Information Paper

Implementation of Revised International Standards in the Australian National Accounts

EMBARGO: 11:30 AM (CANBERRA TIME) TUE	-C 20 CEDT 400	~~
FINIBARGO: III:30 AM (CANBERRA HIME) HIE	-5 3U SEPL 199	41

INFORMATION PAPER: IMPLEMENTATION OF REVISED INTERNATIONAL STANDARDS IN THE AUSTRALIAN NATIONAL ACCOUNTS

W. McLennan Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

CATALOGUE NO. 5251.0

ABS Catalogue No. 5251.0 ISBN 0 642 25660 8

© Commonwealth of Australia 1997

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission from the Australian Government Publishing Service. Requests or inquiries concerning reproduction should be addressed to the Manager, Commonwealth Information Services, Australian Government Publishing Service, GPO Box 84, Canberra, ACT 2601.

In all cases the ABS must be acknowledged as the source when reproducing or quoting any part of an ABS product or other product.

Produced by the Australian Bureau of Statistics

INQUIRIES

- For information about other ABS statistics and services, please refer to the back of this publication.
- For further information about this information paper, contact John Joisce on Canberra (02) 6252 6170.

CONTENTS

			Page
	Pr	eface	vi
SECTIONS			
	1	Introduction	1
		Statistics affected	2
	2	Revised international standards	3
		International standards involved	3
	3	Implementation timetable	5
	4	Consultation process	7
		Further information papers	8
	5	SNA93 implementation decisions	9
		Overview of SNA93 changes	10
		SNA93: changes to be implemented in the ANA	11
		Principles of accounting	11
		Changes to income and output	12
		Changes to assets, capital formation and inventories	21
		Additional concepts of final consumption expenditure and adjusted disposable income	26
		Sectors and sub-sectors	26
		Other changes to ANA concepts and classifications	33
		SNA93 recommendations that will not be implemented in the ANA	36
		'Backcasting' of estimates	41
	6	Dollar impact of main changes to concepts and classifications	42
		Changes that impact on the level and movement of the components of GDP	42
		Other changes	45
	7	Integrating the national income, expenditure and product accounts with the input-output tables	49
		Major implications of the I-O approach	51
	8	Changes to presentation of GDP in the NIEP accounts	52
	9	Chain volume measures	55

CONTENTS continued		Page
SECTIONS continued		
	10 Proposed compilation and data dissemination cycle	57
	Changes to the ANA compilation and data dissemination cycle	57
	Changes to the presentation, content and timing of ANA releases	58
	Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5206.0) (quarterly))	58
	Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5204.0) (annual)	59
	Australian National Accounts: State Accounts (Cat. no. 5220.0)	61
	Australian National Accounts: Financial Accounts (Cat. no. 5232.0)	62
	Australian National Accounts: Input-Output Tables (Cat. no. 5209.0) and Australian National Accounts: Input-Output Tables (Commodity Details) (Cat. no. 5215.0)	63
	Australian National Accounts: Capital Stock (Cat. no. 5221.0)	63
	Australian National Accounts: Multifactor Productivity (Cat. no. 5234.0)	63
	Australian National Accounts: National Balance Sheet (Cat. no. 5241.0)	63
	Australian National Accounts: Concepts, Sources and Methods (Cat. no. 5216.0) and Statistical Concepts Reference Library (Cat. no.1361.0.30.001)	64
	11 Presentation of new table formats	65
	Overview of SNA93 framework of accounts	65
	Production account	66
	Distribution and use of income accounts	67
	Accumulation accounts	68
	Balance sheet	69
	Goods and services account	69
	Rest of the world accounts	69
	I-O tables	70
	Satellite accounts	70

CONTENTS continued		Page
SECTIONS continued		
	12 Contacts for further information	73
	SNA93	73
	BPM5	73
	IMF's 'A Manual on Government Finance Statistics'	73
	IMF's 'Manual on Monetary and Financial Statistics'	73
	Standard Economic Sector Classifications of Australia	73
	Copies of SNA93 and BPM5 manuals	74
ADDITIONAL INFORMATION		
	Abbreviations and symbols	75
	Appendixes	
	A Indicative tables	78
	B Classification changes	96
	Glossary	102

PREFACE

The Australian Bureau of Statistics (ABS) is committed to a program of continual improvement to the quality of the statistics it produces. The ABS *Annual Report, 1995–96* featured an overview of the major streams of work being undertaken now and over the next few years to improve and extend the Australian national accounts. One of these streams is the implementation of new international statistical standards in the national accounts, together with associated developments to integrate the input-output tables with the national income, expenditure and product accounts, and to introduce frequently reweighted chain volume measures to improve the estimation of economic growth. Work is also underway to extend and improve data sources, especially in the area of services, to develop improved measures of output and productivity for the non-market sector, to develop an integrated set of labour accounts, and to further integrate environmental concerns with the national accounts.

This paper aims to inform readers about ABS plans for the implementation of the new international standards in the Australian national accounts and their first official release on that basis in September 1998. A companion publication *Information Paper: Implementing New International Statistical Standards in ABS International Accounts Statistics* (Cat. no. 5364.0) was released on 29 September 1997. A detailed paper reporting on the introduction of frequently reweighted chain volume measures and on other aspects of the work mentioned above will become available in due course.

W. McLennan Australian Statistician

SECTION 1: INTRODUCTION

- 1.1 The Australian Bureau of Statistics (ABS) is planning to introduce major changes during 1998 to the Australian national accounts (ANA) resulting from the implementation of revised international statistical standards. The changes are far reaching, and affect key national accounts data items including the measurement and presentation of gross domestic product (GDP), investment and national and sector saving. Three broad areas of change are involved: (i) changes to concepts, terminology, classifications and data presentation; (ii) changes to the way in which the national income, expenditure and product (NIEP) accounts are compiled by integration with the input-output (I-O) tables; and (iii) the introduction of annually reweighted chain volume measures to replace the existing infrequently rebased constant price estimates.
- 1.2 The implementation of new international standards was foreshadowed in the ABS publication Discussion Paper: Introduction of Revised International Statistical Standards in ABS Macro-economic Statistics (Cat. no. 5245.0), released in December 1994. The new standards referred to in the discussion paper were: the System of National Accounts 1993 (SNA93), released under the auspices of five international organisations (for details, see Section 2, para. 2.2); and the fifth edition of the International Monetary Fund's (IMF) Balance of Payments Manual (BPM5), also released in 1993.
- This current information paper has a number of purposes. It updates the earlier discussion paper and firms up ABS proposals for changes to the ANA now that detailed consideration has been given to the feasibility and relevance to Australia of recommendations in the revised international standards. It informs users of the target dates for implementation of changes, and outlines further user consultation that the ABS intends to undertake prior to those dates.
- 1.4 A companion publication Information Paper: Implementing New International Statistical Standards in ABS International Accounts Statistics (Cat. no. 5364.0) was released on 29 September 1997. Those changes to ABS balance of payments statistics that have implications for the national accounts are also discussed in this paper. It should be noted that one motivation for the revised international standards was to achieve a high-degree of harmonisation between the standards relating to the various streams of economic statistics such as the national accounts and balance of payments.
- A summary of the main changes in the ANA resulting from changes to concepts and classifications and an indication of their dollar impact on GDP is presented in Section 6. Sections 7 and 9 describe the other important changes relating to the integration of the NIEP accounts with the I-O tables and the introduction of annually reweighted chain volume measures.

SECTION 1: INTRODUCTION continued

1.6 Discussions on the proposed changes have been held with the major users of the ANA, such as the Economic Statistics User Group (ESUG), the Commonwealth Treasury and the Reserve Bank of Australia. Their views have been taken into account in finalising these proposals. The ABS welcomes comments and inquiries for further information. Section 12 provides a list of contacts.

STATISTICS AFFECTED

1.7 All releases referred to as 'the ANA' will be affected by implementation of the revised standards, including the financial accounts, capital stock estimates, State accounts and I-O tables. The publications affected are:

Australian National Accounts: National Income, Expenditure and Product

```
quarterly (Cat. no. 5206.0)
```

annual (Cat. no. 5204.0)

Australian National Accounts: State Accounts

annual (Cat. no. 5220.0)

Australian National Accounts: Financial Accounts

quarterly (Cat. no. 5232.0)

Australian National Accounts: Capital Stock

annual (Cat. no. 5221.0)

Australian National Accounts: Input-Output Tables (Commodity Details)

annual (Cat. no. 5215.0)

Australian National Accounts: Input-Output Tables

annual (Cat. no. 5209.0)

Australian National Accounts: Multifactor Productivity

annual (Cat. no. 5234.0)

Australian National Accounts: National Balance Sheet

annual (Cat. no. 5241.0)

Australian National Accounts: Concepts, Sources and Methods

irregular (Cat. no. 5216.0)

Statistical Concepts Reference Library

on CD-ROM (Cat. no. 1361.0.30.001).

SECTION 2: REVISED INTERNATIONAL STANDARDS

Most of the macro-economic statistics produced by the ABS are 2.1 based on international statistical standards and frameworks developed by organisations such as the United Nations and the IMF. The ABS adopts these standards for two main reasons. Foremost, the standards generally provide the most relevant conceptual basis for measuring Australia's economic and financial conditions. Adopting the standards also ensures that Australian statistics are comparable with those of other countries, most of which also use the standards, and enables the ABS to provide statistics to international agencies on the basis they require. To ensure that the standards reflect contemporary requirements for macro-economic statistics, occasional reviews are undertaken. These may take many years to complete. International reviews of some of the more important of the standards have been completed in recent years and others are currently going through the review process.

INTERNATIONAL STANDARDS INVOLVED

- 2.2 Central among the standards that have been revised is the United Nations' A System of National Accounts (SNA). The edition currently used by the ABS in compiling the ANA was published in 1968 (SNA68). The revised version was released in late 1993 under the auspices of five international organisations: Commission of the European Communities - Eurostat, IMF, Organisation for Economic Co-operation and Development (OECD), United Nations, and World Bank. The work of revising the standards document was coordinated from the mid-1980s by an inter-secretariat working group from these organisations, working under the guidance of experts from member countries. The ABS participated in this process through attendance at meetings of experts and by providing detailed comments on drafts of the manual. The revised document, which became available to the ABS in early 1994, is entitled System of National Accounts 1993 (referenced throughout this information paper as SNA93).
- 2.3 Also subject to revision were standards promulgated by the IMF relating to balance of payments, money and banking statistics, and government finance statistics. In revising these standards the IMF aim was to 'harmonise' the standards with SNA93. In this sense, 'harmonisation' means ensuring that concepts that are common to the IMF standards and SNA93 are defined in the same way, while allowing for different concepts to be applied where they are unique to one of these fields of statistics. Where concepts are components or extensions of the SNA, they must be defined to be consistent with the SNA.
- Revision of only one of the IMF standards is complete at this time. The fourth edition of the IMF's Balance of Payments Manual, published in 1977, was superseded in 1993 by a fifth edition (referenced throughout this information paper as BPM5).

SECTION 2: REVISED INTERNATIONAL STANDARDS continued

INTERNATIONAL STANDARDS INVOLVED continued

- **2.5** The IMF is drafting the *Manual on Monetary and Financial Statistics* which will replace the *Guide to Money and Banking Statistics*, first issued in 1984, and is redrafting its *A Manual on Government Finance Statistics*, first issued in 1985.
- **2.6** The discussion in this information paper is restricted to the effects on ABS statistics of introducing the revised standards contained in SNA93. The separate information paper relating to the implementation of BPM5 is also available (*Information Paper: Implementing New International Statistical Standards in ABS International Accounts Statistics* (Cat. no. 5364.0)). The ABS will consider releasing similar papers relating to the standards on monetary and financial statistics, and government finance statistics, when final versions of those standards become available. The ABS publication *Information Paper: Developments in Government Finance Statistics* (Cat. no. 5516.0), released in February 1997, foreshadows some of the changes that might arise from the redevelopment of international standards in this field of statistics.
- 2.7 The ABS has welcomed the adoption by the international statistical community of updated international standards for national accounts and balance of payments statistics. Building on the strengths of previous editions, the latest revisions are seen by the ABS as significant advances in the evolution of national economic accounting. Incorporation of the new standards in Australian statistics has been a major focus of the economic statistics agenda within the ABS over the past few years and will continue to be a major focus over the next few years as the implementation process is completed.

SECTION 3: IMPLEMENTATION TIMETABLE

- The last issues of the ANA to be released on the SNA68 basis will be the June quarter 1998 releases of Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5206.0), and Australian National Accounts: Financial Accounts (Cat. no. 5232.0). The ABS intends introducing SNA93 in the NIEP and financial accounts by re-releasing the June quarter 1998 issue of Cat. nos 5206.0 and 5232.0 on the revised SNA93 basis in October 1998. This will give users an opportunity to become fully acquainted with the new presentation and to assess the impact of the changes before the first 'live' releases in respect of the September quarter 1998. Australian National Accounts: Input-Output Tables, 1994-95 (Cat. no. 5209.0) will also be compiled on the revised SNA93 basis and is timed for release in October 1998.
- 3.2 Consistency of statistical time series will be maintained by 'backcasting' changes as far back as may be appropriate. For annual current price series in the production account of the NIEP accounts, this could be back to 1948-49. For the equivalent quarterly series it could be back to the September quarter 1959.
- 3.3 The previous publication Discussion Paper: Introduction of Revised International Statistical Standards in ABS Macro-economic Statistics (Cat. no. 5245.0) foreshadowed the September quarter 1997 as the implementation date for the revised international standards (SNA93 and BPM5). This date was, to a significant extent, influenced by Australia's expected international reporting requirements at that time. Because of the size of the data collection and estimation tasks involved, it was also recognised that the extent of the initial implementation of the revised international standards might have to be tailored to meet those early reporting requirements. Subsequent events resulted in the ABS deciding to put back the target date for implementation of SNA93 by one year, although BPM5 is to be introduced in late 1997 as originally planned. Delays in implementation of SNA93 in the European Union meant that national accounts on the new basis were no longer required for international reporting on the earlier timetable. Also, following an external review of the ANA, it was decided that it would be more appropriate for the switch-over in the national accounts to be put back one year until the September quarter 1998. The extra year will allow more time for ABS staff to review the required changes to definitions, concepts, sources and methods, as well as allowing new survey information to be included.

SECTION 3: IMPLEMENTATION TIMETABLE continued

- **3.4** Implementation of BPM5 in Australia's balance of payments and international investment statistics will commence with the first 'live' releases being the October 1997 issue of *International Trade in Goods and Services, Australia* (Cat. no. 5368.0), and the September quarter 1997 issue of *Balance of Payments and International Investment Position, Australia* (Cat. no. 5302.0). Because of this timing, for issues from the September quarter 1997 to the June quarter 1998, the 'rest of the world account' in the national accounts will not be compiled on the same basis as the international accounts. The ABS intends to include a reconciliation table in Cat. no. 5302.0 during that period so that the data can be aligned. From the September quarter 1998, the national accounts and the international accounts will be fully consistent.
- **3.5** The ABS revised timetable for implementing SNA93 is in line with that of most other major countries. The European Statistical Office plans to introduce the new European System of Accounts (the European version of SNA93) in 1999. Canada and the United Kingdom are making the change in November 1997, and the United States is moving to implement aspects of SNA93 incrementally over the next few years.
- **3.6** Table 3.1 sets out the target dates for the implementation of SNA93 in the ANA. It should be noted that back data will also be published to ensure that consistent time series are available.

3.1 TARGET DATES FOR IMPLEMENTATION OF SNA93(a)

BS cat. no.	Title	Reference period	Publication date
5206.0	ANA: National Income, Expenditure and Product (quarterly)	Jun qtr 1998 re-release	Oct 1998
		Sep qtr 1998(b)	Nov 1998
5204.0	ANA: National Income, Expenditure and Product (annual)	1996–97, 1997–98	Feb 1999
5220.0	ANA: State Accounts	1996–97, 1997–98	Apr 1999
5232.0	ANA: Financial Accounts	Jun qtr 1998 re-release	Nov 1998
		Sep qtr 1998(b)	Dec 1998
209.0	ANA: Input-Output Tables	1994–95	Oct 1998
234.0	ANA: Multifactor Productivity	1996–97, 1997–98	Feb 1999
241.0	ANA: National Balance Sheet	1997–98	Feb 1999
216.0	ANA: Concepts, Sources and Methods		Oct 1998
361.0.30.001	Statistical Concepts Reference Library (CD-ROM)		Oct 1998

⁽a) Refer to Section 10 for a discussion of the changes to the existing publications strategy.

⁽b) The first 'live' release of data on an SNA93 basis in the quarterly ANA.

SECTION 4: CONSULTATION PROCESS

- 4.1 This information paper represents the continuation of a process of consultation which aims to keep users abreast of the ABS plans for the implementation of SNA93.
- 4.2 The consultation process commenced in December 1994 with publication of the ABS Discussion Paper: Introduction of Revised International Statistical Standards in ABS Macro-economic Statistics (Cat. no. 5245.0). Discussed were SNA93 and BPM5, and the effects that implementing these revised international statistical standards would have on Australia's national and international accounts and related statistics if implemented in full. The paper also discussed ABS plans to implement the revised standards and foreshadowed discussions with users to assess implementation priorities and timetables. The discussion paper was sent to a list of subscribers to national accounts, balance of payments and international investment publications, and to media commentators.
- 4.3 The release of the discussion paper was followed by a program of public seminars in each State and Territory capital during February and March 1995. Individual discussions also took place with several Commonwealth government agencies (Department of Treasury, Department of Finance, Department of Prime Minister and Cabinet, and the Reserve Bank of Australia) and each State and Territory government treasury department. These seminars and discussions informed users of the potential range and extent of changes that the introduction of SNA93 might mean for Australia's national accounts. User reaction to the changes was favourable.
- The publication Information Paper: Implementing New International Statistical Standards in ABS International Accounts Statistics (Cat. no. 5364.0) was released on 29 September 1997. It details BPM5 implementation decisions, provides estimates for some of the impacts on statistical series, and shows the proposed new table formats in the balance of payments and international investment position statistics releases. Similar information in respect of SNA93 implementation is provided in this current paper.
- 4.5 The broad thrust of the ABS proposals for implementation of the revised international standards was discussed at the inaugural meeting of ESUG in September 1996. ESUG was formed in response to a recommendation from the 1995 Review of the Australian National Accounts Program that a macro-economic statistics user group be established. It is a small group, comprising key users from a range of sectors including government, banking, business and academia. The proposed implementation strategy and timetable were endorsed by ESUG.

SECTION 4: CONSULTATION PROCESS continued

4.6 It is intended that ESUG consider other issues relating to the national accounts as these emerge. Of necessity, ongoing direct consultation will have to be limited to users who make extensive use of the information.

FURTHER INFORMATION PAPERS

- **4.7** Subsequent to this paper, further information papers are planned prior to implementation of the revised standards in Australia's national accounts statistics. The first of these relates to the proposed introduction of annually reweighted chain volume measures and is planned for publication in early 1998.
- **4.8** A paper presenting tables with annual time series data on a SNA93 basis is also planned for release in early 1998. However, the data will be 'indicative' only. There will still remain several months before the new data will be finalised for release as official statistics in the June quarter 1998 accounts to be re-issued on a SNA93 basis in October 1998. The information paper will provide users with an opportunity to examine the data and the revised concepts before SNA93 is formally implemented.
- **4.9** The implementation of SNA93 in the I-O tables will be the subject of a separate information paper planned for release later in 1998.

SECTION 5: SNA93 IMPLEMENTATION DECISIONS

- 5.1 The changes brought about by SNA93 are widespread. The revised System comprises a more comprehensive and integrated set of accounts than its predecessor, SNA68. In particular, what are currently known as the NIEP accounts, the I-O tables, the financial flow accounts and the balance sheet in the ANA have been brought together in a fully integrated way. This will allow users to examine not only the production relationships in the accounts but also the ways in which these relationships affect Australia's net worth and financial position. Further, the introduction of satellite accounts through the use of complementary and alternative concepts and classifications will extend the analytical capacity of the national accounts in areas such as tourism, health and the environment.
- 5.2 In addition to changes to the structure of the accounts themselves, there have been a substantial number of changes to concepts, classifications and definitions. Some of these represent changes in terminology and presentation, while others impact on the measurement of major summary aggregates such as GDP and saving. As a general concept, GDP is unchanged in the ANA. That is, it still refers to the total market value of goods and services produced in Australia, after deducting the cost of goods and services used up in the production process (intermediate consumption), but before deducting the consumption of fixed capital. However, a number of changes — such as the capitalisation of mineral exploration, computer software and some types of livestock, the measurement of wages and salaries on an accrual basis and the introduction of an alternative output measure for banks — will lead to revisions in the level and movement of GDP. This section provides a comprehensive discussion of changes to statistical treatments of economic activities and to institutional sectors, including the classification of institutional units to those sectors.
- 5.3 Considered in its totality, the revised SNA is not a radical departure from the former edition. It represents an incremental change in the development of national accounting to reflect changing economic behaviour and new policy concerns as well as to improve understanding of the accounts, their international comparability and harmonisation with other international statistical standards.
- Because of the comprehensive nature of the national accounts, ABS proposals relating to the implementation of SNA93 necessarily involved input from the many stakeholders within the ABS. The proposals outlined in this paper are the culmination of detailed discussions by the ABS national accounts, financial accounts, public finance, international investment, balance of payments and ABS subject matter areas responsible for the collection of economic data used as input into the ANA.

- 5.5 As previously mentioned, the ABS intends to implement changes recommended in SNA93 to the extent that it is feasible and relevant to Australian circumstances. Most of the changes to concepts that impact on GDP will be implemented. Estimates will be 'backcast' so that consistency of time series data will be maintained. Some departures from recommended international terminology will be retained where it aids understanding of the accounts by domestic users. Changes to table structures will also be more limited than those recommended by SNA93. This section documents the specific changes that will be implemented in the ANA, lists the SNA93 recommendations that will not be implemented, and discusses data quality issues related to 'backcasting' of estimates. The changes have been grouped together under various headings for ease of presentation.
- 5.6 The ABS publication Australian National Accounts: Concepts, Sources and Methods (Cat. no. 5216.0) and the Statistical Concepts Reference Library (Cat. no. 1361.0.30.001) on CD-ROM provide a comprehensive guide to the ANA. These will be revised in line with the decisions taken on implementing the SNA93 in the ANA.

OVERVIEW OF SNA93 CHANGES

Five broad types of changes will be made to the ANA: (i) changes to the concepts underlying the accounts; (ii) changes to the terms used to refer to items; (iii) changes to the classification systems used in the accounts; (iv) changes to the structure and presentation of the accounts themselves; and (v) changes to the estimation methodology used to compile the accounts.. The changes to concepts and classifications are described below (changes recommended by SNA93 which the ABS is not planning to implement are also listed). The dollar impacts of these changes on various national accounting aggregates, including GDP, are shown in Section 6 of this paper. An important change to the presentation of the accounts relates to the way in which the ABS proposes to present GDP in the ANA. GDP will be derived as a unique measure in place of the existing four measures - GDP(E), GDP(I), GDP(P) and GDP(A) - although the individual components of the existing measures will continue to be an integral part of the accounts. The new approach is described in Section 8 and illustrated, along with the revised accounting structure, in Appendix A. Details of the proposed changes to the classifications for non-financial assets, financial instruments, institutional sectors and private final consumption expenditure are shown in Appendix B. A short definition of new terms is provided in a Glossary.

OVERVIEW OF SNA93 CHANGES continued

5.8 The changes in estimation methodology relate to the integration of the NIEP accounts with the I-O tables and the introduction of annually reweighted chain volume measures. Both of these major changes are outlined in separate sections of this paper. Section 7 describes the I-O approach while section 9 discusses chain volume measures, a topic which will be addressed in detail in a separate information paper to be released in early 1998.

SNA93: CHANGES TO BE IMPLEMENTED IN THE ANA

Principles of accounting

Timing of transactions — accrual accounting

- Although an accrual basis of recording was generally implicit in the earlier version of the SNA and in the existing ANA, some transactions were recorded on a cash basis (the most notable being general government transactions), while others were recorded on a 'due for payment' basis (such as interest income). This approach reflected the different accounting practices of the various institutional units in the economy and was a matter of practicality rather than one of preferred principle. SNA93 devotes an entire chapter to the clarification of accounting rules and is quite explicit in stating that the national accounts should record transactions on an accrual basis in order to reflect the time when the transaction occurred rather than when it may be paid for. It recognises that, in practice, the accounts of the parties to a transaction may not always be kept on a consistent basis. Nevertheless, SNA93 does extend the use of accrual accounting in the System in a number of important areas. The ANA data items that will be most significantly affected by the extension of accrual accounting concepts are the recording of wages and salaries, employers' superannuation contributions, and income on debt securities. These are discussed under separate headings below.
- **5.10** The extent to which accrual accounting can be implemented more widely for the general government sector in the ANA will depend on the progress made by Commonwealth and State government bodies in introducing accrual accounting in their own public accounts.

Principles of accounting continued

Re-routing of transactions

5.11 SNA93 applies more widely the concept of 're-routing' transactions. This involves recording transactions to reflect economic flows even though this may differ from the actual transaction, i.e. where the actual transactions involve a 'short-cut'. The most significant changes are in the accounting for individual and collective consumption, and the reinvested earnings on foreign direct investment. For example, where education services are provided by the government, this expenditure is currently recorded as government final consumption expenditure. However, the economic reality of this transaction is that households benefit individually from this service. SNA93 provides the framework for this to be shown in the accounts. Further explanation is provided later in this section.

Changes to income and output

Terminology — compensation of employees

5.12 The term compensation of employees will replace the existing 'wages, salaries and supplements'. The scope of compensation of employees will generally remain unchanged but the way it is measured will change in a number of respects (see paras 5.13-5.20).

Wages and salaries

5.13 Currently, wages and salaries are measured on a cash ('payroll') basis in the ANA. SNA93 is explicit in recommending that compensation of employees be measured on an accrual basis. In principle, this requires that the total cost of employee compensation be reflected in the period in which the employee provided the services to the employer. As far as data will allow, provisions for employee entitlements which qualify as actual liabilities are to be included rather than the cash payments of these entitlements. Provisions for employee entitlements which qualify include provisions for long service leave and annual leave. A further aspect of accrual accounting is that wages and salaries should be accrued on a time worked basis rather than on the number of paydays in a period.

Changes to income and output continued

- **5.14** The extent to which this treatment can be implemented is constrained by the availability of data. Its implementation in the ANA will be assisted by the introduction of the new commercial accounting standard, Australian Accounting Standard 30, Accounting for Employee Entitlements, which became operative in 1996 (although many businesses had adopted accrual principles before this date). Adjustments to data items for compensation of employees have been made in the ABS annual economic collections to reflect an accrual basis since reference year 1994–95. Because these annual data are an input into the compilation of the I-O tables, the accrual measure of compensation of employees will be used in those tables from that reference year. However, currently, the ABS payroll-based quarterly Survey of Employment and Earnings is the major source of information on earnings for compiling both the quarterly and annual NIEP accounts estimates of wages and salaries. From the March quarter 1997, a significant step in the direction of accrual accounting was implemented in this survey with the collection of data to enable accurate pay-day adjustment of payrolls to a 'payable' basis. A pay-day adjustment based on less satisfactory data is currently applied in the seasonal adjustment process, but not in the derivation of original estimates.
- **5.15** After the future integration of the NIEP accounts and the I-O tables, the estimates of wages and salaries in the NIEP accounts will be benchmarked to the annual accrual estimates in the I-O tables. However, quarterly NIEP account estimates will still contain elements of payroll-based accounting. The ABS is reviewing how it collects quarterly data from businesses. There may be some prospects for collecting quarterly data on the preferred basis in the future.
- **5.16** The impact on estimates from the changed treatment will vary from year to year (and could have either an upward or downward effect on estimates).

Separation, termination and redundancy payments

5.17 Whereas these types of payments are included with wages and salaries in the existing ANA, SNA93 recommends that they be included in compensation of employees as employers' social contributions (previously termed supplements). This change will be implemented in the ANA. SNA93 also recommends that sick leave payments be classified in the same way. However, this change cannot be implemented in the ANA because, in Australia, data providers are unable to consistently differentiate between sick leave payments and other wage and salary payments.

Changes to income and output continued

Imputations for unfunded superannuation

5.18 Employers' contributions to funded superannuation schemes on behalf of employees are currently included in wages, salaries and supplements. Withdrawals of pension from these schemes are treated as financial transactions (i.e. as withdrawals from a financial asset and recorded in the financial accounts) and are not included in wages, salaries and supplements or GDP. This approach is confirmed in SNA93. However, for unfunded superannuation schemes operated by government, the existing treatment is to include the cash payouts of pension and lump sum payments (benefit payments) in wages, salaries and supplements, government final consumption expenditure and GDP. This is an incorrect conceptual treatment as the benefit payments, rather than the accruing expense, are included as part of the value of production in the period. It also distorts the cost of providing government services and government and household saving. Consistent with the treatment of funded schemes, SNA93 recommends that an imputation be made for the employers' contributions implicitly required to fund future benefit payments from unfunded schemes. This imputed contribution, rather than the benefit payment, is to be included in compensation of employees, government final consumption expenditure and GDP. The new treatment is one of the most important of the SNA93 changes to be implemented in the ANA and will significantly increase household saving, offset by a decrease in general government saving.

5.19 For the purposes of deriving the imputed flows on account of government unfunded superannuation, a notional superannuation 'fund' is created which is treated as a financial asset of households and a liability of government. Consistent with the operation of funded schemes, an imputation is derived for both the employers' contributions to the notional fund and for property income on the notional use of the assets of the fund in each period by the government. The property income component assumes by far the larger share over time. Only the imputed employers' contribution will be included in compensation of employees, government final consumption expenditure and GDP. However, both components impact on household and general government saving. As for funded superannuation schemes, actual benefit payments from the 'fund' will not be treated as compensation of employees, but as a drawdown of household saving in the financial accounts. SNA93 also recommends that all transactions, actual and imputed for both funded and unfunded schemes, be shown in the sector income and use of income accounts, although a contra entry is included to preserve the correct conceptual basis for the measurement of saving (see para. 5.82).

Changes to income and output continued

Workers' compensation

5.20 Currently, the ABS includes workers' compensation *claims* in wages, salaries and supplements. The SNA93 recommendation, which will be adopted in the ANA, is to include the *premiums* in compensation of employees as part of social contributions. The SNA has always recommended this treatment. However, the ABS did not adopt this treatment in the past because the view was taken that the compulsory nature of workers' compensation in Australia implied that it was more appropriate for the insurance service charge (the gap between premiums and claims) to be borne by employers rather than employees. The insurance service charge measures the value of services provided by insurance enterprises in arranging payments of claims in exchange for the receipts of premiums. While Australia's institutional arrangements are unchanged with regard to the compulsory nature of workers' compensation, SNA93 is explicit in its recommendation that the compulsory nature of schemes is not a sufficient condition for adopting a different treatment. The insurance service charge will now be included in private final consumption expenditure and will generally raise the level of compensation of employees and GDP.

Non-life insurance services output

5.21 The current ANA treatment is to measure insurance output as premiums earned less claims incurred. This treatment tends to understate measured value of output, as insurers use investment income from prepaid premiums to partly cover claims. In line with SNA93 recommendations, income from investment of insurance technical reserves (prepaid premiums, reserves against outstanding claims) will now also be taken into account when measuring non-life insurance services output and the consumption of those services by households and industry. The service charge will be calculated as premiums plus premium supplements (where premium supplements are the property income accruing on insurance technical reserves) less expected claims. This change will raise the level of GDP. The treatment of life insurance services will remain unchanged.

Changes to income and output continued

Financial Intermediation Services Indirectly Measured

- **5.22** One of the most significant revisions to the SNA is the proposal to allocate the production of financial services of banks and other financial intermediaries to the users of those services, both depositors and borrowers. The SNA93 recommendation relating to the allocation of the service charge to users of services sparked significant controversy and, consequently, the System has allowed countries the option of either 'allocation' or maintaining the treatment recommended by SNA68 (that is, allocating consumption to a nominal industry in the financial sector, implying a negative value added for the nominal industry equal and opposite to the value of the imputed output of financial intermediaries). While alternative treatments are possible, allocation is the preferred SNA93 alternative.
- **5.23** The root problem in measuring the output of financial intermediaries is the treatment of interest in the national accounts. Because interest is 'property income' (that is, it is income earned on a non-produced asset) it is not treated as an income or expense item in the derivation of an industry's gross output and value added. Consequently, financial intermediaries would thus produce a very low, or frequently, a negative value added. To overcome this obvious inconsistency, an alternative method of measuring gross output has been developed to measure the services to borrowers and depositors that financial intermediaries provide. This method is referred to as Financial Intermediation Services Indirectly Measured (FISIM).
- **5.24** The indirectly charged services of banks effectively relate to the differences in interest rates offered to borrowers and depositors. The existence of this difference means that banks do not charge directly for all the services they provide since they cover the cost of some of these services and generate an operating surplus by charging higher interest rates to borrowers than they pay to depositors. Thus the payment for service is implicit in either or both of the higher interest paid by borrowers or the lower interest received by depositors. The SNA93 recommendation that this indirectly charged output should be allocated to all users of the service represents a major change from the previous international standard.

Changes to income and output continued

- 5.25 In the existing NIEP accounts, the measure of indirectly charged services is all attributed to borrowers and is allocated either to private final consumption expenditure or intermediate consumption (shown as a negative gross operating surplus (GOS)) of the 'nominal industry'). The private final consumption expenditure component relates to financial services consumed on personal loans by households and this has a positive effect on the level of GDP. The remaining service charge (termed the Imputed Bank Service Charge (IBSC)) is treated as being consumed by the nominal industry. In the I-O tables, on the other hand, the nominal industry cannot be accommodated, so the IBSC is allocated directly to intermediate consumption of using industries. The treatment in the existing I-O tables is therefore more consistent with the recommendations of SNA93, although it still falls short of the full allocation recommended.
- **5.26** The ABS intends to estimate FISIM as the difference between the interest rates on loans and deposits and a pure, or reference, rate of interest. Conceptually the reference rate must lie between the loan and deposit rates and thus a margin or price for each loan and deposit can be established. The quantity of service provided on loans and deposits is calculated by estimating the average balances on loans and deposits in each period. FISIM is thus equal to the average balance on loans or deposits multiplied by the relevant margin. Total FISIM is derived by summing the individual FISIM calculated on all deposits and loans. No FISIM is calculated in respect of debt securities as intermediaries provide no services in relation to them.
- **5.27** Following the preferred stance of SNA93, the ABS will allocate FISIM fully to users as it believes that it is a conceptually superior treatment for which satisfactory estimates can be compiled in Australia. The revised treatment will show consumption by individual industries, government units, and households, for both depositors and borrowers. Imports and exports of FISIM will also be estimated, and will appear in the current account of the balance of payments. The nominal industry in the existing estimates will disappear.
- **5.28** The general effect of allocation of FISIM is to increase GDP, primarily due to the allocation of FISIM on household deposits. FISIM allocated to the general government sector will also add to GDP but this effect is expected to be small. FISIM on housing loans is intermediate consumption and thus will not affect the level of GDP. Preliminary estimates indicate that the contribution to GDP from net exports is a relatively small negative.

Changes to income and output continued

5.29 The approach to be used effectively disaggregates the total interest flow on loans and deposits into a service element and a 'pure' interest element (that is, the property income that is solely related to the provision of funds). The interest flows recorded as property income in the income and outlay accounts will be the 'pure' interest component only, with the service component being placed in either private final consumption expenditure, government final consumption expenditure, exports, imports or intermediate consumption. Therefore, it is important to note that, the allocation of FISIM will not affect the saving of any sector.

Mixed income

5.30 The new term 'mixed income' will replace the existing 'gross operating surplus (GOS) — unincorporated enterprises'. SNA93 recommends a change in terminology to reflect more fully the nature of this concept which includes elements of both return for proprietor's own labour and operating surplus. This change will have no impact on GDP. In the I-O tables the only change will be to terminology, as the tables are not compiled by institutional sector. That is, the term GOS will simply be renamed 'gross operating surplus and mixed income' in the I-O tables.

Royalties

5.31 Royalties are currently regarded as property income, and are included as part of 'interest etc., received' and 'interest etc., paid' in the ANA. SNA93 recommends that this treatment remain for natural resource royalties. For royalties on intellectual property (such as patents, films etc.) it recommends treatment as service income and intermediate costs. Hence, these types of royalties will form part of the output of the industry providing intangible assets and part of the intermediate consumption of the industry licensed to use these assets. In the domestic sector the effect on GOS of these reclassifications will net out to zero. GDP is thus only affected through the import and export of these services.

Boundary between taxes and service income

5.32 There will be a change to the treatment of certain licences and fees. Some, which are currently treated as taxes, are to be treated as service income of general government. Examples include drivers' licences and some regulatory charges. This will reduce the level of government final consumption expenditure in the ANA because sales of general government services are treated as an offset. Some of these charges are paid by households and therefore the change will result in an increase in private final consumption expenditure. On balance, this change will result in a small decrease in the level of GDP to the extent that the relevant licences and fees are paid by trading and financial enterprises.

Changes to income and output continued

5.33 The changes to the terminology used to describe certain types of taxes and subsidies are shown in table 5.1.

E 1						
5.1	CHANGES	TO	TAXES	AND	SUBSIDIES	TERMINOLOGY

Current term in ANA	New term recommended in SNA93
Indirect taxes	Taxes on production and imports
Commodity taxes	Taxes on products
Other indirect taxes on production and imports	Other taxes on production and imports
Direct taxes	Current taxes on income, wealth, etc.
Direct taxes on income	Income taxes
Other direct taxes, fees, fines etc.	Other current taxes on income, wealth, etc.
Subsidies	Subsidies
Commodity subsidies	Subsidies on products
Other subsidies	Other subsidies on production

Fines

5.34 SNA93 has recommended a change to the treatment of fines. They are now to be treated as 'other current transfers'. In the ANA they are currently included with 'other direct taxes, fees and fines etc.' The change has no effect on GDP.

Valuation of industry and sector output and value added

5.35 Presently, individual industry components of GDP are shown at market prices in the NIEP accounts, although an alternative valuation at factor cost is presented in the annual accounts. However, SNA93 recommends the concept of 'basic prices' as the preferred valuation for industry and sector estimates of output and 'purchasers' prices' for the valuation of intermediate inputs (and final demand). Basic price valuation removes the distortion caused by a difference in the incidence of commodity taxation and subsidies across the output of individual industries. The basic price is the amount received by the producer including any subsidies (because they artificially lower the purchase price of commodities) but before the addition of taxes on products (they artificially raise the purchase price of commodities). Industry gross product (now to be referred to as 'industry value added') is described as being at 'basic prices' by convention, even though the outputs and inputs are valued using two different sets of prices.

Changes to income and output continued

- **5.36** Consistent with SNA93 and the valuation used in the I-O tables, industry-based estimates of value added and output will be presented at basic prices, not at market prices as in existing GDP(P) industry dissections. The main impact of this change will be to change the individual industry contribution to production in the NIEP accounts.
- **5.37** The ABS intends to maintain the existing factor cost valuation of individual industry gross product as an alternative, but secondary, valuation in current price estimates in the annual NIEP accounts.

Accrual of interest on debt securities

- **5.38** A new treatment for interest on debt securities has been recommended by both SNA93 and BPM5. The revised international standard for recording interest payable and receivable on such securities is an accrual basis rather than the previous 'due for payment' basis. Under the current 'due for payment' basis the income is recorded when contractually due to be paid.
- **5.39** For debt securities, the ABS has taken 'accrual' to mean applying current period market interest rates to instrument market values to derive interest flows. The current due for payment basis involves recording income flows to the holders of instruments when the income is payable. For example, if an Australian government security is purchased, held for five months and then traded back into the market a month before a coupon payment is due to be made, then, under the due for payment basis of income recognition, no income is recorded as being payable. With annual turnover in general government securities being very high (many times the size of the total outstanding portfolio), there is ample scope for coupon payments to be collected out of proportion to average holdings, and for the resultant interest flow statistics to bear little relationship to the time that capital was provided by any individual asset holder.
- **5.40** It is expected that accrual, using prevailing market interest rates, will significantly reduce anomalies and asymmetries in Australia's macro-economic statistics. This change will have a significant impact on internal flows of interest and on the income component of the balance of payments, but will not affect GDP. Its effect has not yet been fully quantified.

Changes to income and output continued

Reinvested earnings on foreign direct investment

- **5.41** SNA93 recommends that international flows of reinvested earnings attributable to direct investors should be included as part of property income flows in the rest of the world and relevant domestic sector accounts. A contra entry, equal and with opposite sign, is included under 'shares and other equity' in the financial account.
- **5.42** Direct investment is investment in a 'foreign direct investment enterprise' which is either a branch of a non-resident enterprise or a corporation in which at least one foreign investor owns sufficient shares has an effective voice in management. The earnings of foreign direct investment enterprises that are attributable to their direct investors and that are retained rather than remitted as dividends or profits are to be treated as if they are remitted. The reason for this treatment is that the decision to retain earnings is a conscious investment decision by the foreign direct investor. An amount of the retained earnings, based on the proportion of ownership by the direct investor, is imputed as remittance of property income. The same amount is recorded as reinvestment of the retained earnings in the financial account. These recommendations will be implemented and will impact on sector and national saving. Implementation of this change will also eliminate the only difference in treatment at present between Australia's national accounts and balance of payments statistics.

Backyard production

5.43 Presently in the NIEP accounts, the value of output produced by the household sector for its own final consumption ('backyard production') is not fully accounted for on the income side. While the production boundary defined by SNA93 is almost unchanged (both in terms of backyard production and more generally) from that defined in SNA68, the SNA93 recommendations regarding the treatment of backyard production are more precise. The planned implementation of these recommendations is expected to result in a more complete account of backyard production in the NIEP accounts and to raise the estimate of gross mixed income.

Changes to assets, capital formation and inventories

5.44 SNA93 proposes several changes to the asset boundary. These relate to the capitalisation of certain defence expenditures and a new asset type 'intangible fixed assets' which covers mineral exploration, computer software, and entertainment, literary and artistic originals. In addition, the ABS intends to implement the treatment of livestock that was included in SNA68 and is retained in SNA93 but which the ABS had not introduced (see paras 5.55-5.57).

Changes to assets, capital formation and inventories continued

Defence expenditure

- **5.45** Currently, nearly all defence expenditures are treated as government final consumption expenditure. SNA93 recommends that certain defence expenditures be treated instead as gross fixed capital formation. Expenditures to be treated in this way include construction of buildings, roads, bridges, airfields, docks, etc., for military use. Transport equipment, communications equipment and computers are also to be capitalised provided they are not part of weapons or weapons delivery systems. They meet the definition of assets and capital formation as they produce services for a period of one year or more and they are used continuously and repeatedly in production. Furthermore, they are used in a fashion similar to civilian assets and could conceivably be switched from military to civilian use. In some countries these facilities are used for both military and civilian purposes.
- **5.46** Expenditures on weapons of destruction and weapon delivery systems will continue to be regarded as government final consumption expenditure. This includes rockets, missiles, warheads (and their means of delivery), warships, submarines, fighter aircraft, bombers and tanks. The rationale for the treatment is that these types of goods are not used 'repeatedly or continuously in production', they are single-use goods and are used for destruction, the antithesis of production.
- **5.47** Despite some ABS reservations about the restrictive scope of the expenditures to be capitalised, the treatment recommended by SNA93 will be implemented in the ANA. As the new treatment transfers expenditure between two types of final expenditure (government final consumption expenditure to gross fixed capital expenditure) it only impacts on GDP to the extent that it raises consumption of fixed capital on those assets. Consumption of fixed capital on general government assets is included in government final consumption expenditure and general government gross operating surplus. In table 6.1 (Section 6), while the estimated rise in public gross fixed capital formation on account of the changed treatment of defence expenditure is \$1.0 billion, the 'corresponding' fall in government final consumption expenditure is only \$0.3 billion. This asymmetry reflects the \$0.7 billion estimate for consumption of fixed capital which is included in government final consumption expenditure. Gross output, GOS and GDP will all rise by the estimated value of consumption of fixed capital (\$0.7 billion).

Changes to assets, capital formation and inventories continued

Mineral exploration

5.48 SNA93 recommends the capitalisation of all mineral exploration expenses, regardless of whether or not the exploration was successful. This is on the grounds that, when taken as a whole, even unsuccessful exploration accumulates knowledge that can be applied in increasing the chances of success of future activity. The quarterly and annual national accounts currently treat all mineral exploration expenses as intermediate consumption, whereas some mineral exploration is capitalised in the I-O tables. This change will raise the level of GDP.

Computer software

- **5.49** The SNA93 recommendation that all computer software be capitalised will be implemented as far as possible in the ANA. Computer software covers both purchased software and software developed in-house. Currently, software purchased by business independently of hardware is treated as intermediate consumption in the ANA.
- **5.50** There are practical difficulties with the implementation of this recommendation because software and hardware are often purchased as a package so businesses cannot always separately identify the software component. Survey respondents who cannot separate such purchases have been instructed to include the total expenditure in the plant and equipment category of capital expenditure. To the extent that this is a problem, it will affect the split of gross fixed capital formation into tangible and intangible assets, but not the total level of gross fixed capital formation. The change will increase GDP.

Entertainment, literary and artistic originals

- **5.51** SNA93 recommends the capitalisation of entertainment, literary and artistic originals. These assets consist of the originals of films, sound recordings, manuscripts, tapes, models, etc., on which drama performances, radio and television programming, musical performances, sporting events, literary and artistic output etc., are recorded or embodied. The production of these assets will be included in the accounts as an acquisition of produced assets. Currently, expenditures on the development of these originals are treated as intermediate consumption.
- **5.52** SNA93 recommends a present value method to value artistic originals. Estimates of the future series of annual income flows generated from the originals are discounted to obtain the present value of income in any given year. The major artistic original for which this approach will be used is film production on own-account. The approach will be implemented for artistic originals wherever data availability permits.

Changes to assets, capital formation and inventories continued

5.53 In cases where the present value approach proves difficult to implement, SNA93 suggests that the production cost approach can be used as a second best solution. This approach is based on obtaining data on the production costs of the artistic originals and capitalising these data. The problem with this approach in the Australian context is that some types of artistic originals have a typically low rate of return (most notably own-account film originals). Use of this approach would significantly overstate gross fixed capital formation and hence GDP compared with the present value approach.

5.54 In practice this is a difficult area and both approaches present problems which have not yet been fully resolved in SNA93 or by international expert groups of national accountants. Implementation is likely to be limited in scope initially. Irrespective of which approach is chosen for each artistic original, the overall result of capitalising artistic originals will be an increase in GDP.

Livestock

5.55 SNA93 recommends that livestock be included in gross fixed capital formation or work-in-progress (change in inventories), depending on an animal's role in production. Breeding stock, dairy cattle and sheep raised for wool are to be capitalised; animals raised for food are to be treated as work-in-progress until slaughtered. Furthermore, entries are to be recorded for own-account production as the animal grows. This recommendation is the same as that in SNA68. However, it was not implemented in the ANA, the current treatment being to include livestock in production only when slaughtered or exported live. Although there are a number of data difficulties and assumptions required, the ABS intends to implement this recommendation, although it will not be possible to implement it for the whole range of farm animals, at least initially. If the SNA93 recommendation were not implemented, it would bias downward the level of Australia's gross fixed capital formation and GDP.

Changes to assets, capital formation and inventories continued

5.56 SNA93 recommendations will be fully implemented for cattle and sheep. All sheep raised for wool, dairy cattle and own-account breeding stock (i.e. rams, ewes, bulls and cows), will be included as acquisitions of fixed assets as they grow to maturity, and subtracted as disposals when eventually slaughtered or otherwise disposed of. Bulls, produced for sale, are included as work-in-progress until sold, at which time they are deducted from the inventories of the seller and included as acquisitions of fixed assets of the purchaser. All capitalised animals that are slaughtered are added to the stock of finished goods when killed. All other sheep and cattle are to be included as work-in-progress and output as they grow, and are converted to finished goods when slaughtered. The implementation of this recommendation will alter the timing of recording of production and will also add to the level of GDP to the extent that some animals will now have additional value as assets in production.

5.57 It should be noted that the full range of animals, including horses, are included in the level of fixed assets and inventories shown in the balance sheet of the ANA. It has not yet been possible to adopt a fully consistent treatment in the flow accounts for animals other than cattle and sheep. Data constraints will not allow the application of the SNA93 treatment for other types of farm animals such as poultry and pigs at this stage. The existing treatment will be maintained, i.e., they will be included in output only when slaughtered. This difference in treatment has been assessed to have a minimal impact on the level and movement of GDP.

Additional concepts of final consumption expenditure and adjusted disposable income

Collective and individual consumption

5.58 SNA93 introduces additional concepts of consumption beyond the existing government and private final consumption expenditure concepts. In national accounting, general government is deemed to consume its own output, except to the extent that some of it is purchased directly by households or businesses (in which case it is netted off). However, many of the services provided by general government are consumed directly by individuals while others are consumed collectively. Education and health services are examples of the former while defence and public administration are examples of the latter. Indeed, whether a particular 'individual' service is provided by the private sector or the general government sector varies from country to country depending on institutional arrangements in each country. In recognition of this, SNA93 has introduced the concepts of 'actual individual consumption' for households and 'actual collective consumption' for general government. The former includes private final consumption expenditure plus 'individual' services provided by general government. The latter consists of government final consumption expenditure minus those same 'individual' services provided to households. The introduction of these additional concepts requires that a concept of 'adjusted disposable income' also be included in order to balance the accounts for general government and households. It has no impact on GDP or sector saving.

5.59 In the ANA, it is intended that these additional views of consumption and income be introduced in a supplementary table and that the current sector dissection of final consumption expenditure be retained in the main accounts.

Sectors and sub-sectors

5.60 Institutional sector and other closely related classifications for use in ABS statistics are described in Standard Economic Sector Classifications of Australia (SESCA) (Cat. no. 1218.0) to be released later this year. These classifications incorporate recommendations from SNA93 and will be used in the ANA. The institutional sectors and sub-sectors to be shown in the ANA are included in table 5.2, although initially data limitations will prevent separate estimates being published for Non-Profit Institutions Serving Households (NPISH) (these institutions will be combined with households until sufficient data become available to enable separate publication).

5.2 REVISED DOMESTIC SECTORS AND SUB-SECTORS IN THE ANA

Non-financial corporations Private

Public

Commonwealth State and local

Financial corporations Reserve Bank of Australia

Depository corporations

Banks

Other depository corporations

Insurance corporations and pension funds

Life insurance Pension funds

Other insurance corporations

Other financial institutions (including financial auxiliaries)

Central Borrowing Authorities Financial intermediaries n.e.c.

Financial auxiliaries

National General government

State and local

Households (a)

NPISH (b)

5.61 The SNA groups together institutional units with similar functions in the economy into sectors to enhance the analytical usefulness of the accounts. Whereas SNA68 identified four sectors, SNA93 recommends identification of a fifth sector, the NPISH sector. This is the only change to the broad sectoring arrangements in the revised standards. Following is a summary of the revised standard for allocating non-profit institutions (NPIs) to sectors, and the plan for implementing this standard.

5.62 The NPISH sector is to comprise a subset of all non-profit institutional units where:

Non-profit institutional units are legal or social entities created for the purpose of producing goods or services whose status does not permit them to be a source of income, profit or other financial gain to the units that establish, control or finance them. (SNA93, para. 4.54).

⁽a) Including unincorporated businesses n.e.c. and NPISH until data permit the development of a separate sector.

⁽b) To be introduced when data permit

Sectors and sub-sectors continued

- **5.63** SNA93 distinguishes two broad types of NPIs: market producers and non-market producers. NPIs are defined to be market producers if they charge prices or fees which have a significant influence on both the amounts producers are willing to supply and the amounts purchasers are willing to buy (i.e. the prices are 'economically significant'). Non-market producing NPIs provide goods or services either free or at prices or fees that are not economically significant.
- **5.64** There has been no change in the allocation of market producing NPIs to sectors in SNA93. As in SNA68, these NPIs are allocated to either the non-financial corporations sector or the financial corporations sector, depending on which sector they serve.
- **5.65** In the case of non-market NPIs, SNA93 makes a further distinction based on whether they are controlled and mainly financed by government units. There has been no change in the allocation to sectors of non-market NPIs controlled and mainly financed by government units. As was the practice in SNA68, these NPIs are allocated to the general government sector. However, in the case of other non-market NPIs, SNA93 recommends that they be allocated to a new sector, the NPISH sector. Prior to the revised standards, such NPIs were allocated to the household sector.
- 5.66 The NPISH sector includes the following two main kinds of NPISH that provide goods or services to their members or to other households without charge or at prices that are not economically significant:
- Organisations whose primary role is to serve their members, such as trade unions, professional or learned societies, consumers' associations, political parties, churches or religious societies, and social, cultural, recreational and sports clubs.
- (ii) Philanthropic organisations, such as charities, relief and aid organisations financed by voluntary transfers in cash or in kind from other institutional units.
- **5.67** The ABS has decided in principle to implement the revised standard for allocating NPIs to sectors, i.e., to identify the NPISH sector. However, it will be some time before continuing sources are available to provide the complete set of data relating to NPIs necessary to identify fully the NPISH sector. In the interim, NPIs which will eventually be allocated to the NPISH sector will continue to be included in the household sector.

Sectors and sub-sectors continued

5.68 The ABS is developing strategies to collect the complete set of data necessary for full identification of the NPISH sector. This development work is in two areas: (i) institutional sector codes are being applied to units on the ABS Business Register; and (ii) ABS surveys, in particular, the suite of Services Industry Surveys, are being enhanced to support data requirements for NPIs.

Changes to sub-sectors

- **5.69** At the second and third levels of the institutional sector classification there will be some increase in the information available in the ANA for financial corporations. The NIEP accounts will include six sub-sectors of the financial corporations sector, as follows:
- (i) Reserve Bank of Australia
- (ii) **Banks**
- (iii) Other depository corporations
- (iv) Life insurance and pension funds
- (v) Other insurance corporations
- Other financial institutions.
- **5.70** The NIEP accounts currently show the two sub-sectors relating to insurance; the rest are in a combined sub-sector. It is proposed that the currently available split between public and private sector financial corporations be discontinued.
- **5.71** The financial accounts will be compiled for all levels shown in table 5.2.
- **5.72** The SNA93 recommendation for a 'foreign control' sub-sector of financial corporations and non-financial corporations will not be implemented initially as data sources are yet to be developed.

Sector boundary decisions

5.73 SNA93 makes specific recommendations for changes to the existing sector classification of NPISH (see para. 5.60-5.68) and financial auxiliaries. Compared to the previous international standard, SNA93 provides considerably more guidance for determining sector boundaries. That is, SNA93 recommendations relating to the allocation of institutional units to sectors are generally more precise. The ABS has taken the opportunity afforded by the availability of the revised standards to reconsider its classification of institutional units to sectors. In particular, the treatment of universities, quasi-corporations, and central borrowing authorities has been considered in detail. Decisions are outlined below.

Sectors and sub-sectors continued

Financial auxiliaries

5.74 Financial auxiliaries include stock brokers, insurance brokers, investment advisers, trustees, custodians and nominees, mortgage originators and other entities that are engaged in providing services closely related to financial intermediation even though they do not intermediate themselves. They are to be reclassified from the corporate trading enterprises sector to the financial sector. However, because of difficulties with the recognition of some of these entities on the ABS Business Register and the time required to develop data sources, the implementation of this decision will be an evolving process over a number of years.

Universities

5.75 Following detailed investigations and consultation with major users, which included circulation of the exposure draft Institutional Sector Classification of Universities (May 1995), public universities will continue to be treated as non-market NPIs allocated to the general government sector. However, public universities will be shifted from the State and local level of general government to what will be termed the 'national' level. It is clear that public universities meet the NPI criteria as outlined above. They are defined as non-market NPIs on the basis of their funding arrangements. While most public universities were created by State legislation, the bulk of their funding (more than 70%) is received from the Commonwealth Government. Approximately 20% of the remaining funding is accounted for by the Higher Education Contribution Scheme (HECS) fees, with only around 10% accounted for by fees for overseas students, postgraduate students and entrepreneurial activity. As the HECS fee is set by Government, only the fees for overseas students, postgraduate students and entrepreneurial activity are regarded as satisfying the 'economically significant prices' criterion outlined above. Therefore, public universities will continue to be regarded as non-market NPIs. They are allocated to the general government sector on the basis that, while no Australian government is able to control universities in the sense of being able to appoint their managing officers, it is clear that the Commonwealth Government is able to exercise a significant degree of control through its funding power.

Sectors and sub-sectors continued

5.76 While there will continue to be two sub-sectors within the general government sector defined according to level of government, their definitions will be changed. Whereas previously these sub-sectors were defined as (i) Commonwealth and (ii) State and local; they will now be defined as (i) National and (ii) State and local. The previous sub-sector definitions (in particular the nomenclature) presented problems when allocating institutional units such as public universities which are subject to a degree of control from both Commonwealth Government and State Governments. The scope of the new national sub-sector has been changed to include multi-jurisdictional units in addition to units which are solely under the jurisdiction of the Commonwealth. At the present time universities are the only institutions to be designated multi-jurisdictional units, but other units may well be so classified in the future.

Sectors and sub-sectors continued

Quasi-corporations

5.77 An unincorporated enterprise is defined to be a quasi-corporation if it functions like a corporation by maintaining a complete set of accounts including balance sheets. SNA93 recommends that, for the purposes of sectoring and sub-sectoring, quasi-corporations be treated as corporations and allocated either to the non-financial corporations or the financial corporations sector. While this recommendation represents no change from the previous international standard, SNA93 notes that 'experience has shown that countries have difficulties distinguishing quasi-corporations owned by households' (SNA93, para. 4.53). Indeed, this is the case in Australia where at present only large and easily identified quasi-corporations (e.g., branches of overseas corporations, mutual societies) are distinguished and allocated to the relevant corporate sector. The bulk of quasi-corporations are not presently identifiable from data stored on the ABS Business Register and, consequently, are included in the household sector. Ideally, what is required is a review of all unincorporated enterprises on the Business Register to determine if they meet the quasi-corporation criterion. While the resources for a review of this magnitude are not currently available, the ABS plans to use information from its profiling of large businesses to identify large partnerships, unit trusts and trading trusts that are currently not identified as quasi-corporations on the Business Register. Listings of partnerships of companies and trusts with companies as unit holders have been requested from the Australian Taxation Office and will be matched against units on the Business Register. Further, it is intended that unincorporated enterprises that report to a financial institution prudential supervisor will be identified and classed as quasi-corporations. This is in addition to those already identified, such as credit unions and building societies. Thus, while it will not be possible to identify all quasi-corporations, the ABS is developing the capacity to implement more fully the SNA93 recommendation regarding these institutional units.

Central Borrowing Authorities

- **5.78** In light of the revised standards, and in consultation with users, the ABS has revised its treatment of government Central Borrowing Authorities (CBAs).
- **5.79** CBAs were set up by State and Territory Governments to centralise the borrowing (and, to a lesser extent, financial asset and liability management) of both the general government and public trading corporations within the State or Territory. At present, CBAs are allocated to the general government sector on the basis that, although their activity resembles financial intermediation, their activity is carried out on behalf of government and they are in effect agents of government.

Sectors and sub-sectors continued

5.80 In the light of SNA93 recommendations, in June 1995 the ABS circulated the exposure draft, Institutional Sector Classifications of Central Borrowing Authorities, to major users of government finance and national accounts statistics. This exposure draft reviewed the issues involved in applying the revised sector classification to CBAs, examined developments in the method of operation of CBAs in recent years, and invited comments from users.

5.81 Based on the review of issues in the exposure draft and the consultation that followed its release, a decision has been taken to reclassify CBAs from the general government sector to the financial corporations sector. In summary this decision is based on: (i) the determination that CBAs are institutional units; (ii) that on balance their activities accord more with those of financial corporations than of general government; and (iii) that although they are closely identified with their owning governments, this is not sufficient justification either for classifying them as ancillary corporations or treating them as agents of government.

Other changes to ANA concepts and classifications

Changes to recording of superannuation and workers' compensation contributions and receipts in bousehold income and outlay account

5.82 Presently, in the ANA, employers' contributions to superannuation funds (a component of wages, salaries and supplements) and interest received on householders' equity in life insurance and superannuation funds are recorded as household income and contribute to disposable income and saving. Contributions to, and drawdowns from superannuation reserves, are treated as financial transactions by households and do not impact on income or saving. In addition, contributions placed with financial institutions managing superannuation funds are not treated as income of the financial institutions, neither are payments of benefits from the funds regarded as disbursements of income from the financial institutions. Rather, the contributions made to the schemes and the benefits paid by them represent changes in the equity of households in the schemes and are reflected instead in the financial accounts and balance sheet.

Other changes to ANA concepts and classifications continued

5.83 SNA93 continues this conceptual treatment in as far as it affects household saving. Employers' contributions to superannuation and property income attributable to householders' equity in pension funds will be reflected in primary income receivable by households. However, in a departure from current practice, SNA93 recommends that all the transactions on account of superannuation, both actual and imputed, be included in households' secondary income receivable and payable, in order to make explicit the underlying economic processes taking place. These transactions are then reversed using a contra item so household saving remains unaffected. Actual receipt of benefits are shown as a receipt of secondary income by households. Similarly, contributions by households to superannuation schemes (both the employers' and employees' components including property income attributable to householders' equity) are shown as secondary income payable. This new treatment feeds through to the measurement of household disposable income. In order to maintain the conceptual integrity of the system, these transactions are reversed in the item 'Adjustment for change in net equity of households on life insurance and pension funds' to leave household saving unaffected. Despite some reservations about this treatment, the ABS will implement these SNA93 recommendations in the ANA in order to maintain international comparability.

5.84 A consistent treatment will be adopted in the ANA for workers' compensation insurance. Workers' compensation premiums (a component of compensation of employees), together with premium supplements (defined as property income on insurance technical reserves) will be shown as part of primary income receivable by households. Workers' compensation claims will be included as part of secondary income receivable by households. Net premiums paid, the difference between premiums paid and the insurance service charge, will be included as part of secondary income payable by households to insurance enterprises (the insurance service charge is included as part of private final consumption expenditure). However, unlike the treatment of pension funds, above, there is no need for an adjustment item to reverse these new transactions because workers' compensation insurance does not involve an element of household saving.

Other changes to ANA concepts and classifications continued

Inclusion of financial derivatives

5.85 The inclusion of financial derivatives in the national accounts is a new aspect of SNA93. These instruments include futures, other forward-type contracts such as forward rate agreements and foreign exchange contracts, swaps, and options. While the SNA93 recommendations need some clarification, there is general international agreement that financial derivatives should be treated as financial assets if they have demonstrable value. SNA93 treats transactions in certain derivatives, specifically forward rate agreements and interest rate swaps, as interest income transactions; transactions in all other financial derivatives falling within the asset boundary are classified to the financial accounts. The SNA93 (and BPM5) treatment of interest rate swaps and forward rate agreements is currently under review in the light of issues raised by several international expert groups convened by the IMF. Australia, along with various other countries, has argued that all transactions in financial derivatives should be classified in the financial accounts. Interest rate swaps (including cross currency interest rate swaps) account for over 90% of the derivatives market in Australia. No formal decision has yet been made to revise SNA93 in respect of derivatives. However, the proposed treatment in the ANA (and Australia's international accounts) is to anticipate a change in the standards and record all transactions in financial derivatives in the financial accounts and all outstanding asset and liability positions in these instruments in the balance sheet. There will be no impact on GDP.

Imports valuation in I-O tables

5.86 In the NIEP accounts and the balance of payments, imports of goods are valued 'free-on-board' (f.o.b.). Freight and insurance provided by non-residents on imported goods are included in imports of services, while freight and insurance provided by residents on exported goods are included in domestic production and exports of services (generally, output of the transport and insurance industries). In the I-O tables, on the other hand, imports of goods are valued 'cost-insurance-freight' (c.i.f.). Freight and insurance, regardless of whether they are supplied by domestic or foreign producers, are included in the value of imported goods. This allows for a consistent valuation at basic prices between imported and domestically produced goods in the tables. Freight and insurance to the customs frontier of the importing country have to be included in the basic price so as to reflect an equivalent onshore supply value. A problem arises because the same freight and insurance services are included in both imports of services and in domestic production. The current ABS I-O tables adopt a treatment that is consistent with the NIEP and balance of payments accounts for net exports of goods and services, but show offsetting differences between imports and exports.

Other changes to ANA concepts and classifications continued

5.87 In order to accommodate the difference in valuation, SNA93 recommends an adjustment in the I-O tables to convert imports from a c.i.f. to a f.o.b. basis at the total level. This is done by adding an extra row and column in the supply table. The commodity detail will, however, remain on a c.i.f. basis (thus remaining consistent with basic prices in the tables). The SNA93 recommendation will be implemented for the first time in Australia's 1994-95 I-O tables, commencing in respect of 1994-95.

SNA93 RECOMMENDATIONS THAT WILL NOT BE IMPLEMENTED IN THE ANA

5.88 As mentioned previously, the ABS endorses the revised SNA and proposes to implement its recommendations to the fullest extent practicable, especially in as far as the changes impact on GDP. However, there are a number of SNA93 recommendations relating to concepts and the production boundary that the ABS does not plan to implement. These are described below. The ABS also proposes to produce a condensed version of the full array of accounts recommended by SNA93, although the information content will be retained. This is discussed in Section 11.

Speculative construction — timing of recording in gross fixed capital formation

5.89 SNA93 recommends that speculative construction be shown as part of inventories until the ownership has been transferred to the eventual user of the asset. Hence it should not be treated as gross fixed capital formation until that time. Output remains part of the work-in-progress of the institutional unit producing the asset until sold. In this way, consistency will be maintained between the financing of the activity and the production. However, construction for own use or work completed under contract of sale is to be included as gross fixed capital formation as the work is put in place. The ANA currently adopts the latter treatment for all building and construction activity, including speculative construction.

SNA93 RECOMMENDATIONS THAT WILL NOT BE IMPLEMENTED IN THE ANA continued

5.90 The ABS has decided to retain the existing approach in the ANA for operational reasons and because it is not regarded as a significant departure from the intentions of SNA93. It would be difficult to collect the data needed to implement the standard in the ABS Building Activity Survey, the major source of data on new building for the national accounts. In particular, the nature of the survey would have to change from a 'work done' to a 'stocks' basis of data collection, where individual speculative building projects are tracked until sold. It is considered that the gains in adopting the SNA93 treatment are minimal and not worth the extra burden on respondents especially as there will be no impact on the measurement of GDP. Moreover, speculative activity is only important at certain times in the building cycle and is generally completed over one or two quarters, making a timing adjustment to investment and capital stock largely unnecessary. It is also noted that there were objections to this SNA93 recommendation in the user consultation round following the release of the earlier discussion paper.

Crops — time of recording in output and GDP

5.91 The SNA93 recommends is that cultivated natural growth be included in output as work-in-progress or gross fixed capital formation over the entire period of the growth process. This includes growth of agricultural crops, livestock, cultivated fish and crustacea, vineyards, orchards and timber tracts. In SNA68, only growth in livestock and fishstock were treated in this way, although the treatment was not adopted in the ANA. The existing ANA treatment is to include agriculture and forest products in output when harvested or slaughtered. The ABS proposes to retain the existing treatment for crops but will adopt SNA93 recommendations for certain types of livestock (see paras 5.55-5.57).

SNA93 RECOMMENDATIONS THAT WILL NOT BE IMPLEMENTED IN THE ANA continued

5.92 The recommendations for crops and plantation growth will not be implemented for data availability and operational reasons. Implementation of the revised standards for crops would require crop output to be forecast at the beginning of the crop year and then distributed to quarters as the production process occurs. Because the crop year generally spans more than one financial year in Australia, it would also require a redistribution of output across years. Given Australia's variable weather conditions and variations in prices for these commodities, revisions going back into the previous year could be substantial if the SNA93 approach were to be adopted. The existing methodology for the seasonal adjustment of crop production also requires crops to be forecast but this does not have to be done until November, towards the end of the crop year when there is substantially more information available on the likely outcome of the harvest. A further difficulty is that measurement of the crop production process throughout the season would be quite arbitrary. Allocation of output using costs incurred in each period, including an allowance for the use of own labour is recommended by SNA93. The major expenses associated with wheat production would be incurred in the June (planting) and December and March (harvesting) quarters, although substantial crop growth would also occur during the September quarter. Notwithstanding the somewhat arbitrary nature of the allocator, quarterly costs data by type of crop are not available.

5.93 The approach taken to the treatment of crop output in the accounts can have a significant impact on year-to-year growth, especially in a year following the breaking of, or coming into, a drought. In the quarterly accounts, the choice of seasonal adjustment method is of major importance to the interpretation of the data. Because crop output is almost exclusively in the December and the March quarters, it is difficult to seasonally adjust in the standard manner. The current adjustment method is to distribute annual output evenly over the quarters of the financial year. An effect of this method is that the whole of the annual movement in crop output is reflected in the September quarter. The ABS is examining possible methods to eliminate this 'step' problem in seasonally adjusted estimates, with a view to implementing an improved method when SNA93 is introduced.

SNA93 RECOMMENDATIONS THAT WILL NOT BE IMPLEMENTED IN THE ANA continued

Orchard growth — inclusion within the fixed asset boundary

5.94 SNA93 recommends that the value of acquisition less disposals of mature repeat production trees, vines, shrubs, etc., and acquisition and establishment of immature trees etc. on own-accounts should be included in gross fixed capital formation. The latter may be valued by the costs incurred in their establishment during the period until maturity. In the existing ANA, these establishment costs would be variously treated as intermediate consumption or gross fixed capital expenditure, depending on the treatment in business accounts. Although the ABS supports the SNA93 recommendation in principle, for data availability reasons it proposes to continue existing practice. The existing treatment will understate the level of gross fixed capital formation and GDP compared with SNA93.

Valuables — inclusion within the fixed asset boundary

5.95 A new type of asset has been created in SNA93 called valuables. Valuables are defined as goods of considerable value that are not used primarily for purposes of production or consumption but are held as stores of value over time. The economic benefits that valuables bring are that their values are not expected to decline relative to the general price level. For Australia, the most important of these assets is gold. While this SNA93 change is supported in principle, existing and prospective data availability is a major problem. It does not appear possible to implement this change in the ANA at this stage, although further investigations are being undertaken. In the ANA, that part of gold production which is retained as a store of value will contribute to the item 'change in inventories' rather than to the item 'valuables'. GDP would be the same under both the ANA and SNA93 treatments.

Inclusion of real estate transfer costs in the valuation of assets

5.96 SNA93 recommends that the purchaser's transfer costs (stamp duties, legal fees etc.) should be added to the purchase price when measuring the acquisition of fixed assets and that the seller's transfer costs (real estate agents' commissions, legal fees etc.) should be deducted from the sale price when measuring disposals. The net effect on gross fixed capital formation (measured as purchases less disposals) is to include the whole of the transfer costs in gross fixed capital formation. This gives the same total for gross fixed capital formation as the existing treatment in the ANA. However in SNA93, transfer costs (except for those on land) are included, indistinguishably, with the asset being bought and sold rather than being shown as a separate asset class called real estate transfer expenses as in the existing ANA.

SNA93 RECOMMENDATIONS THAT WILL NOT BE IMPLEMENTED IN THE ANA continued

5.97 Difficulties arise with the treatment of real estate transfer costs in the context of the balance sheet. Under both SNA93 and the existing ANA balance sheet, they are included as a fixed asset by virtue of the fact that they are recognised as gross fixed capital formation in the flow accounts. While their inclusion as gross fixed capital formation in the flow accounts has been long standing practice in national accounting and is consistent with business accounting practice, when the wider implications for the balance sheet are considered, the ABS has significant reservations about the treatment as real estate transfer costs do not exist as an economic asset in the real world, i.e. they cannot be on-sold and do not retain value over time. The alternative to their inclusion in gross fixed capital formation would be to regard ownership transfer costs as an intermediate expense. While this approach would have some conceptual advantages, it would be inconsistent with business accounting treatment of these expenses, and it would bias downwards the level of Australia's gross fixed capital formation and GDP relative to the international standards.

5.98 As an interim solution to the problem, it is proposed that real estate transfer costs continue to be capitalised as a component of gross fixed capital formation in the ANA, but the whole of the amount be written-off as consumption of fixed capital in the same period as the transaction occurs. Therefore these costs will not appear as an asset in the balance sheet. Although this treatment is not in accordance with normal accounting rules, it achieves a more satisfactory outcome for the national accounts. In the longer term, it is expected that the treatment of transfer costs will be subject to further review internationally, and that a better treatment will emerge as the international standard. It is also proposed to retain the existing practice of showing real estate transfer costs as a separate category of gross fixed capital formation in the ANA.

Identification of market and non-market transactions

5.99 SNA93 makes a distinction between market and non-market output in the measurement of production. The latter includes services provided by general governments, housing services produced for own consumption by owner occupiers, and own-account capital formation. The ABS does not propose to make this distinction in either the NIEP accounts or the I-O tables. The current ANA split between market and non-market activity is defined differently from that in SNA93 and the terminology will be discontinued. However, some major components of non-market output will continue to be available separately.

SNA93 RECOMMENDATIONS THAT WILL NOT BE IMPLEMENTED IN THE ANA continued

Illegal activities

5.100 SNA93 recommends that, in principle, all illegal activities should be included. While current estimates in the ANA do not include any specific estimates for such activity, some transactions arising from these activities are likely to be included in the data sources used to compile the accounts. However, the ABS has no current plans to try to extend the scope of included illegal activities.

'BACKCASTING' OF ESTIMATES

- **5.101** The ABS intends to provide back estimates of aggregates according to the revised concepts and classifications in order to maintain the integrity of time series data. Each series will be backcast to its beginning, as far as this is possible. For instance, GDP will be backcast to 1948-49. An indicative series on the new basis for the period 1984-85 to 1995-96 will be provided in the information paper to be released in early 1998.
- **5.102** The quality of available data to backcast varies substantially. In those cases where there is virtually no reliable data for earlier years, the ABS plans to extrapolate on the basis of indirect indicators, considering this preferable to breaks in time series. The alternative of postponing the implementation of such changes until a sufficient time series of data becomes available was also rejected because the ABS is committed to implementing SNA93 in its domestic and international reporting from 1998.
- **5.103** For some changes, existing data sources could be used to provide time series estimates. For example, mineral and petroleum exploration data have been collected on a quarterly basis going back many years and the available data are suitable for use in implementing the revised treatment of mineral exploration. Data from the Insurance and Superannuation Commission are also available to permit backcasting of the revised treatments of transactions relating to insurance and superannuation funds.
- **5.104** However, it should be noted that in some cases new data sources have had to be developed to implement the revised concepts. For some of the changes, the 1995-96 or 1996-97 annual economic collections provide the first opportunity to collect data consistent with the revised concepts. By necessity, backcasting will have to rely on indicators of varying quality to extrapolate single point-in-time estimates. For example, data relating to the supply and use of computer software were not available before 1993-94. Estimates based on the revised treatment of computer software will be extrapolated to earlier periods using the value of imports of computers as an indicator.

- 6.1 This section indicates the dollar impact of the main changes to concepts and classifications resulting from the SNA93 implementation decisions detailed in Section 5. In some cases the estimates in this section have been made with less information than will be available when the SNA93 changes are implemented in the ANA. Thus, they must be treated as preliminary estimates and are best used only as approximate indicators of the likely dollar impact of the changes. It should also be noted that, at this stage, it is not possible to indicate the dollar impact of the changes to methods that will result from the introduction of the I-O approach or annually reweighted chain volume measures.
- 6.2 The following two broad categories of change are distinguished:
- (i) changes that impact on the level of GDP and its components; and
- (ii) other changes.
- 6.3 While the importance of the first category of change is immediately apparent, changes in the second category may have important impacts for particular types of analyses. For example, while the changed treatment of reinvested earnings on foreign direct investment will not impact on GDP or components, it will impact on the measurement of sector and national saving.

CHANGES THAT IMPACT ON THE LEVEL AND MOVEMENT OF THE COMPONENTS OF GDP

Changes to the concepts, classifications and definitions of the various components within the ANA will generally increase the level of GDP. Importantly, the three measures of GDP will be affected equally. Tables 6.1 and 6.2 present a summary of the changes that will impact on the level of GDP and its components. Table 6.1 shows, for each change, the estimated dollar value of its impact in 1994-95. Table 6.2 shows these impacts in percentage terms. In both tables, a reference is given to the paragraphs in Section 5, SNA93 Implementation Decisions, which provide a more detailed description of the nature of the changes. As estimates of the impact of the changes on other years are currently being compiled, it is not possible at this stage to indicate what would be the impact on the rate of growth. The information paper proposed for release in early 1998 will provide a time series of data to enable these impacts to be assessed.

6.1 ESTIMATED DOLLAR IMPACT ON GDP AND MAIN COMPONENTS 1994–95(a)

ULL ESTIMATED DOLLAR	IMPACT ON	GDP A	ND MAIN C	OMPO	NENTS,	1994	1–95(a	1)			
				Final consumption expenditure		Gross fixed capital formation					
	Compensation of employees	GOS (d)	Net taxes on products and production (e)	Pri- vate	Govt	Gen- eral govt	Other	Net exports	Inter- mediate usage (f)	Gross output (f)	GDP
SNA93 changes	\$b	\$b	\$b	\$b	\$b	\$b	\$b	\$b	\$b	\$b	\$b
Compensation of employees(c)											
Wages and salaries — accrual measurement (paras 5.13-5.16)	n.y.a.	n.y.a.									0.0
Imputed employers' contributions for unfunded superannuation (paras 5.18–5.19)	-2.0				-2.0					-2.0	-2.0
Workers' compensation (para. 5.20)	0.4			0.4					-0.4		0.4
Non-life insurance services output (para. 5.21)		1.0		1.0					0.8	1.8	1.0
Financial intermediation services indirectly measured (FISIM) (paras 5.22–5.29)		5.0		n.y.a.	n.y.a.				n.y.a.	n.y.a.	5.0
Royalties (para. 5.31)		-1.3						-1.3	n.y.a.	n.y.a.	-1.3
Backyard production (para. 5.43)		1.1								1.1	1.1
Taxes											
Boundary between taxes and service income (paras 5.32–5.33)			-1.3	0.8	-2.1				1.3		-1.3
Valuation of industry and sector gross output (paras 5.35–5.37)				Impacts	s on ind	ustry c	ompone		0.0		
Assets, capital formation and inventories											
Defence expenditure (paras 5.45–5.47)		0.7			-0.3	1.0				0.7	0.7
Mineral exploration (para. 5.48)		1.6					1.6		-1.6		1.6
Computer software (paras 5.49–5.50)		3.0			0.0	0.7	2.5		-3.0		3.0
Entertainment, literary and artistic originals (paras 5.51–5.54)		0.3					0.3		-0.3		0.3
Livestock (paras 5.55-5.57)		3.0					3.0			3.0	3.0
All changes	n.y.a.	n.y.a.	-1.3	n.y.a.	n.y.a.	1.7	7.4	-1.3	n.y.a.	n.y.a.	11.5
1994–95 level (existing ANA basis)(b)	224.6	176.7	56.4	282.8	80.0	8.9	88.5	-8.7	n.y.a.	n.y.a.	454.1

⁽a) Increases in level are shown without sign; decreases are shown with a minus sign.

⁽b) Source: Australian National Accounts: National Income, Expenditure and Product, 1995-96 (Cat. no. 5204.0), Table 9, page 15.

⁽c) Termed 'Wages, salaries and supplements' on existing ANA basis.

⁽d) Note that the SNA93 term 'Mixed income' replaces the existing ANA term 'GOS of private unincorporated trading enterprises'. The effect of this change is for GOS to fall, and mixed income to rise, by the value of GOS private unincorporated trading enterprises, \$45.9 billion in 1994-95 (not shown in the above table).

⁽e) Termed 'Indirect taxes less subsidies' on existing ANA basis.

⁽f) 'Intermediate usage' and 'gross output' are derived from the I-O tables. The 1994-95 I-O tables have not yet been fully compiled.

6.2 ESTIMATED PERCENTAGE IMPACT ON GDP AND MAIN COMPONENTS, 1994-95(a)

				Final consumption expenditure		Gross fixed capital formation		<i>y</i> G (c.,)			
SNA93 changes	Compen- sation of employees (c) %	GOS (d) %	Net taxes on products and production (e) %	Pri- vate %	Govt %	Gen- eral govt	Other	Net exports %	Inter- mediate usage (f) %	Gross output (f) %	GDP
Compensation of employees(c)	70	70	70	70	70	70	70	70	70	70	
Wages and salaries — accrual measurement (paras 5.13–5.16) Imputed employers' contributions for unfunded superannuation	n.y.a.	n.y.a.									0.0
(paras 5.18–5.19)	-0.9				-2.5					n.y.a.	-0.4
Workers' compensation (para. 5.20)	0.2			0.1					n.y.a.		0.1
Non-life insurance services output (para. 5.21)		0.6		0.4					n.y.a.	n.y.a.	0.2
Financial intermediation services indirectly measured (FISIM) (paras 5.22–5.29)		2.8		n.y.a.	n.y.a.				n.y.a.	n.y.a.	1.1
Royalties (para. 5.31)		-0.7						-14.9	n.y.a.	n.y.a.	-0.3
Backyard production (para. 5.43)		0.6								n.y.a.	0.2
Taxes Boundary between taxes and service income (paras 5.32–5.33)			-2.3	0.3	-2.6				n.y.a.		-0.3
Valuation of industry and sector gross output (paras 5.35–5.37)			I	Impacts on industry components of GDP							0.0
Assets, capital formation and inventories											
Defence expenditure						44.0					0.0
(paras 5.45–5.47)		0.4			-0.4					n.y.a.	0.2
Mineral exploration (para. 5.48)		0.9			• • •		1.8		n.y.a.		0.4
Computer software (paras 5.49–5.50)		1.7			0.0	7.9	2.8		n.y.a.		0.4
Entertainment, literary and artistic		0.0					0.0				0.4
originals (paras 5.51–5.54)		0.2					0.3		n.y.a.		0.1
Livestock (paras 5.55–5.57)		1.7			• •		3.4				0.7
All changes(b)	n.y.a.	n.y.a.	-2.3	n.y.a.	n.y.a.	19.1	8.4	-14.9	n.y.a.	n.y.a.	2.5

⁽a) Percentage increases in level are shown without sign; decreases are shown with a minus sign.

⁽b) Changes are with respect to the level estimates contained in: Australian National Accounts: National Income, Expenditure and Product, 1995–96 (Cat. no. 5204.0), Table 9, page 15.

⁽c) Termed 'Wages, salaries and supplements' on existing ANA basis.

⁽d) Note that the SNA93 term 'Mixed income' replaces the existing ANA term 'GOS of private unincorporated trading enterprises'. The effect of this change is for GOS to fall, and mixed income to rise, by the value of GOS private unincorporated trading enterprises, \$45.9 billion in 1994-95 (not shown in the above table).

⁽e) Termed 'Indirect taxes less subsidies' on existing ANA basis.

⁽f) 'Intermediate usage' and 'gross output' are derived from the I-O tables. The 1994-95 I-O tables have not yet been fully compiled.

OTHER CHANGES

Unfunded superannuation (para. 5.18–5.19)

The accrual treatment of unfunded superannuation will have a major impact on sector saving, increasing household sector saving and decreasing general government saving. Although the estimation model and data sources for accrual estimates are still being developed, indications are that household sector saving will increase by around \$8.0 billion and general government saving will decrease by the same amount in 1994-95. These changes result from a -\$2.0 billion impact stemming from the difference between the imputed employer contribution and cash payments to retirees (this change impacts on compensation of employees, government final consumption expenditure and GDP), which is more than offset by a \$10 billion impact from imputed property income flows. The existing estimates for household and general government saving in 1994-95 are \$10.9 billion and -\$9.7 billion respectively.

Reinvested earnings on foreign direct investment (paras 5.41–5.42)

International flows of reinvested earnings attributable to direct investors will be included as part of property income flows and as financing transactions in the rest of world and relevant domestic sector accounts as recommended by SNA93. Estimates of sector and national saving will be affected. The estimate of net reinvested earnings payable to non-residents on foreign direct investment (i.e. reinvested earnings on foreign direct investment in Australia less reinvested earnings on Australian direct investment abroad) in 1994-95 is \$2.6 billion. Thus in 1994–95, national income and national saving will each fall \$2.6 billion (down 0.7% and 20.8%, respectively). The counterpart net inflow of investment of the same amount will be reflected in the national and sector financial accounts as a change in shares and other equity.

Separation, termination and redundancy payments (para. 5.17)

Presently treated as part of wages and salaries in the ANA, they will be included in compensation of employees as social transfer payments (previously described as supplements). The estimated value of separation, termination and redundancy payments in 1994-95 is \$3.7 billion.

Fines (para. 5.34)

Presently included as 'other direct taxes, fees and fines etc.' in the ANA, they will be treated as 'other current transfers'. The estimated value of fines in 1994-95 is \$0.5 billion.

OTHER CHANGES continued

Accrual of interest on debt securities (paras 5.38-5.40)

The revised international standard for recording income payable and receivable on debt securities is on an accrual basis rather than the previous due for payment basis. Its impact has not yet been fully quantified, although it is expected to have significant implications for the measurement of property income flows and sector saving.

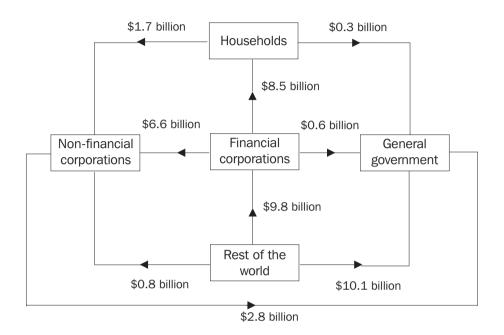
Financial derivatives (para. 5.85)

6.10 Previously not recorded in the national accounts. The recording of all transactions in financial derivatives in the financial accounts will impact on the total changes in financial assets, liabilities and net worth. It is estimated that the net impact on Australia's international investment position at 30 June 1996 will be less than \$1 billion. Estimates are not yet available for domestic sector transactions or balances.

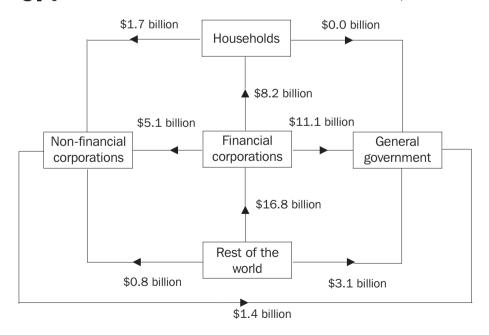
CBAs (para. 5.78-5.81)

6.11 SNA93 provides more precise guidelines for the allocation of institutional units to sectors. In light of the revised standards, and in consultation with users, the ABS is intending to revise its treatment of government CBAs. CBAs, presently classified to the general government sector in the ANA, will be reclassified to the financial corporations sector. The impact of this change in the financial accounts in 1994–95 is represented by diagrams 6.3 and 6.4. The impact on inter-sectoral interest flows has yet to be estimated. Diagram 6.3 shows net inter-sectoral financial flows among the four domestic sectors and with the rest of the world before reclassification of CBAs. Thus, for example, in 1994-95, general government were net borrowers from each sector: \$10.1 billion from the rest of the world; \$0.6 billion from domestic financial corporations; \$2.8 billion from domestic non-financial corporations; and \$0.3 billion from the household sector. Similarly, financial corporations raised \$9.8 billion in net funds from the rest of the world and were net lenders to the household, non-financial corporations and general government sectors (\$8.5 billion, \$6.6 billion and \$0.6 billion, respectively).

EXISTING TREATMENT OF CBAs: FINANCIAL FLOWS, 1994-95



6.4 AFTER RECLASSIFICATION OF CBAs: FINANCIAL FLOWS, 1994-95



OTHER CHANGES continued

6.12 Diagram 6.4 represents net inter-sectoral flows among the four domestic sectors and with the rest of the world after reclassification of CBAs. Comparing diagram 6.4 with diagram 6.3, it can be seen that the flows are changed as a result of reclassifying CBAs. For example, general government is now a net borrower of \$11.1 billion from domestic financial corporations (compared with \$0.6 billion before the reclassification of CBAs) but has reduced its net borrowing from non-residents to \$3.1 billion (down from \$10.1 billion). In like manner, other inter-sectoral net lending/borrowing is changed. Financial corporations' borrowing from non-residents has risen from \$9.8 billion to \$16.8 billion, and non-financial corporations' net lending to general government is halved (from \$2.8 billion to \$1.4 billion). (The net lending/borrowing of the sectors are different between the two representations because 'other payables/receivables' is not included in the estimates. It has been excluded because the data do not have counterparty information).

SECTION 7: INTEGRATING THE NATIONAL INCOME, EXPENDITURE AND PRODUCT ACCOUNTS WITH THE INPUT-OUTPUT TABLES

- 7.1 The I-O tables have always been and continue to be an integral part of a system of national accounts. I-O tables present a comprehensive picture of the supply and use of goods and services (referred to collectively as 'commodities') in the economy and the incomes generated from production. Further, SNA93 notes that such tables provide an accounting framework within which the commodity flow method of compiling national accounts — in which the total supplies and uses of individual types of commodities have to be balanced with each other can be systematically exploited, resulting in improvements in the overall accuracy of the national accounts.
- SNA93 recommends use of the I-O framework for compiling basic data, integration of the I-O tables within the national accounts, and compilation of I-O tables at constant prices as well as at current prices. It also recommends at least commodity flows data (goods and services account by products) should be compiled annually and these data should be fully consistent with other parts of the national accounts.
- As part of the national accounts compilation strategy for implementation of SNA93, the ABS is planning to exploit the benefits of compiling the NIEP accounts using the commodity flow method (the so called 'I-O approach to compiling the NIEP accounts', or simply the 'I-O approach'). That is to say, the compilation of the NIEP accounts is to be fully integrated with the compilation of the I-O tables. This move to the I-O approach will be a significant change to the way the NIEP accounts and I-O tables are compiled.
- 7.4 Conceptually, the NIEP accounts and the I-O tables are fully integrated and consistent. The NIEP accounts provide three approaches to measuring GDP: summing the incomes generated by production; summing final expenditures on commodities produced; and summing the value added at each stage of production. I-O tables are essentially a further disaggregation of the same three approaches. Whereas intermediate consumption is netted out from the NIEP accounts, I-O tables bring these inter-industry flows of commodities back into focus, thereby providing a more developed articulation of the process of economic production, and the structure and interrelationships of industries. An important feature of the I-O tables is that they are fully balanced matrices which allow for the confrontation of data and the resolution of differences at a very detailed level. A detailed discussion of the nature of I-O tables is contained in Australian National Accounts: Input-Output Tables, 1993–94 (Cat. no. 5209.0).

SECTION 7: INTEGRATING THE NATIONAL INCOME, EXPENDITURE AND PRODUCT ACCOUNTS WITH THE INPUT-OUTPUT TABLES continued

- 7.5 Despite their conceptual integration, in practice the Australian NIEP accounts are not presently fully consistent with the I-O tables. Rather, the existing NIEP accounts are compiled independently of the I-O tables and in many cases use different data sources. As a consequence, estimates of GDP and components in the NIEP accounts and the I-O tables mostly differ, in some cases by a considerable amount.
- 7.6 The use of different data (often in different ways) between the NIEP accounts and the I-O tables partly reflects the lack of a single source of information giving a consistent picture of the productive activity occurring in the whole economy. Over the last few years the ABS has developed an annual survey, the Economic Activity Survey (EAS), which is designed to provide such a picture for a large part of the economy. Although the EAS is still evolving, it has the potential, in combination with other data sources, to provide a wide range of integrated data for use in compiling the I-O tables and the NIEP accounts. An annual economy wide survey also facilitates the production of I-O tables each year. Prior to the reference year 1992-93, I-O tables were produced only triennially and up to three and a half years after the end of the reference period. This infrequency, and lack of timeliness, were principal reasons for the lack of integration of the I-O tables and the NIEP accounts in practice.
- The ABS intends to commence benchmarking the annual NIEP accounts to the I-O tables from reference year 1994-95 and plans to introduce this change at the same time as the other SNA93 changes outlined in this paper. In order to do this it has taken steps to harmonise sources and methods in compiling the NIEP accounts and I-O tables. It is also progressively extending and improving the quality of the EAS and other source data required for compilation of the I-O tables. The I-O tables are also being produced each year commencing from the reference year 1992-93, and the timing of their finalisation will be substantially brought forward to allow timely benchmarking of the NIEP accounts. Work is also proceeding on the development of constant price I-O tables. These will be an important ingredient in both the new compilation strategy and in the production of chain volume, price and productivity measures.

SECTION 7: INTEGRATING THE NATIONAL INCOME, EXPENDITURE AND PRODUCT ACCOUNTS WITH THE INPUT-OUTPUT TABLES continued

MAJOR IMPLICATIONS OF THE I-O APPROACH

- The major implication of the strategy is that the measures of current price annual GDP and components will be consistent between the I-O tables and the NIEP accounts. More particularly, income-based and expenditure-based GDP in current price annual terms will be brought into equality within the NIEP accounts for all but the latest year. Currently, a balancing item, the 'statistical discrepancy', is required to reconcile them and give the existing production account the appearance of balance. Although a statistical discrepancy will remain in quarterly current and constant price estimates, it is expected that there will be a significant improvement in the consistency and overall quality of those estimates from the benchmarking process. A further consequence of the I-O approach is that it will provide industry-based measures and components in annual current and constant price terms. GDP(P) at constant prices in the existing NIEP accounts is an extrapolation of base period GDP(I) using production indicators.
- As NIEP accounts will be benchmarked to the I-O tables from the reference year 1994-95 onwards, that will be the first year in which income and expenditure-based estimates of GDP are fully in balance in the NIEP accounts. NIEP series will be 'backcast' to provide continuity with the balanced 1994-95 NIEP accounts. Although it is anticipated that the income and expenditure approaches will move closer in earlier years, an annual statistical discrepancy will remain prior to 1994-95. The I-O tables from 1994-95 onwards will be subject to rebalancing for a number of years after their publication to allow data and methodological improvements to be implemented. This rebalancing of tables back to 1994-95 may have some implications on national accounts measures for some earlier years, but the extent of those changes is not expected to have much affect on the growth rates of GDP.
- **7.10** As previously mentioned, I-O table compilation will be brought forward to allow timely benchmarking of the NIEP accounts. It is also planned that the timing of release of the annual NIEP accounts will be brought forward, since benchmarking of the quarterly NIEP accounts will occur mainly in the June quarter release rather than in the December quarter as at present. The new compilation approach is also likely to have implications for the revisions policy for major components of the ANA.

SECTION 8: CHANGES TO PRESENTATION OF GDP IN THE NIEP ACCOUNTS

- 8.1 The SNA93 sequence of accounts and data items show only one measure of GDP, defined by the production approach and entered in the production account. Incomes and final expenditures are shown in the distribution and use of income accounts and capital accounts of the System. GDP is not defined in any of these accounts, although recognition is given in SNA93 to the fact that GDP can also be derived by summing incomes (existing GDP(I)), or final expenditures plus net exports (existing GDP(E)).
- SNA93 illustrates an ideal statistical world where all data sources are fully consistent, and any data conflicts are resolved so that transactions are in balance. GDP is unique, regardless of whether it is viewed from the production, the income or the expenditure approach. In practice, however, it is often not possible to resolve all inconsistencies in the basic data used to compile the national accounts, so either judgment has to be used to adjust components known to be particularly difficult to measure or one or more 'statistical discrepancy' items are required to balance the accounts.
- 8.3 Although considerable effort is expended to resolve data inconsistencies in the preparation of the existing NIEP accounts, a statistical discrepancy remains between the different measures of GDP, each of which is derived as the sum of its components. Current price GDP(P) is not available. In constant price terms, GDP(I), GDP(E) and GDP(P) are presented, together with the average of the three measures, GDP(A). In effect, there are currently four alternative measures of constant price GDP released in the NIEP accounts with an implicit statistical discrepancy between them.
- Having a unique measure of GDP is consistent with the SNA93 recommendation that the I-O tables should be integrated with the NIEP accounts. As described in Section 7, I-O tables achieve a fully balanced picture of the supply and use of goods and services and the incomes generated from production. Source data are confronted and differences are resolved at a detailed level within an integrated framework. There is only one measure of GDP and there are no statistical discrepancies between GDP and the individual income, expenditure and production approaches. The planned integration of the I-O tables with the NIEP accounts of the ANA from 1994-95 will result in fully balanced annual estimates from that year (except for the latest complete year). However, as fully balanced source data will not be available for years prior to 1994–95 or for quarters before or after that year, a statistical discrepancy will remain in the quarterly accounts and in annual estimates prior to 1994-95.

SECTION 8: CHANGES TO PRESENTATION OF GDP IN THE NIEP ACCOUNTS continued

- 8.5 The ABS has reviewed the treatment of the statistical discrepancy in the NIEP accounts more generally and proposes to implement changes so that only one measure of current and constant price GDP at market prices is presented, rather than the existing two current price variants, and four constant price variants. This would be consistent with the presentation of GDP in the national accounts of other member countries of the OECD, although there are a number of different ways in which this is achieved. Most OECD countries calculate GDP using one of the income, expenditure or production approaches, and derive the others residually. The statistical discrepancy is implicitly included with the derived component (typically increase in inventories or GOS). A few OECD countries, including Canada, the United States and the United Kingdom, explicitly show the statistical discrepancy as a component of GDP. Both Canada and the United Kingdom divide the discrepancy between the income and expenditure approaches. As far as the ABS is aware, no countries apart from Australia present a number of alternative measures of GDP.
- 8.6 The ABS proposes to retain an explicit statistical discrepancy in the accounts, but to allocate it among the income, expenditure and production-based estimates in order to provide a unique measure of quarterly current and constant price GDP at market (purchasers') prices. The simple average of the three approaches in constant prices (i.e. the existing GDP(A)) will be nominated as the constant price measure of GDP. This should result in little change for the majority of analysts and commentators who have adopted the current GDP(A) measure as the headline measure. The other variants, GDP(E), GDP(I) and GDP(P), will no longer be published, although they can be derived from the information presented, if users so wish. Current price GDP will be derived by reflating constant price GDP using the expenditure-based implicit price deflator. Current price income and expenditure statistical discrepancies will be calculated by deducting the sum of the individual income and expenditure components from current price GDP. Consequently, the statistical discrepancy between the income side of the account and the expenditure side may not be equal and may not necessarily be of opposite sign.
- The presentation of industry-based estimates in the quarterly NIEP accounts will also be changed from the current market price valuation to basic price valuation, as recommended by SNA93. This basis removes the impact of taxes and subsidies on products from the valuation of individual industry output and value added. This will also bring the presentation of industry output and value added into line with that used in the I-O tables. The difference between basic price and market price valuation is described in paras 5.35–5.37.

SECTION 8: CHANGES TO PRESENTATION OF GDP IN THE NIEP ACCOUNTS continued

8.8 As part of the process of finalising GDP estimates each quarter, the ABS utilises a rigorous process of editing the basic data to achieve as much overall consistency as possible without making arbitrary adjustments. Ideally, the resolution of remaining inconsistencies should be done on the basis of an assessment each quarter of the relative strengths and weaknesses of the detailed data underlying each of the approaches. As the ABS gains more experience with confronting data and resolving differences using the I-O approach, it aims to develop procedures whereby further informed judgment can be applied in the quarterly balancing process in order to further reduce the remaining statistical discrepancies.

SECTION 9: CHAIN VOLUME MEASURES

- 9.1 SNA93 recommends the use of annual chain volume indexes which link together year-to-year volume movements in production and expenditure in preference to constant price estimates expressed in terms of the constant dollar values of some selected base year (i.e. fixed-weighted volume indexes). SNA93 also recommends that a superlative index be used in constructing the volume indexes in the national accounts, opting for Fisher in preference to Tornqvist. An annual chain volume measure is one that is reweighted annually so the price weights used to form the volume measure closely reflect the price relativities in every period.
- The ABS has, in fact, been publishing chain volume measures for a number of years, but with links only at five-yearly intervals. At present, constant price (volume) estimates are calculated back as far as the September quarter 1984 at the average prices of 1989–90. However, estimates for the five years preceding September 1984 are calculated at average 1984-85 prices and are linked to the later series at the September quarter 1984. These estimates are in turn linked to earlier estimates at average 1979-80 prices at the September quarter 1979, and so on. The resulting linked constant price series, which are referenced to the latest base year, 1989-90, are equivalent to chain volume measures. While the series are additive back as far as the September quarter 1984, the series going back beyond September 1984 when the first link occurs are not.
- The ABS has undertaken a major empirical analysis to compare the outcomes of using fixed-weighted and chained indexes and different index number formulae to derive expenditure-based estimates of GDP. It has concluded that annually re-weighted chain volume measures provide better estimates of movements in expenditures than constant price measures derived from fixed-weighted indexes. In particular, annual chain volume indexes provide better indicators of growth than the more conventional constant price estimates in situations where the price and volume relativities of major components are changing rapidly over time in a generally monotonic fashion. For example, computer equipment prices have been falling rapidly and usage has been growing at a faster rate than for most other goods. In these circumstances the five-yearly rebased constant price estimates of aggregates with a substantial computer equipment component are inaccurate indicators of growth.
- One major consequence of a move to chain volume measures in the national accounts would be the general loss of additive consistency between component and aggregate estimates, except for the most recent quarters. However, the ABS considers the advantage of more accurate volume measures outweighs this disadvantage.

SECTION 9: CHAIN VOLUME MEASURES continued

- The ABS has taken an in-principle decision to introduce annually re-weighted chain volume measures at the same time as other SNA93 changes are implemented in 1998. It is proposed that these measures be expressed in dollar values, rather than as index numbers, using the values of a reference year. Investigations into the advantages and disadvantages of different index number formulae and a range of practical considerations are proceeding. Irrespective of which formula is chosen, it is clear that the impact of annual chaining on GDP growth rates will be very small. However, the impact on growth in some components (particularly private gross fixed capital expenditure on equipment and imports) will be significant.
- 9.6 The ABS has been consulting extensively with users and international national accounts experts on this development. Further consultation will occur in the process of firming up proposals and before a final decision is made to move to annual chain volume measures as the headline rate of real growth in the national accounts. A detailed information paper on chaining, explaining the issues and ABS proposals, is planned for release in early 1998.

10.1 The implementation of SNA93 has implications for the presentation of data in the various components of the ANA. The ABS has also taken the opportunity to review the boundary between the various ANA releases, and proposes to make some changes to highlight the integrated nature of the accounts and to reduce the number of individual publications. In addition, the move toward the I-O strategy for compiling the accounts will have future implications for the compilation and data dissemination cycle. It should also be noted that the ABS is reviewing data dissemination more generally as it moves to the new publications production workbench system. A major aim of this latter review will be to determine the mix of paper and electronic dissemination which, on balance, best suits the needs of users and is most operationally effective for the ABS.

CHANGES TO THE ANA COMPILATION AND DATA DISSEMINATION CYCLE

10.2 The present ANA compilation cycle is underpinned by the compilation of Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5204.0). This annual publication represents the most comprehensive release of national accounts data. The estimates are presently finalised around February each year, however as some 'detailed' estimates take longer to finalise, Cat. no. 5204.0 is released around the middle of each year. Annual estimates of capital stock, published in Australian National Accounts: Capital Stock (Cat. no. 5221.0), and the December guarter NIEP account estimates, published in Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5206.0), are also finalised around February each year and are consistent with the estimates in Cat. no. 5204.0. Annual State accounts, published in Australian National Accounts: State Accounts (Cat. no. 5220.0) are also benchmarked to Cat. no. 5204.0 and are finalised about a month later, that is, in March each year.

CHANGES TO THE ANA COMPILATION AND DATA DISSEMINATION CYCLE continued

10.3 As briefly discussed in Section 7 of this paper, the plan to implement the I-O approach to compiling the NIEP accounts will involve the benchmarking of GDP and its components to the I-O tables. Given the integrated nature of the national accounts, these benchmarks will flow through to the remaining income accounts, the capital accounts and the balance sheet. The financial accounts, however, will be less affected. Prior to the present plan to adopt an I-O approach to compiling the NIEP accounts, I-O tables were finalised a number of years after the reference period. As mentioned in Section 7, to support the implementation of the I-O approach it is planned to produce I-O tables to a much tighter timetable so that their integration with the NIEP accounts will be timely. After detailed consideration of the data sources and methodologies available for compiling the I-O tables, it has been determined that it is most effective to benchmark the quarterly NIEP accounts to the I-O tables in each June quarter issue of Cat. no. 5206.0. Thus, implementation of the I-O approach will shift the major benchmarking of the quarterly accounts from the December quarter to the June quarter issue of Cat. no. 5206.0. This will allow the release timetable for the annual national accounts to be brought forward.

10.4 Following is a brief description of the proposed changes to each ANA statistical release on account of the implementation of SNA93. In some cases more general longer term proposals for changes to the coverage of releases are outlined. However, it is important to emphasise that the presentation and content of some of these publications (in particular Cat. no. 5206.0), are subject to review and modification independently of SNA93 implementation.

CHANGES TO THE PRESENTATION, CONTENT AND TIMING OF ANA RELEASES

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

10.5 The summary tables in Cat. no. 5206.0 will be modified to reflect the revised concepts, data items, terminology and formats resulting from implementation of SNA93. The existing production account will be renamed the GDP account. Industry components of GDP will be shown at basic prices, not market prices as currently published. Significant revisions to data will result from changed treatments, including extensions to the fixed assets boundary and the inclusion of an imputation for the accruing costs of unfunded government superannuation schemes in compensation of employees and government final consumption expenditure. A major change relating to constant price estimates is the proposed adoption of annually reweighted chain volume indexes as the headline volume measure.

CHANGES TO THE PRESENTATION, CONTENT AND TIMING OF ANA RELEASES continued

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

> **10.6** The scope of the Cat. no. 5206.0 release will remain largely unchanged, although it is likely that the amount of data in the hard copy version will be significantly reduced in favour of electronic release of data. In the longer term, the ABS proposes to exclude the institutional sector income and outlay accounts from Cat. no. 5206.0 and include them in an expanded Australian National Accounts: Financial Accounts (Cat. no. 5232.0) release which would provide complete sector accounts, showing all sources and uses of funds by sector. However, this will not occur until sufficient work has been done to upgrade currently unpublished quarterly sector income and outlay accounts. In the longer term, when a sufficient time series of data for wages and salaries paid by sector become available from quarterly ABS surveys, it is also planned that the new SNA93 institutional sector generation of income accounts will be included. Notwithstanding these future developments, the existing household and general government income and outlay accounts, and the stocks and farm income tables will be retained in Cat. no. 5206.0 but modified to be consistent with SNA93. It is not proposed at this stage to compile on a quarterly basis the new adjusted disposable income and use of disposable income accounts (for a description of these accounts, see Section 11).

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

- **10.7** Cat. no. 5204.0 will continue to provide the most detailed set of national accounts. The tables will be modified to reflect the revised concepts, data items, terminology, and formats, consistent with SNA93 (see Appendix A). In addition, several new accounts will be presented, although they will not all be available on initial implementation:
- adjusted disposable income and use of disposable income accounts (i) will be included for the households and NPISH sector and the general government sector;
- (ii) the existing overseas transactions account and the net lending to overseas account will be recast into a number of separate accounts. These are the external account of goods and services, the external income and use of income account, the external capital account, and the external financial account;
- a consolidated national balance sheet including national wealth and an end of year (closing) balance sheet for each institutional sector will be included;

CHANGES TO THE PRESENTATION, CONTENT AND TIMING OF ANA RELEASES continued

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

- estimates of multifactor productivity will be included. The existing (iv) release Australian National Accounts: Multifactor Productivity (Cat. no. 5234.0) will be discontinued;
- a more detailed sub-sector presentation of the financial (v) corporations sector will be presented, although the development of these accounts may not be sufficiently advanced for inclusion in the initial implementation;
- (vi) in the future, separate tables will be included for the NPISH sector. In the interim they will be combined with households in the households and NPISH sector;
- a generation of income account for each institutional sector will be (vii) included when sufficient data become available on compensation of employees by sector; and
- (viii) a production account for the total economy, showing the value of gross output and intermediate consumption, will be presented when a sufficient time series becomes available from the I-O tables.
- **10.8** Following the SNA93 recommendation that industry gross product be valued at basic prices, it is proposed that the present factor cost valuation of industry gross product remain only as a supplementary account. The ANA will adopt basic price valuation as the preferred measure of industry output and gross product. The ABS proposes to discontinue the existing market price valuation of industry gross product.
- **10.9** The existing public/private split of the financial enterprises sector will be discontinued. There are only a few remaining public financial enterprises. The public/private split of financial enterprises has not been implemented in the financial accounts because the collection of counterparty information for banks' dealings with private as opposed to public financial institutions was not considered viable for provider load reasons.

CHANGES TO THE PRESENTATION, CONTENT AND TIMING OF ANA RELEASES continued

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

> **10.10** The 1996–97 issue of Cat. no. 5204.0 will not be released during 1998 in order to free up resources for the implementation of SNA93 in the re-released June quarter 1998 NIEP accounts. However, major summary tables such as the domestic production account and national and sector income and outlay and capital accounts will be compiled and made available electronically. A combined 1996-97 and 1997-98 issue of Cat. no. 5204.0 will be released on an SNA93 basis in February 1999, the 1997–98 component being several months ahead of the current Cat. no. 5204.0 release date. It is further planned that the 1998-99 issue would be released in November of the same year, ahead of the release of the September quarter 1999 NIEP accounts. All future issues would aim to meet the November release date.

Australian National Accounts: State Accounts (Cat. no. 5220.0)

- **10.11** SNA93 does not make recommendations about sub-national (regional) accounts. However, as the State accounts are a dissection of the Australia-level NIEP accounts, they too will reflect the revised concepts, classifications and definitions used in those accounts. Similarly, as the I-O tables are only compiled for Australia as a whole, implementation of the I-O approach to compiling the NIEP accounts will indirectly impact on the State accounts as they are benchmarked to the Australia-level annual and quarterly accounts.
- **10.12** Apart from some minor changes to terminology, no changes are planned to the presentation of the existing summary tables. The estimates will reflect changes to GDP and components described in this paper. Industry components of gross State product (GSP) will continue to be shown at factor cost. At the national level, industry components of GDP will use basic prices as the preferred valuation, although factor cost estimates will also be shown (for a description of basic price valuation see paragraph 5.34). The ABS feels that the benefits from deriving State by industry basic price valuation are not warranted by the extra collection costs. However, both GDP and GSP for all industries combined will continue to be valued at market prices (to be referred to as 'purchasers' prices') and thus will remain entirely consistent.
- **10.13** Changes will be made to the way insurance and superannuation transactions are accounted for in the existing household income and outlay accounts, consistent with SNA93. This will have an impact on the definition of household income and disposable income. While it is expected that these changes will be implemented in the State accounts, indirect allocators will have to be used where actual data are not available.

CHANGES TO THE PRESENTATION, CONTENT AND TIMING OF ANA RELEASES continued

Australian National Accounts: State Accounts (Cat. no. 5220.0 (annual)) continued

10.14 In line with the national accounts, capital accounts by State will include extensions to the asset boundary to include computer software, mineral exploration, entertainment and artistic originals, certain defence expenditures, and certain livestock (see Section 5 under Changes to Assets, Capital Formation and Inventories).

10.15 As with Cat. no. 5204.0, it is proposed that Cat. no. 5220.0 for 1996-97 not be issued during 1998. Regular releases will begin again with the combined 1996-97 and 1997-98 issue planned for February 1999, which is several months ahead of the current Cat. no. 5220.0 release date. This release will contain the first estimates of GSP on an SNA93 basis.

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

10.16 Proposed changes on account of SNA93 relate mainly to the revised financial instrument classification and changes to institutional sectors. See the indicative financial accounts in Appendixes A and B for the new classification of financial instruments. The most important change to the classification of financial instruments is that the current practice of distinguishing instruments issued by residents from those issued by non-residents will be discontinued. Data for institutional sectors will be extended to include the full range of sub-sectors as outlined in Section 5 of this paper. Changes to institutional sector boundaries, and in particular the reclassification of State government CBAs from the general government sector to the financial corporations sector, will also impact on the financial accounts. The release dates of Cat. no. 5232.0 will not be affected by the SNA93 changes.

10.17 As mentioned earlier in this section, there is a longer term aim to extend the scope of Cat. no. 5232.0 to include institutional sector income and use of income accounts so that all quarterly sectoral accounts will be included in the one release. Such a presentation will highlight the link between sectoral saving, investment, net lending and financial flows.

SECTION 10: PROPOSED COMPILATION AND DATA DISSEMINATION CYCLE continued

CHANGES TO THE PRESENTATION, CONTENT AND TIMING OF ANA RELEASES continued

Australian National Accounts: Input-Output Tables (Cat. no. 5209.0), and Australian National Accounts: Input-Output Tables (Commodity Details) (Cat. no. 5215.0)

> 10.18 There will be some changes to the format of the I-O tables which will reflect the many conceptual changes affecting the measurement of output and production described in this paper. A major addition in the future will be the inclusion of constant price tables. Changes proposed to the I-O tables will be the subject of an information paper planned for release in 1998.

> **10.19** As mentioned above, the key future role that I-O tables are to play in benchmarking the NIEP accounts will have implications for the timeliness of the I-O tables and will advance the release dates of Cat. nos 5209.0 and 5215.0 significantly. The 1994-95 I-O tables are scheduled for publication in October 1998. It is planned that subsequent issues will be released in April each year.

Australian National Accounts: Capital Stock (Cat. no. 5221.0)

10.20 Capital stock estimates will be included in an expanded Australian National Accounts: National Balance Sheet (Cat. no. 5241.0), starting with the 1997-98 issue. Cat. no. 5221.0 will cease after the 1995-96 issue. Capital stock estimates will reflect the changes to the fixed asset boundary discussed in Section 5. It is also planned that more detailed industry data and a finer dissection of the asset class 'machinery and equipment' will be available. Data for each of the institutional sectors will also be presented, consistent with the sector data shown in the national balance sheet more generally.

Australian National Accounts: Multifactor Productivity (Cat. no. 5234.0)

10.21 SNA93 does not contain recommendations on the measurement of productivity. However, estimates of labour and multifactor productivity will be affected by the changes to the measurement of GDP and capital stock. Multifactor productivity data will be included in an expanded Cat. no. 5204.0, beginning with the 1997-98 issue. Cat. no. 5234.0 will cease after the 1995-96 issue.

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

10.22 SNA93 recommends a number of changes to the asset boundary and to the classification of non-financial assets and financial assets and liabilities. The balance sheet and accumulation and revaluation account shown in Appendix A is indicative of the proposed balance sheet for Australia. It should be noted that the format and terminology used in the existing national balance sheet already conforms fairly closely to SNA93, as the revised standards were taken into account when the balance sheet was first published in 1995.

SECTION 10: PROPOSED COMPILATION AND DATA DISSEMINATION CYCLE continued

CHANGES TO THE PRESENTATION, CONTENT AND TIMING OF ANA RELEASES continued

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

10.23 Beginning with the 30 June 1998 issue, Cat. no. 5241.0 will include the detailed estimates of capital stock previously included in Cat. no. 5221.0.

10.24 The 30 June 1996 issue is planned for release in December 1997. The 30 June 1997 issue will not be released. The 30 June 1998 issue will be on a full SNA93 basis. Its release will be brought forward to February 1999. All subsequent issues are planned for the February following the reference period. In order to achieve the earlier release dates beginning with the 1998 edition, balance sheet components relating to natural resources for the latest year will have to be derived as extrapolations from the previous year and revised using actual data in the following issue.

Australian National Accounts: Concepts, Sources and Methods (Cat. no. 5216.0), and Statistical Concepts Reference Library (Cat. no. 1361.0.30.001)

> **10.25** The ABS intends to update concepts, sources and methods documentation in time for the first release of estimates on an SNA93 basis in October 1998. The plan is to release both a hard copy version and an electronic (CD-ROM) version in October 1998.

SECTION 11: PRESENTATION OF NEW TABLE FORMATS

11.1 The framework of accounts recommended by SNA93 continues to reflect the basic aspects of economic life (production, income, consumption, accumulation and wealth) and is consistent in structure for the total economy, each of the five domestic sectors, and the rest of the world. However, compared to SNA68, the accounts have been restructured, and some new accounts have been included, to describe economic stocks and flows more comprehensively and to improve the international comparability of national accounts statistics. If fully implemented, the SNA93 recommendations would significantly expand the present ANA. While the ABS proposes to compile a set of accounts consistent with SNA93 recommendations wherever possible, some departures in detail and format are proposed for practical publication considerations, and where data items are not applicable or are insignificant in Australia. This section outlines the SNA93 framework for presenting the national accounts and the changes to be implemented in the ANA. Examples of the new accounts are provided in Appendix A. A full set of annual tables is available on request (see the Inquiries box at the front of this paper). Definitions of new data items and terminology are included in the Glossary.

OVERVIEW OF SNA93 FRAMEWORK OF ACCOUNTS

- **11.2** For the total economy and each institutional sector, SNA93 recommends a framework of accounts covering production, income, consumption, accumulation and wealth. Broadly, the framework consists of the following accounts:
- (i) production account
- distribution and use of income accounts (ii)
- (iii) accumulation accounts
- balance sheet (iv)
- goods and services account. (v)
- **11.3** The balances from each of these accounts are carried from one account to another and often represent key economic variables in their own right. Generally, these accounts are closely related to the accounts which presently comprise the ANA. In many cases, the SNA93 recommended account represents a more detailed dissection of an existing account in the ANA. However, in some cases the SNA93 recommended account has no counterpart in the present ANA.
- **11.4** The remainder of this section presents a broad description of the SNA93 sequence of accounts together with ABS proposals for implementation in the ANA. The reader is encouraged to read this section in conjunction with Appendix A.

PRODUCTION ACCOUNT

- **11.5** SNA93 reserves the term 'production account' to refer to an account which records, in summary form, the activity of producing goods and services by sector and for the whole economy. It derives gross value added (defined as the value of output less the value of intermediate consumption before accounting for consumption of fixed capital) and, for the whole economy, defines GDP. At the industry and sector level it provides a measure of the contribution of each industry or sector to GDP. In the Australian context, it is represented by the existing GDP(P) tables, although a complete account in the SNA93 sense is not presently available. The distribution and use of income accounts and the accumulation accounts in the System, including the income and expenditure components of GDP, relate back to the production account as balances from one account are carried forward to another.
- **11.6** Presently in the ANA, the term 'domestic production account' is used to refer to the major summary account for the whole economy, recording the incomes generated in production (GDP(I)) and final expenditures plus net exports (GDP(E)). SNA93, on the other hand, records these components in other accounts (see below).
- 11.7 The NIEP accounts of the ANA will retain the essence of the existing domestic production account as the major summary account, recording the income and expenditure components of GDP. However, the domestic production account in the ANA will be renamed the 'Gross Domestic Product Account' to avoid confusion with SNA93 terminology. There will be changes to the way in which GDP is currently presented (see Section 8).
- **11.8** A new production account, recording the value of annual gross output, intermediate consumption and GDP will be included in the annual NIEP accounts in the future when a sufficient time series of data becomes available from the I-O tables after the I-O tables and the NIEP accounts have been integrated. Presently, production-based GDP is only available in constant price terms. Gross output and intermediate consumption components are not yet available in constant prices, and they will not be available sub-annually.
- 11.9 The ABS will reconsider the possibility of compiling individual sector production accounts in the future. A more fruitful medium term approach to deriving the contribution of each institutional sector to GDP is to sum the incomes generated by production in each sector (available from the generation of income account, see below). The ABS is developing the data to support this approach, but estimates will not be included in the initial implementation of SNA93.

DISTRIBUTION AND USE OF INCOME ACCOUNTS

- **11.10** The distribution and use of income accounts recommended by SNA93 include the following:
- generation of income account (i)
- (ii) allocation of primary income account
- secondary distribution of income account (iii)
- (iv) redistribution of income in kind account
- use of disposable income account (v)
- (vi) use of adjusted disposable income account.
- **11.11** The SNA93 generation of income accounts show, for the whole economy and each sector, the incomes generated in production: compensation of employees plus GOS plus net taxes on production and imports. For the whole economy it defines what is referred to currently in the NIEP accounts as GDP(I). For the whole economy, income components of GDP will be included in the Gross Domestic Product account, and not in a separate generation of income account. However, as data become available, generation of income accounts for each institutional sector will be provided.
- 11.12 The allocation of primary income, secondary distribution of income and use of disposable income accounts are essentially a dissection of the existing sectoral income and outlay accounts in the present ANA. Mainly for operational reasons, the ABS does not intend to present the full range of these accounts in the ANA. Rather, it will combine the accounts recommended by SNA93 into a single account along the lines of the present income and outlay account. New features such as the distinction between primary and secondary income and new balances from the more detailed tables will be incorporated.
- 11.13 The redistribution of income in kind account and the use of adjusted disposable income account have no counterpart in the present ANA. They present alternative concepts of final consumption expenditure and disposable income. They will be implemented as supplementary tables in the NIEP accounts, reflecting their main use in facilitating international comparisons between countries with different institutional arrangements for the provision of services. The conceptual bases of the tables are explained in Section 5 (para 5.58-5.59).

ACCUMULATION ACCOUNTS

- 11.14 The accumulation accounts recommended by SNA93 include the following:
- capital account (i)
- (ii) financial account
- (iii) other changes in assets account.
- 11.15 The capital account and financial account in SNA93 are not essentially different in structure from those presently contained in the ANA (although the asset boundary and the classification of assets has changed, see Section 5).
- **11.16** One recommendation in SNA93 relating to the capital account is that consumption of fixed capital be included as a negative item on the changes in assets side of the account rather than as a source of funds. In the ANA it is proposed that the existing treatment be retained, i.e. consumption of fixed capital will be shown as a source of funds (part of gross saving). Net lending/borrowing is the same under both treatments.
- **11.17** SNA93 introduces two new accounts for each sector to complete the link between the flow accounts and the balance sheets. They record changes in assets and liabilities that are not recorded in either the capital account or the financial account:
- (i) other changes in volume of assets account
- (ii) revaluation account.
- **11.18** The 'other changes in volume of assets account' records changes in assets and liabilities that do not result from transactions between institutional units. For example, this account records losses due to natural disasters, discovery and depletion of natural assets, write-off of bad debts and changes to the classification of institutional units. The revaluation account records those changes in assets and liabilities resulting from changes in their prices, and includes a distinction between neutral and real holding gains (see Glossary). The ANA presently contains components of the other changes in volume of assets and revaluation of assets accounts as part of the reconciliation between the opening and closing balance sheets. These new areas of national accounting are particularly difficult and will take many years to develop. The dissection into neutral holding gains and real holding gains will not be available for initial implementation, although the ABS plans to produce experimental estimates in the future.

BALANCE SHEET

11.19 It is not proposed that there be any significant changes to the format of Australia's national balance sheet on account of SNA93 implementation. Commencing from the first set of experimental estimates, released in 1995, the estimates have incorporated the recommendations and terminology of SNA93 as far as possible while still maintaining consistency with the ANA. However, future balance sheets will incorporate modifications to the asset boundary and classifications consistent with changes elsewhere in the ANA.

GOODS AND SERVICES ACCOUNT

11.20 The SNA93 goods and services account records the supply and use of goods and services in the economy. While the ABS does not propose to implement this account in the short term, major components of this account relating to the final expenditure approach to GDP will be included in the GDP account. It is planned to implement the goods and services account in the NIEP accounts once a sufficient time series of data becomes available after the I-O tables and the NIEP accounts have been integrated.

REST OF THE WORLD ACCOUNTS

- 11.21 SNA93 recommends a number of separate accounts to record the transactions currently included in the ANA overseas transactions account:
- (i) external account of goods and services
- (ii) external account of primary income and current transfers
- external capital account (iii)
- external financial account. (iv)
- **11.22** Each of these accounts will be implemented in the ANA. The existing overseas transactions account will be split into three accounts. The existing net lending to overseas account will be renamed the 'external financial account' to better reflect its nature.
- **11.23** It should be noted that, as a result of the earlier implementation (by one year) of revised international standards in balance of payments and international investment statistics, a table reconciling the differences will be included in the quarterly balance of payments publication (Cat. no. 5302.0) from the September quarter 1997 to the June quarter 1998. From the September quarter 1998, statistics in the ANA will be fully consistent with balance of payments and international investment position statistics.

I-O TABLES

11.24 The ABS is still considering possible changes to the presentation of the 'make' and 'absorption' matrices, the industry by industry tables and the other tables collectively referred to as the I-O tables. This will be the subject of a separate information paper, to be released during 1998. The I-O tables will reflect changes in concepts and terminology consistent with the changes elsewhere in the system and described throughout this paper.

SATELLITE ACCOUNTS

11.25 SNA93 introduces the concept of satellite accounts which are separate from, but consistent with, the core national accounts. Such accounting statements extend the system and provide information on selected areas of interest. They may require additional data, employ complementary and alternative concepts and classifications, extend the coverage of human activities and present monetary and physical data. The scope for developing satellite accounts is considerable and SNA93 makes no specific recommendations to guide countries on a particular path of development. For this reason the notion of 'implementation decisions' applied elsewhere in this information paper does not apply. This section is therefore limited to a brief description of the nature of the satellite accounts the ABS is developing or considering developing.

Unpaid work

11.26 While SNA93 continues to exclude unpaid work from the boundary of production within the core of its system, it recommends that estimates of unpaid work be incorporated into an expanded boundary of production via satellite accounts. The ABS is working towards producing such accounts as data and resources permit. Further information and experimental accounts are contained in the ABS publication Occasional Paper: Unpaid Work and the Australian Economy, 1992 (Cat. no. 5240.0) (released in 1994).

SATELLITE ACCOUNTS continued

Environmental accounts

11.27 SNA93 deals specifically with satellite accounts for the environment in Chapter XXI, Satellite analysis and accounts. The development of satellite accounts for the environment for Australia is largely dependent on the development of a number of data series including the compilation of natural resource accounts and the national balance sheet on an extended basis. An initial balance sheet was published in March 1995 in the ABS publication Occasional Paper: National Balance Sheets for Australia, Issues and Experimental Estimates, 1989 to 1992 (Cat. no. 5241.0). This initial work has been improved and extended with the release in March 1997 of Australian National Accounts: National Balance Sheet, 30 June 1995 (Cat. no. 5241.0). The ABS intends to continue developing the capacity to implement more fully the SNA93 environmental accounting guidelines. However, for countries such as Australia which have diverse and rich natural resources, the development of this capacity is a long-term project.

11.28 SNA93 also relates to the Integrated Environmental and Economic Accounts (SEEA) which the United Nations published in 1993 as an initial draft. The major thrust of SEEA is to extend an accounting framework based on SNA93, to the whole range of areas where there is an interaction between the environment and human economic activity. Development of this full set of accounts will take many years as the research and thinking in this area is still in its early stages. The ABS is, however, exploring a variety of different avenues, most of which involve physical measures rather than monetary measures. These include the development of environment protection expenditure statistics and energy 'balances' (i.e. accounts). The former have been produced since 1990-91 and quantify activities of those undertaking environmental protection, those paying and those benefiting. The energy balances show stocks of energy resources and flows of energy products, in physical units. The stock account consists of five components: opening stock; closing stock; net change; production; and adjustment. The flow accounts show conversion of primary energy products to electricity and other secondary forms, together with end use by industry and estimates of emissions. The publication Energy Accounts for Australia (Cat. no. 4604.0) was released in November 1996.

SATELLITE ACCOUNTS continued

Tourism accounts

11.29 The value of tourism to many economies has been recognised for some time. However, since tourism is a demand-based concept, and as tourism commodities are supplied by a number of heterogeneous business entities whose output is only partly to meet tourism demand, a tourism 'industry' is not identified explicitly within the central national accounts system. Consequently, determining value added and related variables for tourism activity is not possible in the current system. A tourism satellite account (TSA) aims to extract data on tourism from the current national accounts estimates which relate to tourism, both on the supply and demand side of the accounts. There are plans to develop a TSA in respect of 1996-97, although it will not be available until 1999. Further information is contained in an ABS professional paper An Introduction to Tourism Satellite Accounts, which is available on request.

SECTION 12: CONTACTS FOR FURTHER INFORMATION

12.1 The contacts for further information relating to the implementation of the revised international standards are provided below. (All of the contacts are in the ABS central office in Canberra; see below for the address). The contact information for copies of the SNA93 and BPM5 manuals is provided at the end of this section.

SNA93

12.2 For further information relating to the implementation of SNA93, readers should write to Mr John Joisce, Director, National Accounts Research Section, or contact him on telephone (02) 6252 6170 or facsimile (02) 6252 5380.

BPM5

12.3 For further information relating to the implementation of BPM5, readers should write to Mr Bob McColl, Director, Balance of Payments Section, or contact him on telephone (02) 6252 6189 or facsimile (02) 6252 7219.

IMF'S 'A MANUAL ON GOVERNMENT FINANCE STATISTICS'

12.4 For further information relating to the implementation of revised standards for government finance statistics (which are still being developed), readers should write to Mr Brian Donaghue, Director, Public Finance Section, or contact him on telephone (02) 6252 6718 or facsimile (02) 6252 6470.

IMF'S 'MANUAL ON MONETARY AND FINANCIAL STATISTICS'

12.5 For further information relating to the implementation of revised standards for money and banking statistics (which are still being developed), readers should write to Mr Derick Cullen, Director, Financial Accounts Section, or contact him on telephone (02) 6252 6244 or facsimile (02) 6252 5380.

STANDARD ECONOMIC SECTOR CLASSIFICATIONS OF AUSTRALIA (SESCA)

12.6 For further information relating to the implementation of the revised SESCA, readers should write to Ms Lyn Blair, Director, Classification Section, or contact her on telephone (02) 6252 7967 or facsimile (02) 6252 7788.

12.7 The ABS postal address is:

Australian Bureau of Statistics PO Box 10 Belconnen ACT 2616

The ABS Internet address for sales and inquiries is: client.services@abs.gov.au

SECTION 12: CONTACTS FOR FURTHER INFORMATION continued

COPIES OF SNA93 AND BPM5 MANUALS

12.8 Copies of the SNA93 and BPM5 manuals can be viewed at the library in each ABS office but are not available for purchase from the ABS. Copies of SNA93 can be purchased from any of the five sponsor organisations. The contact information for purchase of SNA93 from the United Nations is:

United Nations Publications Room DC2-853 New York, NY 10017 USA

Telephone 1 (212) 963 8302 Facsimile 1 (212) 963 3489

12.9 The contact information for purchase of SNA93 and BPM5 from the IMF is:

International Monetary Fund **Publication Services** 700 19th St NW Washington DC 20431 USA

Telephone 1 (202) 623 7340 Facsimile 1 (202) 623 7201

ABBREVIATIONS AND SYMBOLS

ABS Australian Bureau of Statistics

ANA Australian national accounts

ANZSIC Australian and New Zealand Standard Industrial Classification

ASX Australian Stock Exchange

b billion

billion thousand million

BPM5 Balance of Payments Manual, Fifth Edition

CBAs Central Borrowing Authorities

cost-insurance-freight c.i.f.

COFOG Classification of Total Outlays by Function of Government

COICOP Classification of Individual Consumption by Purpose

CPC Central Product Classification

EAS Economic Activity Survey

ESUG Economic Statistics User Group

FISIM Financial Intermediation Services Indirectly Measured

f.o.b. free-on-board

GDP gross domestic product

GDP(E) gross domestic product, expenditure approach

GDP(I) gross domestic product, income approach

GDP(P) gross domestic product, production approach

GOS gross operating surplus

GPC Government Purpose Classification

GSP gross state product

HECS Higher Education Contribution Scheme

IMF International Monetary Fund

IBSC Imputed Bank Service Charge

I-O input-output

ABBREVIATIONS AND SYMBOLS continued

not elsewhere classified n.e.c.

NIEP national income, expenditure and product

NPIs non-profit institutions

NPISH Non-Profit Institutions Serving Households

n.y.a. not yet available

OECD Organisation for Economic Cooperation and Development

SEEA System of Environmental and Economic Accounts

SESCA Standard Economic Sector Classifications of Australia

SDRs Special drawing rights

SNA System of National Accounts

SNA68 System of National Accounts 1968

SNA93 System of National Accounts 1993

TSA tourism satellite account

not applicable

ABS PUBLICATIONS

Cat. no. 1361.0.30.001 Statistical Concepts Reference Library

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

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

Cat. no. 5209.0 Australian National Accounts: Input-Output Tables

Cat. no. 5215.0 Australian National Accounts: Input-Output Tables (Commodity Details)

Cat. no. 5216.0 Australian National Accounts: Concepts, Sources and Methods

Cat. no. 5220.0 Australian National Accounts: State Accounts

Cat. no. 5221.0 Australian National Accounts: Capital Stock

Cat. no. 5232.0 Australian National Accounts: Financial Accounts

Cat. no. 5234.0 Australian National Accounts: Multifactor Productivity

ABBREVIATIONS AND SYMBOLS continued

ABS PUBLICATIONS continued

Cat. no. 5241.0 Australian National Accounts: National Balance Sheet

APPENDIX A: INDICATIVE TABLES

This Appendix provides examples of revised table structures, data items and terminology proposed for inclusion in the ANA as part of the implementation of SNA93. They are representative of the tables that are expected to be released in the annual NIEP accounts (Cat. no. 5204.0), the most comprehensive issue of the ANA. Tables contained in the quarterly NIEP and financial accounts will be consistent with these tables, although they may show varying amounts of detail when compared with the annual accounts, as is current practice.

The tables in this Appendix are not intended to be comprehensive or final but are meant to provide users with a flavour of the proposed changes. The views of users will be taken into account as the tables are finalised over the remainder of 1997. A further information paper is planned for release in early 1998 which will present final versions of the main accounts together with indicative time series of annual estimates on the new basis. Further, the June quarter 1998 NIEP accounts are to be re-released in October 1988 on the new basis so that users can become familiar with the new presentations before the first 'live' release for September quarter 1998 in December 1998. It should also be noted that the ABS intends to take the opportunity to revamp the presentation of the national accounts publications more generally in line with the move to the new ABS-wide publications production workbench system at the same time as it implements SNA93.

The range of indicative tables presented on the following pages are for the total economy and the household and NPISH sector. Indicative tables for the remaining institutional sectors and for the rest of the world are available on request to the ABS (see Section 12). The core tables present the proposed format, data items and terminology. Definitions of new or changed data items are included in the Glossary. The values attached to data items in the tables are taken from illustrative tables included in SNA93 and are included as an aid to understanding of the new accounts. They are not meant to be indicative of actual values or the relative importance of data items for Australia.

It is intended that the full range of detailed supplementary tables in the ANA be maintained. For example, details of changes in inventories, farm income, the split between farm and non-farm gross product and public/private splits of gross fixed capital formation will remain. However, changes in terminology and definitions will also be carried through to those detailed tables.

LIST OF INDICATIVE ANA TABLES ATTACHED

Accounts for the total economy

Gross domestic product account	Table A1
Production account	Table A2
Value added at basic prices — by industry,	
in constant prices	Table A3
National income and use of income account	Table A4
National capital account	Table A5
Financial account	Table A6
National closing balance sheet	Table A7
Balance sheet accounts and accumulation and	
revaluation accounts	Table A8

Accounts for the household and NPISH sector

Generation of income from production account	Table A9
Income and use of income account	Table A10
Capital account	Table A11
Financial account	Table A12
Closing balance sheet	Table A13

LIST OF INDICATIVE ANA TABLES AVAILABLE ON REQUEST

Accounts for the non-financial corporations sector

	Generation of income from production account	Table 14
	Income and use of income account	Table 15
	Capital account	Table 16
	Financial account	Table 17
	Closing balance sheet	Table 18
Accounts for the finan	icial corporations sector	
	Generation of income from production account	Table 19
	Income and use of income account	Table 20
	Capital account	Table 21
	Financial account	Table 22
	Closing balance sheet	Table 23
Accounts for the gene	eral government sector	
	Generation of income from production account	Table 24
	Income and use of income account	Table 25
	Capital account	Table 26
	Financial account	Table 27
	Closing balance sheet	Table 28
Accounts for the rest	of the world	
	External goods and services account	Table 29
	External income and use of income account	Table 30
	External capital account	Table 31
	External financial account	Table 32
	External closing balance sheet	Table 33
	External balance sheet accounts and accumulation	
	and revaluation accounts	Table 34
Supplementary Accounts	Household (incl. NPISH) sector adjusted disposable	
	income and use of adjusted disposable	
	income account	Table 35
	General government sector adjusted disposable income	
	and use of adjusted disposable income account	Table 36

A1

GROSS DOMESTIC PRODUCT ACCOUNT

	Year 1
	\$m
Final consumption expenditure General government Households (incl. NPISH) Total	368 1 031 1 399
Gross fixed capital formation(a) Acquisitions less disposals of tangible fixed assets Dwellings Other buildings and structures Machinery and equipment Livestock — fixed assets Ownership transfer costs Total	75 150 60 23 17 325
Acquisitions less disposals of intangible fixed assets Total	51 376
Domestic final demand	1 775
Changes in inventories(a)	38
Gross national expenditure	1 813
Exports of goods and services Less imports of goods and services	540 499
Statistical discrepancy(b)	(b)
Gross domestic product at purchasers' prices — GDP	1 854
Compensation of employees	762
Gross operating surplus Non-financial corporations Financial corporations General government Dwellings owned by persons Total	258 55 46 89 448
Gross mixed income	453
Gross domestic product at factor cost	1 663
Other taxes less subsidies on production	58
Gross domestic product at basic prices	1 721
Taxes less subsidies on products	133
Statistical discrepancy(b)	(b)
Gross domestic product at purchasers' prices — GDP	1 854

⁽a) Data according to alternative classifications such as private/public and institutional sector will continue to be available.(b) From 1994–95 the annual statistical discrepancies will be eliminated for all years except the latest year. However, statistical discrepancies will remain in the quarterly accounts.

A2

PRODUCTION ACCOUNT(a)

	Year 1
	\$m
Total gross output at basic prices	3 604
Taxes less subsidies on products	133
Output at purchasers' prices	3 737
Less intermediate consumption	1 883
Gross domestic product at purchasers' prices — GDP	1 854

⁽a) This table will not be available for inclusion in the initial implementation of SNA93.

A3

VALUE ADDED AT BASIC PRICES — BY INDUSTRY, IN CONSTANT PRICES

	Year 1
	\$m
Value added at basic prices	
Agriculture, forestry and fishing	42
Mining	18
Manufacturing	700
Electricity, gas and water	29
Construction	118
Wholesale trade	40
Retail trade	30
Accommodation, cafes and restaurants	21
Transport and storage	30
Communication	10
Finance and insurance	100
Property and business services	66
Government administration and defence	50
Education	150
Health and community services	137
Cultural and recreational services	50
Personal and other services	50
Ownership of dwellings	80
All Industries — GDP at basic prices	1 721

A4

NATIONAL INCOME AND USE OF INCOME ACCOUNT

	Year 1
	\$m
Compensation of employees	762
Gross operating surplus	448
Gross mixed income	453
Taxes on production and imports	235
Less subsidies	44
Primary income receivable from non-residents	
Compensation of employees	6
Property income	63
Less primary income payable to non-residents	
Compensation of employees	2
Property income	38
Gross national income	1 883
Net secondary income receivable from non-residents	
Current taxes on income, wealth etc.	1
Net other current transfers	-30
Gross disposable income	(a) 1 854
Use of gross disposable income	
Final consumption expenditure	
General government	368
Households (incl. NPISH)	1 031
Net saving	233
Consumption of fixed capital	222
Use of gross disposable income	(a) 1 854

⁽a) The equality of GDP and gross disposable income is coincidental and entirely a consequence of the particular illustrative figures chosen in the SNA93 presentation (the sum of net primary and secondary income receivable from non-residents is zero). This is unlikely to occur in practice.

A5

NATIONAL CAPITAL ACCOUNT

	Year 1
	\$m
Net saving	
Non-financial corporations	47
Financial corporations	11
General government	-41
Households (incl. NPISH)	216
Total	233
Consumption of fixed capital	222
Capital transfers	
Receivable from non-residents	1
Less payable to non-residents	4
Gross saving and capital transfers	452
Gross fixed capital formation	
Non-financial corporations	250
Financial corporations	9
General government	37
Households (incl. NPISH)	80
Total	376
Changes in inventories(a)	38
Acquisitions less disposals of non-produced non-financial assets	0
Statistical discrepancy(b)	(b)
Net lending (+) / net borrowing (-)	38
Total net capital accumulation and net lending (+) / net borrowing (-)	452

⁽a) Details of changes in inventories will be shown in a supplementary table.

⁽b) From 1994-95 the annual statistical discrepancies will be eliminated for all years except the latest year. However, statistical discrepancies will remain in the quarterly accounts.

A6

FINANCIAL ACCOUNT

	Year 1
	\$m
Net lending (+) / net borrowing (-)	38
Net errors and omissions(a)	(a)
Net change in financial position Changes in assets	38
Monetary gold and SDRs Currency and deposits	-1 -2
Short-term securities other than shares Bills of exchange One name paper — issued in Australia One name paper — issued off shore Total	2 1 1 4
Long-term securities other than shares Bonds etc. — issued in Australia Bonds etc. — issued off shore Total	10 4 14
Derivatives	2
Loans and placements	37
Equity Shares — listed on ASX Shares — not listed on ASX Total	2 1 3
Insurance technical reserves Net equity of households on life insurance reserves Net equity of households on pension funds Prepayment of premiums and reserves against outstanding claims Total	0 0 0 0
Other accounts receivable	30
Net acquisition of financial assets	87

...Continued

A6

FINANCIAL ACCOUNT continued

	Year 1
	\$m
Changes in liabilities (including equity)	
Currency and deposits	11
Short-term securities other than shares Bills of exchange One name paper — issued in Australia One name paper — issued off shore Total	1 1 0 2
Long-term securities other than shares Bonds etc. — issued in Australia Bonds etc. — issued off shore Total	1 1 2
Derivatives	1
Loans and placements	10
Equity Shares — listed on ASX Shares — not listed on ASX Total	2 1 3
Insurance technical reserves Net equity of households on life insurance reserves Net equity of households on pension funds Prepayment of premiums and reserves against outstanding claims Total	0 0 0 0
Other accounts payable	20
Net incurrence of liabilities	49
Total changes in liabilities (including equity)	87

⁽a) The net errors and omissions item in this table reflects the difference in measurement between the conceptually identical concepts of net change in financial position and net lending / net borrowing found in the Capital Account.

A7

NATIONAL CLOSING BALANCE SHEET

	Year 1
	\$m
Assets	
Non-financial assets	
Produced assets	
Fixed assets	5 783
Inventories	553
Total	6 336
Non-produced assets	
Tangible non-produced assets	4 000
Intangible non-produced assets	68
Total	4 068
Total	10 404
Financial assets with rest of the world	
Monetary gold and SDRs	0
Currency and deposits	116
Securities other than shares	134
Loans and placements	80
Shares and other equity	118
Insurance technical reserves	26
Life insurance and superannuation	23
Other	3
Other accounts receivable	155
Total	629
Total assets	11 033
Liabilities and net worth	
Liabilities to rest of the world	
Currency and deposits	114
Securities other than shares	99
Loans and placements	54
Shares and other equity	6
Insurance technical reserves	25
Other accounts payable	89
Total liabilities	387
Net worth	10 646
Total liabilities and net worth	11 033

A8

BALANCE SHEET ACCOUNTS AND ACCUMULATION AND REVALUATION ACCOUNTS

				Other		
	Opening			changes in		Closing
	balance sheet	Net capital formation	Financial transactions	volume of assets	Revaluations	balance sheet
Classification of assets, liabilities and net worth	\$m	\$m	\$m	\$m	\$m	\$m

ASSETS

Non-financial assets

Produced assets

Tangible fixed assets

Dwellings

Other buildings and structures

Machinery and equipment

Livestock — fixed assets

Total

Intangible fixed assets

Inventories

Private non-farm stocks

Farm stocks

Public marketing authorities

Other public authorities

Livestock — inventories

Plantation forests

Total

Non-produced assets

Tangible non-produced assets

Land

Subsoil assets

Native forests

Total

Intangible non-produced assets

Total non-financial assets

Financial assets with rest of the world

Monetary gold and SDRs

Currency and deposits

Securities other than shares

Loans and placements

Shares and other equity

Insurance technical reserves

Other accounts receivable

Total

Total assets

No illustrative figures have been included in this table

...Continued

A8

BALANCE SHEET ACCOUNTS AND ACCUMULATION AND REVALUATION ACCOUNTS continued

				Other		
	Opening			changes in		Closing
	balance sheet	Net capital formation	Financial transactions	volume of assets	Revaluations	balance sheet
Classification of assets,						
liabilities and net worth	\$m	\$m	\$m	\$m	\$m	\$m

LIABILITIES

Liabilities to rest of the world Currency and deposits Securities other than shares Loans and placements Shares and other equity Insurance technical reserves Other accounts payable Total

No illustrative figures have been included in this table

Net worth

Total liabilities and net worth

Non-rateable land

Memorandum items Consumer durables Direct investment Foreign investment in Australia Australian investment abroad

A9

HOUSEHOLD (INCL. NPISH) SECTOR GENERATION OF INCOME FROM PRODUCTION ACCOUNT

	Year 1
	\$m
Gross value added (at basic prices)	606
Compensation of employees	
Wages and salaries	45
Employers' social contributions —	
Employers' contributions to superannuation	10
Workers' compensation premiums	5
Employers' imputed social contributions	2
Termination and redundancy payments	0
Total	17
Total	62
Gross operating surplus — dwellings owned by persons	89
Gross mixed income	453
Other taxes on production	3
Less other subsidies on production	1
Total generation of income from production	606

Note 1: This table will not be available for inclusion in the initial implementation of SNA93.

Note 2: The Generation of Income from Production Account shows the distributions of incomes from production in that sector. The Income and Use of Income Account shows the income that is received by a sector from all sources.

A10

HOUSEHOLD (INCL. NPISH) SECTOR INCOME AND USE OF INCOME ACCOUNT

	Year 1
	\$m
INCOME	
Gross operating surplus — dwellings owned by persons	89
Gross mixed income	453
Compensation of employees	
Wages and salaries	573
Employers' social contributions —	
Employers' contribution to superannuation	154
Workers' compensation premiums	20
Employers' imputed social contributions	20
Termination and redundancy payments	0
Total	194
Total	767
Property income receivable	
Interest	56
Dividends	60
Property income attributed to insurance and superannuation policyholders	20
Rent on natural assets	21
Total	157
Total primary income receivable	1 466
Social benefits receivable —	
Funded private superannuation and workers' compensation	261
Unfunded employee superannuation and workers' compensation	20
Social assistance benefits	52
Total	333
Other current transfers	
Non-life insurance claims, excluding workers' compensation	35
Current transfers to NPISH from general government	0
Miscellaneous current transfers	37
Total	72
Total secondary income receivable	405
Total gross income	1 871

...Continued

A10

HOUSEHOLD (INCL. NPISH) SECTOR INCOME AND USE OF INCOME ACCOUNT continued

USES OF INCOME Property income payable Interest Rent on natural assets	\$m 20 27
Property income payable Interest	
Interest	
Nent on natural assets	
Total	47
Total primary income payable	47
Current taxes on income, wealth etc.	
Income tax	170
Other current taxes on income, wealth etc.	8
Total	178
Social contributions —	
By employers' to superannuation and workers' compensation	174
By persons to superannuation funds Employers' imputed social contributions	129 20
Total	323
Other current transfers	
Net non-life insurance premiums, excluding workers' compensation(a)	33
Miscellaneous current transfers	40
Total	73
Total secondary income payable	574
Gross disposable income	1 250
Use of gross disposable income	
Final consumption expenditure	1 031
Adjustment for the change in net equity of households on pension funds	-42
Net saving	216
Consumption of fixed capital	45
Total use of gross income	1871
Memorandum item	
Gross entrepreneurial income(b)	538

⁽a) Net non-life insurance premiums is equal to premiums less the insurance service charge. (b) For definition see Glossary.

A11

HOUSEHOLD (INCL. NPISH) SECTOR CAPITAL ACCOUNT

	Year 1
	\$m
Net saving	216
Consumption of fixed capital	45
Capital transfers	
Capital transfers, receivable from general government	0
Less capital transfers, payable to general government	2
Other capital transfers, receivable	23
Less other capital transfers, payable	6
Total net capital transfers	15
Gross saving and capital transfers	276
Acquisitions less disposals of tangible fixed assets	
Dwellings	20
Other buildings and structures	5
Machinery and equipment	7
Livestock — fixed assets	15
Ownership transfer costs	16
Total	63
Acquisitions less disposals of intangible fixed assets	17
Total gross fixed capital formation	80
Changes in inventories(a)	7
Acquisitions less disposals of non-produced non-financial assets	5
Net lending (+) / net borrowing (-)	184
Total capital accumulation and net lending (+) / net borrowing (-)	276

⁽a) Details of changes in inventories will be shown in a supplementary table.

A12

HOUSEHOLD (INCL. NPISH) SECTOR FINANCIAL ACCOUNT

	Year 1
	\$m
Net lending (+) / net borrowing (-)	184
Net errors and omissions(a)	(a)
Net change in financial position Changes in assets	184
Currency and deposits	80
Short-term securities other than shares Bills of exchange One name paper — issued in Australia One name paper — issued off shore Total	5 12 7 24
Long-term securities other than shares Bonds etc. — issued in Australia Bonds etc. — issued off shore Total	15 2 17
Derivatives	0
Loans and placements	5
Shares and other equity Shares — listed on ASX Shares — not listed on ASX Total	2 1 3
Insurance technical reserves Net equity of households on life insurance reserves Net equity of households on pension funds Prepayment of premiums and reserves against outstanding claims Total	22 42 3 67
Other accounts receivable	49
Net acquisition of financial assets	245
Changes in liabilities (including equity)	
Short-term securities other than shares Bills of exchange One name paper — issued in Australia One name paper — issued off shore Total	0 0 0
Long-term securities other than shares Bonds etc. — issued in Australia Bonds etc. — issued off shore Total	0 0 0
Derivatives	0
Loans and placements	52
Other accounts payable	9
Net incurrence of liabilities	61
Total changes in liabilities (including equity)	245

⁽a) The net errors and omissions item in this table reflects the difference in measurement between the conceptually identical concepts of net change in financial position and net lending / net borrowing found in the Capital Account.

A13

HOUSEHOLD (INCL. NPISH) SECTOR CLOSING BALANCE SHEET

	Year 1
	\$m
Assets	
Non-financial assets	
Produced assets	
Fixed assets	1 470
Inventories	289
Total	1 759
Non-produced assets	
Tangible non-produced assets	1 172
Intangible non-produced assets	1
Total	1 173
Total	2 932
Financial assets	
Currency and deposits	908
Securities other than shares	233
Loans and placements	29
Shares and other equity	424
Insurance technical reserves	329
Life insurance and superannuation	300
Other	29
Other accounts receivable Total	95 2 018
Total	2 018
Total assets	4 950
Liabilities and net worth	
Liabilities	
Securities other than shares	12
Loans and placements	197
Other accounts payable	113
Total liabilities	322
Net worth	4 628
Total liabilities and net worth	4 950

APPENDIX B: CLASSIFICATION CHANGES

This Appendix outlines the changes that will be made to classifications used in the ANA resulting from implementation of SNA93. Presently, the ANA uses the following classifications:

- (i) Industry classification
- (ii) Commodity classification
- (iii) Asset classification
- (iv) Institutional sector classification
- Government purpose classification (v)
- (vi) Private final consumption expenditure classification

Implementation of SNA93 will have little impact on the industry, commodity and government purpose classifications presently used in the ANA (see below). For these classifications, the ANA already reflects the international standards on which the SNA93 classifications are based. However, important changes will be made to asset and institutional sector classifications while relatively minor changes will be made to the private final consumption expenditure classification. Following is a summary of the impact SNA93 implementation has on the classifications presently used in the ANA. It should be noted that data may not necessarily be presented at the most detailed level of the classifications.

Industry classification

The current industry classification used in the ANA is contained in the Australian and New Zealand Standard Industrial Classification (ANZSIC) (Cat. no. 1292.0). ANZSIC closely conforms to the International Standard Industrial Classification used in SNA93. Hence, the implementation of SNA93 will not result in changes to the present industry classification used in the ANA.

Commodity classification

The current commodity classification use in the ANA is the Input-Output Commodity Classification and is described in Australian National Accounts: Input-Output Tables (Commodity Details) (Cat. no. 5215.0). It closely conforms to the Central Product Classification (CPC) used in SNA93 at the 3-digit level. Hence, the implementation of SNA93 will not result in changes to the present commodity classification used in the ANA.

Asset classification

SNA93 considerably expands the asset boundary. Many of the 'new' assets identified by SNA93 have no counterpart in the current ABS asset classification. Following, is an outline of the present ANA classification and the revised classification.

APPENDIX B: CLASSIFICATION CHANGES continued

Non-financial assets

SNA93 recommends some changes to the existing ANA classification of non-financial assets. In addition, a number of new intangible fixed assets and inventories are identified. Table B1 presents a summary of the present and revised classification of non-financial assets proposed for use in the ANA. Estimates may not necessarily be published at the most detailed level of the classification shown below.

B1 NON-FINANCIAL ASSETS: PRESENT AND REVISED CLASSIFICATION

Present ANA classification	Revised classification	
Produced assets	Produced assets	
	Tangible fixed assets	
Dwellings	Dwellings	
Non-dwelling construction	Other buildings and structures	
Equipment	Machinery and equipment	
(No equivalent)	Cultivated assets	
Real estate transfer expenses	Ownership transfer costs(a)	
(No equivalent)	Intangible fixed assets	
	Mineral exploration	
	Computer software	
	Entertainment literary or artistic originals	
Stocks	Inventories	
Material and supplies	Material and supplies	
Work-in-progress	Work-in-progress	
Motivili-brogicess	Work-in-progress on cultivated assets	
	Other work-in-progress	
Finished goods	Finished goods	
Goods for resale	Goods for resale	
(No equivalent)	Valuables	
Non-produced assets	Non-produced assets	
(No equivalent)	Tangible non-produced assets	
Land	Land	
Subsoil assets	Subsoil assets	
Non-cultivated assets	Non-cultivated biological resources	
Intangible assets(b)	Intangible non-produced assets	

⁽a) Ownership transfer costs will be capitalised in the flow accounts but will not be recognised as an asset on the balance sheet.

⁽b) Intangible assets are included in the ANA in the flow accounts at present but are not shown on the balance sheet.

APPENDIX B: CLASSIFICATION CHANGES continued

Financial assets and liabilities

> An important change resulting from SNA93 implementation is that the current practice of distinguishing instruments issued by residents from those issued by non-residents will be discontinued. However, this information will continue to be available, although it will not be a separate component of the classification of assets. Table B2 presents a summary of the present and revised classification of financial instruments.

FINANCIAL INSTRUMENTS: PRESENT AND REVISED CLASSIFICATION

Present ANA classification Revised classification Monetary gold and SDRs (No equivalent) Cash and deposits Loans and placements Loans and placements

Short-term debt securities

Bills of exchange Promissory notes Treasury notes

Bank certificates of deposit

Long-term debt securities

Insurance technical reserves

Technical reserves of life offices & superannuation funds

Equity

Growers equity in marketing schemes Other equity

Other claims on residents

Claims on non-residents(a)

International reserves Deposits with non-resident deposit taking institutions

Loans to non-residents

Debt securities issued by non-residents Equities issued by non-residents Other claims on non-residents

Memorandum items Consumer durables Direct investment Foreign investment in Australia

Australian investment abroad

Non-rateable land

Currency and deposits

Securities other than shares

Short-term

Bills of exchange One name paper Issued in Australia Issued off shore

Long-term Bonds etc.

> Bonds etc. issued in Australia Bonds etc. issued off shore

Derivatives

Insurance technical reserves

Net equity of households in life insurance reserves and in

superannuation funds

Prepayment of premiums and reserves against outstanding claims

Shares and other equity

Listed on ASX Not listed on ASX

Other accounts receivable/payable

Memorandum items Consumer durables Direct investment

> Foreign investment in Australia Australian investment abroad

Non-rateable land

⁽a) Claims on non-residents are implicitly included in the specified instruments in the revised classification.

APPENDIX B: CLASSIFICATION CHANGES continued

Institutional sector classification Table B3 shows the present and revised institutional sector and related classifications based on the SESCA. The SNA93 recommendation that the NPISH sector be separately identified has expanded the present domestic institutional sector classification from four to five sectors. The ABS has decided in principle to implement the revised standard. However, it will be some time before continuing sources are available for the complete set of data relating to NPIs necessary to identify fully the NPISH sector. In the interim, NPIs which will ultimately be allocated to the NPISH sector will continue to be included in the household sector. While 'Overseas' is not a domestic sector, it is included in table B3 for completeness.

INSTITUTIONAL SECTOR AND RELATED CLASSIFICATIONS: PRESENT AND REVISED CLASSIFICATION

Present ANA classification

Corporate trading enterprises

Private corporate trading enterprises Public trading enterprises

Commonwealth State and local

Financial enterprises

Classification used in Financial accounts

Reserve Bank of Australia

Banks

Non-bank deposit taking institutions Life offices and superannuation funds

Other financial institutions

Classification used in NIEP accounts

Private financial enterprises Public financial enterprises

Financial enterprises other than insurance offices and

superannuation funds

Casualty insurance offices and health funds

Life insurance offices and Superannuation funds

General government

Commonwealth State and local

Households and unincorporated enterprises(a)

Overseas/rest of the world

Revised classification

Private non-financial corporations Public non-financial corporations

> Commonwealth State and local

Non-financial corporations

Financial corporations

Classification for use in both Financial and NIEP accounts

Reserve Bank of Australia

Banks

Other depository corporations

Life insurance Pension funds

Other insurance corporations Other financial institutions

General government

National State and local

Households(a)

Non-profit institutions serving households(a)

Rest of the world

⁽a) Until a time series for NPISH is available, they will be included in the household sector (as they are in the present ANA).

APPENDIX B: CLASSIFICATION CHANGES continued

Government purpose classification

The Government Purpose Classification (GPC) currently used in the ANA is closely related to the Classification of Total Outlays of Government by Function (COFOG) used in SNA93. The COFOG used in SNA93 is still in draft form, and when finalised at the international level, changes will be incorporated in the GPC. Although this will have some impact on the detailed level of the GPC used in government finance statistics, it is not expected to have any significant impact at the broad level published in the ANA.

Private final consumption expenditure classifications

SNA93 provides two alternative classifications for private final consumption expenditure: the Classification of Individual Consumption by Purpose (COICOP) and the CPC. The ABS intends to use COICOP to classify private final consumption expenditure in the NIEP accounts.

The present classification of private final consumption expenditure used in the NIEP accounts contains characteristics of both a purpose and a commodity classification. COICOP classifies final consumption expenditure according to purpose. Although the present classification is reasonably consistent with COICOP, there are a number of important differences. For example, food and alcoholic beverages sold through restaurants and hotels are presently classified to the 'food' and 'alcoholic drinks' commodity groups in the NIEP accounts; under the new purpose based classification, COICOP, these items will both be classified to 'Hotels, cafes and restaurants'. Table B4 shows the relationship between the present classification and COICOP. Note that some categories of COICOP may be published at a broader level than that shown.

APPENDIX B: CLASSIFICATION CHANGES continued

B4

PRIVATE FINAL CONSUMPTION EXPENDITURE: PRESENT AND REVISED CLASSIFICATION

Present ANA classification

Food

Alcoholic drinks Cigarettes and tobacco

Clothing, fabrics and footwear

Clothing and fabrics (part)

Footwear

Dwelling rent

Other rent

Imputed rent of owner occupiers Gas, electricity and fuel

Household durables

Furniture and floor coverings

Clothing and fabrics (part) Household appliances (part)

Domestic hardware Domestic hardware Domestic hardware

Health

(a) (a) (a)

Travel and communication

Rail, bus, tram and taxi fares

Other fares

Purchase of motor vehicles Operation of motor vehicles

Communications

Entertainment and recreation

Household appliances (part)

Toys, sporting goods (currently under all other goods and services)

Other goods (currently under all other goods and

services) (part)

Entertainment and recreation

Books, papers, artists' goods (currently under all

other goods and services)

Education (currently under all other goods and services)

(a)

All other goods and services

(a)

Other goods (part)

Other services

Financial services(b)

Revised classification

Food and non-alcoholic beverages

Alcoholic beverages and tobacco

Alcohol

Cigarettes and tobacco

Clothing and footwear

Clothing Footwear

Housing, water, electricity, gas and other fuels

Actual rentals for housing Imputed rentals for housing Electricity, gas and other fuels

Furnishings, household equipment and routine maintenance of

the house

Furniture, furnishings and decorations, carpets and other floor

coverings, and repairs Household textiles

Heating and cooking appliances, refrigerators, washing machines and similar major household appliances, including fittings and repairs

Glassware, tableware and household utensils Tools and equipment for the house and garden Goods and services for routine maintenance

Health

Medical products, appliances and equipment

Out-patient services Hospital services

Transport

Transport services Transport services Purchase of vehicles

Operation of personal transport equipment

Communications

Recreation and culture

Audio-visual photographic and data processing equipment and

accessories, including repairs

Other major durables for recreation and culture

Other recreational items and equipment; flowers, gardens and pets

Recreational and cultural services Newspapers, books and stationery

Education

Hotels, cafes and restaurants

Catering

Accommodation services

Miscellaneous goods and services

Personal care

Personal effects n.e.c. Social protection Other services n.e.c.

Insurance

Financial services n.e.c.

⁽a) No further details are published in the ANA.

⁽b) This is no longer a category title in the revised classification.

GLOSSARY

The following glossary of terms is drawn from SNA93 (see Section 12 for information on how to obtain SNA93).

Basic prices

The basic price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, on that unit as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer. Output sold at prices that are not economically significant (see also Economically significant prices) is not valued at these prices. Rather, such output is valued at its cost of production. See also Purchasers' prices.

Capital transfers

Capital transfers are transactions in which one institutional unit provides a good or service (including assets) to another unit without receiving in return any counterpart in the form of a good or service (including assets). Transfers may be made in cash or in kind. A capital transfer in cash consists of the transfer of cash that the first party has raised by disposing of an asset, or assets (other than inventories), or that the second party is expected, or required, to use for the acquisition of an asset, or assets (other than inventories). The second party, the recipient, is often obliged to use the cash to acquire an asset, or assets, as a condition on which the transfer is made. A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash) or the cancellation of a liability by a creditor, without any counterpart being received in return.

Changes in inventories

The value of the inventories acquired by an enterprise less the value of the inventories disposed of during the accounting period. Changes in inventories may reflect transactions that are internal to the enterprise. The term changes in inventories replaces the term increase in stocks. See also Inventories.

Collective consumption

Collective consumption refers to services provided simultaneously to all members of the community or to all members of a particular section of the community, such as all households living in a particular region. Collective services are automatically acquired and consumed by all members of the community, or group of households in question, without any action on their part. Typical examples are public administration and the provision of security, either at a national or local level. Collective services are the 'public goods' of economic theory. By their nature, collective services cannot be sold to individuals on the market, and they are financed by government units out of taxation or other incomes. The defining characteristics of collective services are as follows: collective services can be delivered simultaneously to every member of the community or of particular sections of the community, such as those in a particular region or country; the use of such services is usually passive and does not require the explicit agreement or active participation of all the individuals concerned; and the provision of a collective service to one individual does not reduce the amount available to others in the same community or section of the community. There is no rivalry in acquisition. See also Individual consumption.

Compensation of employees

This term replaces the existing term 'wages, salaries and supplements'. Compensation of employees is the total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the employee during the accounting period. It is further classified into two sub-components: wages and salaries; and employers' social contributions. Compensation of employees is not payable in respect of unpaid work undertaken voluntarily, including the work done by members of a household within an unincorporated enterprise owned by the same household. Compensation of employees excludes any taxes payable by the employer on the wage and salary bill (e.g. payroll tax). See also Employers' social contributions, Wages and salaries.

Computer software

This refers to computer programs, program descriptions and supporting materials for both systems and applications software. Included are purchased software and, if the expenditure is large, software developed on own-account. Large expenditures on the purchase, development or extension of computer databases that are expected to be used for more than one year, whether marketed or not, are also included. See also Intangible fixed assets.

Cultivated assets

This includes livestock raised for breeding, dairy, wool, etc. and vineyards, orchards and other plantations of trees yielding repeat products that are under the direct control, responsibility and management of institutional units. Immature cultivated assets are excluded unless produced for own use. See also *Livestock for breeding*, dairy, wool, etc.; Tangible fixed assets; and Vineyards, orchards and other plantations of trees yielding repeat products.

Current taxes on income

This term replaces the existing term 'direct taxes'. Current taxes on income are compulsory, unrequited payments, in cash or in kind, made by institutional units to government units. They are transfers because the Government provides nothing directly in return to the individual unit paying the tax, although governments do provide goods and services to the community as a whole or to other individual units, or groups of units, depending on their general economic and social policy. Current taxes on income, wealth, etc., consist mainly of taxes levied on the incomes of households and corporations. They constitute charges against income and are recorded under 'uses of income' for the households and corporate sectors in the income and use of income account. The taxes may also be payable by non-residents, and possibly by government units or non-profit institutions. See also Other taxes on production, Taxes on products, Taxes on production and imports.

Dwellings

Buildings that are used entirely or primarily as residences, including any associated structures, such as garages, and all permanent fixtures customarily installed in residences. Houseboats, barges, mobile homes and caravans used as principal residences of households are also included, as are historic monuments identified primarily as dwellings. The costs of site clearance and preparation are also included in the value of dwellings. See also Tangible fixed assets.

Economically significant prices

These are prices which have a significant influence both on the amounts the producers are willing to supply and on the amounts purchasers wish to buy. See also Basic prices, Producers' prices, Purchasers' prices.

Employees' social contributions

These are social contributions payable by employees to social security funds and private funded social insurance schemes. See also Employers' contributions to superannuation, Employers' imputed social contributions, Employers' social contributions, Social assistance benefits, Social benefits, Social contributions, Social insurance benefits.

Employers' contributions to superannuation

These consist of social contributions payable by employers for the benefit of their employees to superannuation funds or other institutional units responsible for the administration and management of social insurance schemes. Although they are paid by the employer directly to the superannuation fund, the payments are made for the benefit of the employees. Accordingly, employees are treated as being remunerated by an amount equal to the value of the social contributions payable. See also Employees' social contributions, Employers' imputed social contributions, Employers' social contributions, Social assistance benefits, Social benefits, Social contributions, Social insurance benefits.

Employers' imputed social contributions

Some employers provide social benefits directly to their employees, former employees or dependants from their own resources without involving an insurance enterprise or autonomous pension fund, and without creating a special fund or segregated reserve for the purpose. In the Australian context, employers' imputed social contributions primarily relate to unfunded superannuation schemes operated by the Commonwealth Government and State Governments. The remuneration imputed for such employees is equal in value to the amount of social contributions that would be needed to secure the de facto entitlements to the social benefits they accumulate. See also Employees' social contributions, Employers' contributions to superannuation, Employers' social contributions, Social assistance benefits, Social benefits, Social contributions, Social insurance benefits.

Employers' social contributions

These are an amount equal to the value of the social contributions incurred by employers in order to obtain social benefits for their employees. Employers' social contributions may be either actual or imputed. They are intended to secure for their employees the entitlement to social benefits should certain events occur, or certain circumstances exist, that may adversely affect their employees' income or welfare (e.g. sickness, accidents, redundancy, retirement, etc.). In the Australian context, employers' social contributions include employers' contribution to superannuation, workers' compensation premiums, and termination and redundancy payments. See also Employees' social contributions, Employers' contributions to superannuation, Employers' imputed social contributions, Social assistance benefits, Social benefits, Social contributions, Social insurance benefits.

Entertainment, literary or artistic originals

Original films, sound recordings, manuscripts, tapes, models, etc., on which drama performances, radio and television programming, musical performances, sporting events, literary and artistic output, etc., are recorded or embodied. Included are works produced on own-account. In some cases there may be multiple originals (e.g. films). See also Intangible fixed assets.

Entrepreneurial income

The entrepreneurial income for a corporation, quasi-corporation, or institutional unit owning an unincorporated enterprise engaged in market production is defined as its operating surplus (or mixed income), plus property income receivable on the assets owned by the enterprise, less interest payable on the liabilities of the enterprise and rents payable on land or other tangible non-produced assets rented by the enterprise. See also Gross operating surplus, Mixed income.

Financial assets

Financial assets are mostly financial claims. Financial claims entitle the owner to receive a payment, or a series of payments, from an institutional unit to which the owner has provided funds. The exceptions are monetary gold, Special Drawing Rights (SDRs), and shares, which are treated as financial assets even though there is no financial claim on another institutional unit. See also Assets, Insurance technical reserves, Long-term debt securities, Monetary gold and SDRs, Other accounts receivable/payable, Prepayments of premiums and reserves against outstanding claims, Securities other than shares, Shares and other equity, Short-term debt securities.

Financial derivatives

Financial derivatives are financial instruments that are linked to a specific financial instrument or indicator or commodity, and which provide for market financial risk in a form that can be traded or otherwise offset in the market. Financial derivatives are used for a number of purposes including risk management, hedging, and speculation. Unlike debt instruments, no principal amount is advanced to be repaid; and no investment income accrues. The value of the financial derivative derives from the price of the underlying items.

Financial intermediation services indirectly measured (FISIM)

This term replaces the existing term 'Imputed bank service charge'. Banks and some other financial intermediaries are able to provide services for which they do not charge explicitly, by paying or charging different rates of interest to borrowers and lenders (and to different categories of borrowers and lenders). For example, they may pay lower rates of interest than would otherwise be the case to those who lend them money and charge higher rates of interest to those who borrow from them. The resulting net receipts of interest are used to defray their expenses and provide an operating surplus. This scheme of interest rates avoids the need to charge their customers individually for services provided and leads to the pattern of interest rates observed in practice. However, in this situation, the national accounts must use an indirect measure, i.e. FISIM, of the value of the services for which the intermediaries do not charge explicitly.

Whenever the production of output is recorded in the national accounts the use of that output must be explicitly accounted for elsewhere in the accounts. Hence, FISIM must be recorded as being disposed of in one or more of the following ways: as intermediate consumption by enterprises; as final consumption by households; or as exports to non-residents.

Fixed assets

Produced assets that are used repeatedly or continuously in production processes for more than one year. Fixed assets consist of tangible and intangible fixed assets. See also Intangible fixed assets, Produced assets, Tangible fixed assets.

Gross domestic product at factor cost

Income accruing to the owners of the factors of production. Gross domestic product at factor cost is calculated as gross domestic product at market prices plus subsidies less taxes on production and imports. See also *Gross domestic product at purchasers' prices*.

Gross domestic product at purchasers' prices

The total market value of goods and services produced in a country after deducting the cost of goods and services used up in the production process (intermediate consumption), but before deducting the consumption of fixed capital. See also *Gross domestic product at factor cost.*

Gross fixed capital formation

Gross fixed capital formation is measured by the total value of producers' acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets realised by the productive activity of institutional units. Formerly known as gross fixed capital expenditure. See also *Intangible fixed assets, Non-produced assets, Tangible fixed assets.*

Gross mixed income

Mixed income is the term reserved for the surplus accruing to owners of unincorporated enterprises from processes of production (as defined below for gross operating surplus) before deducting any explicit or implicit interest, rents or other property incomes payable on the financial assets, land or other tangible non-produced assets required to carry on the production and before deducting consumption of fixed capital. It was previously described as gross operating surplus — unincorporated enterprises. The owners, or other members of their households, may work without receiving any wage or salary. Mixed income therefore contains elements of both gross operating surplus and returns for the proprietors' own labour (akin to wages and salaries). In practice, all unincorporated enterprises owned by households that are not quasi-corporations are deemed to fall into this category, except owner-occupiers in their capacity as producers of housing services for own final consumption, and households employing paid domestic staff (an activity which is deemed to generate zero surplus).

Gross operating surplus

Gross operating surplus is a measure of the surplus accruing to owners from processes of production before deducting any explicit or implicit interest charges, rents or other property incomes payable on the financial assets, land or other tangible non-produced assets required to carry on the production and before deducting consumption of fixed capital. It excludes the amount previously described as gross operating surplus — unincorporated enterprises, now referred to as gross mixed income. See also *Gross mixed income*.

Gross value added

Gross value added is defined as the value of output at basic prices minus the value of intermediate consumption at purchasers' prices. The term is used to describe gross product by industry and by sector. Basic prices valuation of output removes the distortion caused by variations in the incidence of commodity taxes and subsidies across the output of individual industries. See also Net value added.

Individual consumption

An individual consumption good or service is one that is acquired by a household and used to satisfy the needs and wants of members of that household. Individual goods and services can always be bought and sold on the market, although they may also be provided free, or at prices that are not economically significant, or as transfers in kind. Individual goods and services are essentially 'private', as distinct from 'public'. See also Collective consumption.

Institutional sectors

The residential units that make up the total economy are grouped into five mutually exclusive institutional sectors, namely: the non-financial corporations sector; the financial corporations sector; the general government sector; the household sector; and the NPISH sector. See also Institutional units.

Institutional units

An institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities, engaging in economic activities and in transactions with other entities. There are two main types of institutional units, namely persons or groups of persons in the form of households, and legal or social entities whose existence is recognised by law or society independently of the persons, or other entities, that may own or control them. The individual members of multi-person households are not treated as separate institutional units. Legal or social entities that engage in economic activities in their own right, such as a corporation, NPI or government unit, are considered institutional units as they are responsible and accountable for the economic decisions or actions they take. See also Institutional sectors.

Insurance technical reserves

Insurance technical reserves comprise financial assets that are reserves against outstanding risks, reserves for with-profit insurance, prepayments of premiums and reserves against outstanding claims. Insurance technical reserves may be liabilities not only of life or non-life insurance enterprises (whether mutual or incorporated) but also of autonomous pension funds, which are included in the insurance enterprise sub-sector, and certain non-autonomous pension funds that are included in the institutional sector that manages the funds. Insurance technical reserves are subdivided between net equity of households on life insurance reserves and on pension funds, and prepayments of premiums and reserves against outstanding claims. See also Net equity of households on life insurance reserves and on pension funds, Prepayment of premiums and reserves against outstanding claims.

Intangible fixed assets

Intangible fixed assets are fixed assets that consist of mineral exploration, computer software, entertainment, literary or artistic originals, and ownership transfer costs, and which are intended to be used for more than one year. See also Computer software, Entertainment, literary or artistic originals, Mineral exploration, Ownership transfer costs.

Intangible non-produced assets

Intangible non-produced assets are assets that are constructs of society. They are evidenced by legal or accounting actions, such as the granting of a patent or the conveyance of some economic benefit to a third party. Some entitle their owners to engage in certain specific activities and to exclude other institutional units from doing so except with the permission of the owner. These assets consist of patented entities, leases and other transferable contracts, purchased goodwill and other intangible non-produced assets. See also Non-produced assets.

Inventories

This term replaces the existing term 'stocks'. They consist of materials and supplies, work-in-progress, finished goods and goods for resale. Included are all inventories held by government. See also Produced assets.

Livestock for breeding, dairy, wool, etc.

Livestock that are cultivated for the products they provide year after year. They include breeding stocks (including fish and poultry), dairy cattle, draught animals, sheep or other animals used for wool production and animals used for transportation, racing or entertainment.

Long-term debt securities

Long-term debt securities are debt securities with an original term to maturity of more than one year. They include Treasury bonds, semi-government securities, corporate securities, asset backed bonds and convertible notes prior to conversion. Long-term debt securities also include subordinated debt. See also Financial assets.

Machinery and equipment

This includes transport equipment and other machinery and equipment other than that acquired by households for final consumption. Tools that are relatively inexpensive and purchased at a relatively steady rate, such as hand tools, are excluded. Also excluded are machinery and equipment integral to buildings such as lifts, these being included in dwellings and non-residential buildings.

Machinery and equipment acquired by households for final consumption (e.g. motor vehicles) are not treated as an asset. Rather, they are included in the memorandum item 'consumer durables' in the balance sheet for households. Houseboats, barges, mobile homes and caravans used by households as principal residences are included in dwellings. See also Dwellings, Tangible fixed assets.

Mineral exploration

This is the value of expenditures on exploration for petroleum and natural gas and for non-petroleum mineral deposits. These expenditures include pre-licence costs, licence and acquisition costs, appraisal costs and the costs of actual test drilling and boring, as well as the costs of aerial and other surveys, transportation costs, etc., incurred to make it possible to carry out the tests. See also Intangible fixed assets.

Mixed income

See Gross mixed income.

Monetary gold and SDRs

These are financial assets for which there is no corresponding financial liability. They are monetary gold and SDRs (Special Drawing Rights) issued by the International Monetary Fund (IMF).

Monetary gold is gold owned by monetary authorities (or others subject to effective control by monetary authorities) that is held as a financial asset and as a component of official reserves. Other gold held by any entity (including non-reserve gold held by monetary authorities and all gold held by financial institutions other than the central bank) is treated as a commodity.

SDRs are international reserve assets created by the IMF and allocated to its members to supplement existing reserve assets. They are held exclusively by official holders, which are normally central banks. See also Financial assets.

Net equity of households on life insurance reserves and on pension funds

Reserves held against life insurance and annuity policies by insurance enterprises, whether mutual or incorporated, and by pension funds. These reserves are considered to be assets of the policyholders and not of the institutional units that manage them.

Net value added

Net value added is defined as gross value added minus consumption of fixed capital. See also Gross value added.

Non-financial assets

Non-financial assets are assets for which no corresponding liabilities are recorded. See also Assets, Financial assets, Non-produced assets, Produced assets.

Non-produced assets

Non-financial assets that come into existence other than through processes of production. Non-produced assets consist of tangible assets and intangible assets. See also Intangible non-produced assets, Tangible non-produced assets.

Other accounts receivable/payable

This term is used in two ways. Firstly it is the financial asset consisting of two subordinate classifications: 'trade credit and advances', and 'other accounts receivable/payable'. Alternatively, the item can refer to the actual classification 'other accounts receivable/payable'.

Accounts receivable and payable include items other than those described previously (e.g. in respect of taxes, dividends, purchases and sales of securities, rent, wages and salaries and social contributions). Interest accruing that is not capitalised in the underlying asset may be included. See also Financial assets.

Other buildings and structures

These consist of non-residential buildings and other structures. 'Non-residential buildings' are buildings other than dwellings, including fixtures, facilities and equipment that are integral parts of the structures and costs of site clearance and preparation.

'Other structures' are structures other than buildings, including streets, sewers and site clearance and preparation other than for residential or non-residential buildings. Also included are shafts, tunnels and other structures associated with mining subsoil assets. Major improvements to land, such as dams, are also included. See also Tangible fixed assets.

Other subsidies on production

These consist of all subsidies, except subsidies on products, which resident enterprises may receive as a consequence of engaging in production. Other subsidies on production include: subsidies on payroll or workforce including subsidies payable on the total wage or salary bill, workforce, or on the employment of particular types of persons, for example persons with disabilities or persons who have been unemployed for a long period. The subsidies may also be intended to cover some or all of the costs of training schemes organised or financed by enterprises. Subsidies aimed at reducing pollution are also included. See also Subsidies on products.

Other taxes on production

These consist of all taxes that enterprises incur as a result of engaging in production except taxes on products. Other taxes on production include: taxes on payroll or workforce excluding compulsory social security contributions paid by employers and any taxes paid by the employees themselves out of their wages or salaries; recurrent taxes on land, buildings or other structures; some business and professional licences where no service is provided by the Government in return; taxes on the use of fixed assets or other activities; stamp duties; taxes on pollution; and taxes on international transactions. See also Current taxes on income, Taxes on production and imports, Taxes on products.

Ownership transfer costs

The costs of ownership transfer consist of the following kinds of items: all professional charges, taxes payable or commissions incurred by the units acquiring and disposing the asset (e.g. fees paid to lawyers, architects, surveyors, engineers, valuers, etc., and commissions paid to estate agents, auctioneers, etc.). The assets on which ownership of transfer costs may apply include dwellings, non-dwellings and land. See also Intangible fixed assets.

Prepayments of premiums and reserves against outstanding claims

These are reserves in the form of prepayments of premiums which result from the fact that, in general, insurance premiums are paid in advance. Such reserves are assets of the policyholders.

Reserves against outstanding claims are reserves that insurance enterprises hold in order to cover the amounts they expect to pay out in respect of claims that are not yet settled or claims that may be disputed. Reserves against outstanding claims are considered to be assets of the beneficiaries. See also Financial assets.

Primary income

Primary incomes are incomes that accrue to institutional units as a consequence of their involvement in processes of production or ownership of assets that may be needed for purposes of production. They are payable out of the value added created by production. The primary incomes that accrue by lending or renting financial or tangible non-produced assets, including land, to other units for use in production are described as 'property incomes'. Receipts from taxes on production and imports are treated as primary incomes of governments even though not all of them may be recorded as payable out of the value added of enterprises. Primary incomes exclude social contributions and benefits, current taxes on income, wealth, etc. and other current transfers.

Produced assets

These are non-financial assets that have come into existence as outputs from production processes. Produced assets consist of fixed assets and inventories. See also Fixed assets, Inventories.

Property income

This term replaces the existing term 'interest, etc. received/paid'. Property income is the income receivable by the owner of a financial asset or a tangible non-produced asset in return for providing funds to, or putting the tangible non-produced asset at the disposal of, another institutional unit. Property incomes are received by the owners of financial assets and tangible non-produced assets (mainly land and subsoil assets). Institutional units with funds to invest do so by lending them to other institutional units. As a result, financial assets are created whose owners are entitled to receive property incomes in the form of interest and dividends. Owners of land and subsoil assets may put these assets at the disposal of other units by arranging contracts or leases under which the tenants, or users of the assets, agree to pay the owners property incomes in the form of rent.

Purchasers' prices

This term replaces the existing term 'market prices'. The purchasers' price is the amount paid by the purchaser, excluding any deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place. See also Basic prices, Economically significant prices.

Quasi-corporations

Quasi-corporations are unincorporated enterprises that function as if they were corporations. Three main kinds of quasi-corporations are recognised by SNA93, namely: an unincorporated enterprise owned by government units engaged in market production and operated in a similar way to publicly owned corporations; unincorporated enterprises, including unincorporated partnerships, owned by households which are operated as if they were privately owned corporations; and unincorporated enterprises which belong to institutional units resident abroad such as permanent branches, or offices of production units belonging to foreign enterprises which engage in significant amounts of production over long, or indefinite, periods of time.

Securities other than shares

Financial assets that are normally traded in the financial markets and that give the holders the unconditional right to receive stated fixed sums on a specified date (such as bills) or the unconditional right to fixed money incomes or contractually determined variable money incomes (bonds and debentures). With the exception of perpetual bonds, bonds and debentures also give holders the unconditional right to fixed sums as repayments of principal on a specified date or dates. See also Financial assets.

Securities other than shares continued

Examples include securities such as bills, bonds, debentures, financial derivatives, negotiable certificates of deposit, bankers' acceptances, commercial paper, negotiable securities backed by loans or other assets, preferred stocks or shares that pay a fixed income but do not provide for participation in the residual earnings or value of a corporation and bonds that are convertible into shares. 'Securities other than shares' may be subdivided between short-term and long-term. See also Financial assets, Long-term debt securities, Short-term debt securities.

Shares and other equity

Financial assets that are instruments and records acknowledging, after the claims of all creditors have been met, claims to the residual value of incorporated enterprises. Equity securities do not provide the right to a predetermined income or to a fixed sum on dissolution of the incorporated enterprise. Ownership of equity is usually evidenced by shares, stocks, participation, or similar documents. Preferred stocks or shares which also provide for participation in the distribution of the residual value on dissolution of an incorporated enterprise are included.

Proprietors' net equity in quasi-corporate enterprises is one of the components of shares and other equity although it is not distinguished as a separate category in the classification. Shares are subdivided between those listed and those not listed on the Australian Stock Exchange. See also Financial assets.

Short-term debt securities

Short-term debt securities are debt securities with an original maturity of one year or less. They include bills of exchange, promissory notes (also called 'one name paper'), Treasury notes and bank certificates of deposit. See also Financial assets.

Social assistance benefits

This term replaces the existing term 'personal benefit payments'. Social assistance benefits are current transfers payable to households by government units or NPISH to meet the same needs as social insurance benefits but which are not made under a social insurance scheme incorporating social contributions and social insurance benefits. Therefore, they exclude all benefits paid by social security funds. They may be payable in cash or in kind. In Australia, they include the age pension and unemployment benefits. See also Employees' social contributions, Employers' contributions to superannuation, Employers' imputed social contributions, Employers' social contributions, Social benefits, Social contributions, Social insurance benefits.

Social benefits

Social benefits are current transfers received by households and are intended to provide for needs arising from certain events or circumstances, for example, sickness, unemployment, retirement, housing, education or family circumstances. There are two kinds of social benefits: social insurance benefits; and social assistance benefits. See also Employees' social contributions, Employers' contributions to superannuation, Employers' imputed social contributions, Employers' social contributions, Social assistance benefits, Social contributions, Social insurance benefits.

Social contributions

Social contributions are actual or imputed payments to social insurance schemes to make provision for social insurance benefits to be paid. They may be made by employers on behalf of their employees; or by employees, self-employed or non-employed persons on their own behalf. See also Employees' social contributions, Employers' contributions to superannuation, Employers' imputed social contributions, Employers' social contributions, Social assistance benefits, Social benefits, Social insurance benefits.

Social insurance benefits

These are transfers provided under organised social insurance schemes. Organised social insurance schemes provide benefits through general social security schemes, privately funded social insurance schemes or unfunded schemes managed by employers for the benefit of their existing or former employees without involving third parties in the form of insurance enterprises or pension funds. See also Employees' social contributions, Employers' contributions to superannuation, Employers' imputed social contributions, Employers' social contributions, Social assistance benefits, Social benefits, Social contributions.

Subsidies on products

A subsidy on a product is a subsidy payable per unit of a good or service. The subsidy may be a specific amount of money per unit of quantity of a good or service, or it may be calculated ad valorem as a specified percentage of the price per unit. A subsidy may also be calculated as the difference between a specified target price and the market price actually paid by a purchaser. A subsidy on a product usually becomes payable when the product is produced, sold or imported, but it may also become payable in other circumstances such as when a product is exported, leased, transferred, delivered or used for own consumption or own capital formation. See also Other subsidies on production.

Tangible fixed assets

Tangible fixed assets consist of dwellings; other buildings and structures; machinery and equipment and cultivated assets. See also Dwellings, Other buildings and structures, Machinery and equipment, Cultivated assets.

Tangible non-produced assets

These are non-produced assets that occur in nature and over which ownership may be enforced and transferred. Environmental assets over which ownership rights have not, or cannot, be enforced, such as international waters or air space, are excluded. Tangible non-produced assets consist of land, subsoil assets, non-cultivated biological resources and water resources. See also Non-produced assets.

Taxes on production and imports

This term replaces the existing term 'indirect taxes'. It consists of 'taxes on products' and 'other taxes on production'. These taxes do not include any taxes on the profits or other income received by an enterprise. They are payable irrespective of the profitability of the production. They may be payable on the land, fixed assets or labour employed in the production process, or on certain activities or transactions. See also Current taxes on income, Other taxes on production, Taxes on products.

Taxes on products

A tax on a product is a tax that is payable per unit of some good or service. The tax may be a specific amount of money per unit of quantity of a good or service (quantity being measured either in terms of discrete units or continuous physical variables such as volume, weight, strength, distance, time, etc.), or it may be calculated ad valorem as a specified percentage of the price per unit or value of the goods or services transacted. A tax on a product usually becomes payable when it is produced, sold or imported, but it may also become payable in other circumstances, such as when a good is exported, leased, transferred, delivered, or used for own consumption or own capital formation. See also Current taxes on income, Other taxes on production, Taxes on production and imports.

Trade credits and advances

Trade credit is credit for the purchased of goods and services extended directly to corporations, to government, to NPIs, to households and to the rest of the world and also advances for work that is in progress (if classified as such under inventories) or is to be undertaken. See also Financial assets, Other accounts receivable.

Vineyards, orchards and other plantations of trees yielding repeat products Trees (including vines and shrubs) cultivated for products they yield year after year, including those cultivated for fruits and nuts, for sap and resin, and for bark and leaf products.

Wages and salaries

Wages and salaries paid in cash include the value of any social contributions, income taxes, etc., payable by the employee even if they are actually withheld by the employer for administrative convenience or other reasons and paid directly to social insurance schemes, tax authorities, etc., on behalf of the employee. Wages and salaries may be paid as remuneration in kind instead of, or in addition to, remuneration in cash. The only change from the existing term wages and salaries is that termination and redundancy payments will be excluded from wages and salaries and included in employers' social contributions, and wages and salaries will be measured as far as possible on an accrual rather than the present cash basis. See also *Employers' social contributions*, *Compensation of employees*.