
December	893.5	157.9	830.2	422.0	1242.6	1072.5	740.2	407.6
January	850.2	162.9	815.6	376.4	1137.9	1237.1	679.5	400.3
February	787.1	166.4	912.1	365.5	1257.8	1197.8	596.4	405.4
March	848.8	169.6	906.7	377.9	1275.2	1251.0	619.8	405.1
April	834.2	149.9	884.6	371.5	1136.9	1114.2	522.2	402.9
May	817.7	136.2	848.3	371.2	1077.9	1134.8	526.9	398.4
June	811.9	145.2	823.0	372.8	1183.6	1049.2	591.2	428.1
2000–01								
July	817.7	131.1	857.9	371.9	1233.8	1030.1	508.3	420.4
August	871.6	140.6	861.0	374.2	1252.5	966.9	495.8	426.4

Source: Reserve Bank of Australia.



CHAPTER 10
THE NEW TAX SYSTEM AND ITS IMPACT
ON ABS ECONOMIC STATISTICS

The New Tax System and Its Impact On ABS Economic Statistics

INTRODUCTION

The New Tax System (TNTS) is a tax reform package which includes:

- the introduction of a goods and services tax (GST);
- the phasing out of some indirect taxes (e.g. wholesale sales taxes);
- new ways in which some businesses pay tax (e.g. Pay As You Go and the new Business Activity Statement);
- changes to some existing taxes (e.g. fuel excise and taxes on alcohol);
- a review of business taxation; and
- a range of compensation measures such as lower personal income taxes and increases in some Government benefits.

The introduction of TNTS has had substantial impacts on the economic activities of Australian businesses and the Australian population. As a consequence, the economic statistics produced by the ABS have been affected. Some impacts have been immediate such as changes to prices and income, while other effects will be lagged. For instance, changes in consumer spending patterns caused by price and income may impact on certain ABS series for some time. Also, some parts of the tax reform package are yet to be introduced.

The central element of TNTS was the introduction of a GST on 1 July 2000. The GST is a tax of 10% on the consumption of most goods and services in Australia, including those that are imported, but it does not apply to exports of goods and services consumed outside Australia. Registered businesses charge the GST when they sell or supply goods or services to another business or to consumers. A range of goods and services do not have GST applied (e.g. health services, basic food) and financial services are input taxed, so GST does not apply to them.

HOW THE ABS TREATS THE GST

In the national accounts the GST is recorded as being payable by purchasers, not sellers, and then only by those purchasers who are not able to deduct it as an input credit. Almost all the GST is therefore recorded as being paid on final uses, mainly on household consumption. Small amounts of GST may, however, be paid by the business in respect of certain kinds of purchases on

HOW THE ABS TREATS THE GST *continued*

which the GST may not be deductible. Input tax credits are not available for input-taxed services such as financial services.

Outside of the national accounts, some series are recorded inclusive of the GST while others are exclusive. Generally, statistics relating to household spending, such as retail sales and residential building, are recorded inclusive of GST. Most other economic statistics, which typically relate either to business spending or the output of businesses, are recorded exclusive of the GST because of the deductible nature of the tax.

The ABS treats the GST as a Commonwealth tax. Amounts paid to State and Territory governments out of GST revenue are treated as grants by the Commonwealth to the States and Territories.

SUMMARY OF STATISTICAL IMPACTS

Many of the statistical series produced by the ABS have been and will continue to be affected in some way by the introduction of TNTS. Some of the impacts have been immediate, while some will be in the longer term. Some of the impacts will be direct and some will be indirect. Some examples of these impacts are discussed below.

Direct Effects

Direct effects from the introduction of TNTS occur irrespective of changes in economic behaviour of households and businesses. A number of examples are outlined below:

- i) The Consumer Price Index will continue to measure final transaction prices paid by households for goods and services. Therefore it will reflect the net effect on prices of all the tax changes included in TNTS. Producer price indexes will not include the GST in their compilation because, in respect of inputs, producers will generally be able to claim a refund for the GST paid on inputs and, in respect of outputs, the GST is not part of the price received by producers.
- ii) The application of the GST combined with the removal of other taxes such as WST affects current price estimates of Gross Domestic Product (GDP) and other national accounting aggregates. Overall, TNTS will raise the level of indirect taxes (a component of GDP at current prices), therefore current price estimates of GDP will increase.
- iii) Estimates of household final consumption expenditure are particularly affected by TNTS because the GST is non-deductible for households.

Direct Effects *continued*

iv) For aggregates that are measured excluding the GST, the introduction of the GST in itself will have no effect, however there may be effects due to the removal of other taxes; in particular WST. In these cases (e.g. certain capital expenditure on machinery and equipment) the impact of tax reform will cause a fall in current price aggregates.

v) The value of retail turnover will include the GST, therefore the GST will have an upward effect on the retail turnover series.

vi) Chain volume measures of GDP and other aggregates are not directly affected by the GST because they exclude the direct effects of changes in price.

Indirect Effects

TNTS has affected and will continue to affect the economic behaviour of both households and businesses in a variety of ways. These changes will have an indirect impact on statistical series. For example, changes in relative prices of goods and services caused by the reduction and abolition of the WST and the introduction of the GST will impact upon consumer behaviour (bringing forward or postponing large purchases, changing purchasing patterns etc). Changes in relative prices may also affect a range of other activities such as capital formation and the holding of inventories. Changes to personal income tax, company tax, capital gains tax and accelerated depreciation could also be expected to indirectly affect measures of consumer and business spending.

While chain volume estimates are not affected by the direct impacts of TNTS, they are affected by indirect impacts associated with changes in expenditure patterns.

Impacts on trend and seasonally adjusted series

The transition to the TNTS has led to number of irregular factors and trend breaks for a range of series. To the extent that these irregular factors and trend breaks are significant and can be quantified they have been removed from the calculation of seasonal factors (but not excluded from the seasonally adjusted series themselves) and trend estimates. In some cases the effects are known to be large but it has not been possible to accurately quantify them in the short-term—in these cases the trend series have been suspended until the effects can be quantified. In other cases the effects are known to exist but are not so large to significantly distort the trend series. Users of time series data, particularly those in current prices, need to exercise caution in the interpretation of these series during the transition period.

Opportunities for the ABS

TNTS provides opportunities for the ABS to change the way it produces some economic statistics. The Australian Taxation Office (ATO) has introduced the Australian Business Number (ABN) to identify businesses in dealings with the ATO and other Government agencies. The ATO also maintains a register of businesses called the Australian Business Register. Information from that register is provided by the ATO to the ABS, and, along with other information held by the ABS, is used to select samples of businesses for surveys run by the ABS. The use of ABNs and the Australian Business Register will improve the ABS business register because they generally fit well with business accounting and reporting structures. This will allow easier reporting of data by providers and lead to greater consistency across economic statistics.

TNTS also includes the introduction of Business Activity Statements, which are monthly or quarterly tax returns for businesses. These are expected to be an excellent source of statistical data. The ABS is currently evaluating the data that is provided on Business Activity Statements to determine how best to use it for statistical purposes. The ABS plans that data extracted from Business Activity Statements will be used to substitute for and to supplement some data collected by the ABS directly from businesses. Business Activity Statements will also provide data that will enable improved survey design and estimation processes.

FURTHER READING

Information Paper: ABS Statistics and The New Tax System (1358.0)

Explains in detail the impacts of TNTS on ABS statistics in general.

Information Paper: Price Indexes and The New Tax System (6425.0)

Explains in detail the impacts of TNTS on ABS Price Indexes.

Information Paper: Introduction of the 14th Series Australian Consumer Price Index (6456.0)

Summarises the major changes that occurred in the 14th series CPI.

Information Paper: Accruals-Based Government Finance Statistics (5517.0)

Explains the classification of the GST as a Commonwealth Government tax and its impact on Government finance statistics.

FURTHER READING *continued*

Australian National Accounts: National Income, Expenditure and Product (5206.0), March quarter 2000.

Contains a special article on how TNTS impacts on the national accounts.

The above publications and article are available on the ABS website: <URL: <http://www.abs.gov.au>>.

More information about TNTS is available from the Australian Taxation Office: <URL: <http://www.ato.gov.au>>.

CHAPTER 11

STATISTICS: CONCEPTS, SOURCES, METHODS AND USAGE

To assist in your understanding of the statistics presented in this book, 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 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.

Statistics: Concepts, Sources, Methods and Usage

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. 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 one the cornerstones of statistical collection and analysis. Without the accurate and systematic arrangement of data according to common properties, statistical output cannot be comparable. Classifications group 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. 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 the 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.

Classifications *continued*

Two of these standard classifications which are often used in reporting economic information are the classification of industries and the classification of institutional sectors.

Australian and New Zealand Standard Industrial Classification (ANZSIC)

ANZSIC is the standard classification used in Australia and New Zealand for the collection, compilation and publication of statistics by industry. The objective of the industrial classification is to identify groupings of businesses undertaking similar economic activities. Subject to certain criteria being met (economic significance and compliance with international standards), each such grouping defines an industry. The similar economic activities characterising the businesses concerned are referred to as primary activities. Each individual business is assigned an appropriate industry category on the basis of its predominant activities.

The ANZSIC structure comprises four levels: Divisions (the broadest level), Subdivisions, Groups and Classes (the finest level). At the Divisional level the main purpose is to provide a limited number of categories presenting a broad overall picture of the economy and suitable for publication in summary tables in official statistics. The Subdivision, Group and Class levels provide increasingly detailed dissections of the broad categories.

Structure of ANZSIC example:

Division C:	Manufacturing
Subdivision 22:	Textiles, Clothing, Footwear and Leather Manufacturing
Group Title 224:	Clothing Manufacturing
Class 2242:	Women's and Girls' Wear Manufacturing

There are 17 ANZSIC Divisions each identified by an alphabetical character, as presented:

A	Agriculture, Forestry and Fishing
B	Mining
C	Manufacturing
D	Electricity, Gas and Water Supply
E	Construction
F	Wholesale Trade
G	Retail Trade
H	Accommodation, Cafes and Restaurants
I	Transport and Storage
J	Communication Services

Classifications *continued*

K	Finance and Insurance
L	Property and Business Services
M	Government Administration and Defence
N	Education
O	Health and Community Services
P	Cultural and Recreation Services
Q	Personal and Other Services

Standard Economic Sector Classifications of Australia (SESCA)

SESCA presents a system for classifying institutional units (such as enterprises and households) into appropriate sectors of the economy. A major component of the SESCO is the Standard Institutional Sector Classification of Australia (SISCA) which forms the basis for the institutional sectoring of a range of statistics in the Australian Bureau of Statistics, including the National Accounts, Balance of Payments, International Investment, Financial Accounts and Government Finance Statistics.

SISCA is often used in conjunction with a number of other supporting classifications such as Public/Private classification, Level of Government classification, Jurisdiction classification and the Type of Legal Organisation classification (TOLO). This group of classifications and other related classifications are together presented as the SESCO. These associated classifications allow further identification and detail of particular characteristics of institutional units classified under the SISCA.

The structure of SISCA is as follows:

1	Non-financial corporations
2	Financial corporations
2.1	Central Bank and other supervisory authorities
2.1.1	Reserve Bank of Australia
2.1.2	Other supervisory authorities
2.2	Depository corporations
2.2.1	Banks
2.2.2	Other depository corporations
2.3	Insurance corporations and pension funds
2.3.1	Life Insurance
2.3.2	Pension funds
2.3.3	Other insurance corporations

Classifications *continued*

	2.4	Other financial institutions
	2.4.1	Central banking authorities
	2.4.2	Financial intermediaries n.e.c
	2.4.3	Financial auxiliaries
3		General Government
4		Households
5		Non-profit institutions serving households
6		Rest of the world

Chain Volume Estimates

Chain volume estimates provide a convenient way of measuring changes in quantities (or 'real' change) in various economic statistics because they remove the direct effects of price changes.

Many economic statistics, such as gross domestic product, 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 chain volume estimates (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 in chain volume terms can be derived by linking together movements in volumes, calculated using the average prices of the previous financial year, and applying the compounded movements to the current price estimates of the reference year. The reference year for our chain volume measures is the year prior to the latest complete financial year (currently 1998–99).

It is not possible to derive chain volume 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 chain price index for GDP. The underlying assumption is that these price indexes are representative of price change of the goods and services that could be purchased with the money earned from profits, interest, etc.

Up until 1998 we produced constant price estimates to measure changes in quantities. However, the quality of constant price estimates deteriorate as relative prices change. Chain volume measures deal much better with this, hence our decision to adopt these measures and to discontinue the production of constant price estimates.

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.

Seasonal Factors *continued*

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 *smoothed seasonally adjusted* or *trend estimates*.

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. Macro-economic policy, concerned with the maintenance of income, price and employment stability, is dependent for much of its effectiveness on timely and accurate information on the components of domestic production. The national accounts provide conceptually consistent information and illustrate the relationships between the components.

National Accounts *continued*

Australia's national accounts are compiled in a manner which closely accords with the recommendations 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.

Australia's national accounts record the essential elements of the Australian economy: production, income, consumption (intermediate and final), accumulation of assets and liabilities, and wealth. The starting point for the system is production, which is recorded in the gross domestic product (GDP) account. The GDP account has two 'sides': income and expenditure.

On the **income side** of the account are the incomes accruing to the factors of production: compensation of employees (earned by wage and salary earners), gross operating surplus (profits) (earned by corporations, general government and the ownership of dwellings) and gross mixed income (earned by owners of unincorporated businesses), as well as net taxes on production and imports accruing to government. On the **expenditure side** of the account are final consumption expenditure, investment (represented by gross fixed capital expenditure and changes in inventories), 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).

It can be seen from the above that the familiar Keynesian identity $Y = C + I + X - M$ (where Y is income, C consumption, I investment, X exports and M imports) is apparent on the expenditure side of the GDP account.

Complementing the GDP account are an income account, a capital account, a financial account, and a balance sheet, which shows the nation's wealth.

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 correspond 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. 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 chart.

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 1996 Census. However, further analysis shows men outnumbered women in each age group up to the 25–29 years age group. Women then have greater numbers until the 40–44 years age group. There are more males in each age group until 60–64 years, however women then consistently outnumber men in the older age groups.

Graphs

Graphs are an excellent way of presenting data. They enable the user to get a quicker feel for the data than when using tables or from text.

Graphs, however, can very easily mislead 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 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.

(a) Determine what data are available that are relevant to your topic. This publication is a good place to start. The references shown in the Further Reading part of each section will assist you in identifying sources of more detailed or related information. The ABS *Catalogue of Publications and Products* (1101.0) could also help you to determine what is available.

(b) 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.

(c) 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.

(d) 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.

(e) 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?

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.

Information Paper: 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.

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