Chapter Twenty-five

National Accounts

Contents

In Australia, there is a wide range of economic data available to analyse the performance of various components of the economy over time. For example, data are regularly published on the number of houses being built, the number of cars produced, whether employment is rising or falling, the composition of exports and imports and so on. While these and other statistical series are important in their own right, none of them in isolation can provide an overall picture of the state of the economy.

National accounts are designed to provide a systematic summary of national economic activity and have been developed to assist in the practical application of economic theory. At their summary level, the national income, expenditure and product accounts reflect the key economic flows of the Keynesian economic system: production, the distribution of incomes, consumption, saving and investment. At their more detailed level, they are designed to present a statistical picture of the structure of the economy and the detailed processes that make up domestic production and its distribution. The national accounts include many detailed classifications (for example, by industry, by purpose, by commodity, by State and Territory, and by asset type) relating to major economic aggregates.

The performance of the economy, as represented in national accounting measures such as growth in the national income or gross domestic product, is not an end in itself. Movements in gross domestic product at constant prices are an important measure of economic growth, but there is no single indicator which can describe all aspects of the well-being of a country's citizens.

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

Notwithstanding their limitations, especially in relation to uses for which they were never designed, the national accounts provide vital information for a range of important purposes. The system of national accounts also provides a framework or structure which can be, and has been, adapted and extended to facilitate the examination of other economic and social policy issues.

A detailed presentation of the concepts underlying the national accounts is provided in the ABS publication *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

The main output from the national accounts is a measure of the overall value of economic production in Australia in a given period, but without any double counting of the goods and services being produced. Many goods and services are bought by businesses for use in their own productive activities (for example, steel is bought by car manufacturers). If the value of all goods and services produced were simply added together there would be serious duplication because some goods and services would be added in several times at various stages of production. The overall measure of production, excluding double counting, is called gross domestic product, which is commonly referred to as 'GDP'. It is formally defined as:

> the total market value of goods and services produced in Australia after deducting the cost of goods and services used up (intermediate consumption) in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation).

Measurement of GDP

There are three ways of measuring GDP:

- The **income approach**, which measures GDP by summing the incomes accruing from production (wages, salaries and supplements; gross operating surplus (profits); and indirect taxes less subsidies).
- The **expenditure approach**, which involves summing all final expenditures on goods and services (that is, those goods and services which are not processed any further), adding on the contribution of exports and deducting the value of imports. Final expenditures consist of final consumption expenditure, gross fixed capital expenditure and increase in stocks. Exports are included in GDP because they are part of Australian production even though they are sold to overseas purchasers. Imports are deducted because, although they are included in final expenditures (for example, when someone buys an imported

video recorder its value is included as part of private final consumption expenditure) they are not part of Australian production.

- The **production approach**, which calculates GDP by taking the market value of goods and services produced by an industry (its gross output) and deducting the cost of goods and services used up by the industry in the productive process (intermediate consumption) which leaves the 'value added' by the industry (also called its gross product). GDP is then obtained by summing the gross product of all industries.

In theory, the three approaches result in identical estimates of GDP. In practice, because of the need to use different data sources for each method, the value of GDP obtained from each approach differs. The ABS refers to the above three alternative estimates of GDP as GDP(I), GDP(E) and GDP(P), respectively.

A fourth measure, the simple average of these three, referred to as GDP(A), is the preferred estimate of economic growth for Australia *when expressed in constant price terms*. Using movements in GDP(A) has been shown to provide a smoother and more reliable indicator of turning points in the economy than do changes in any of the individual measures of GDP. Quarterly changes in the constant price trend of GDP(A) are considered by the ABS to be the best indicator of short-term growth. Constant price data are published for all four estimates in original, seasonally adjusted and trend terms (*see* Constant price or 'real' GDP below).

25.1 GROSS DOMESTIC PRODUCT AT AVERAGE 1989–90 PRICES
($ million)

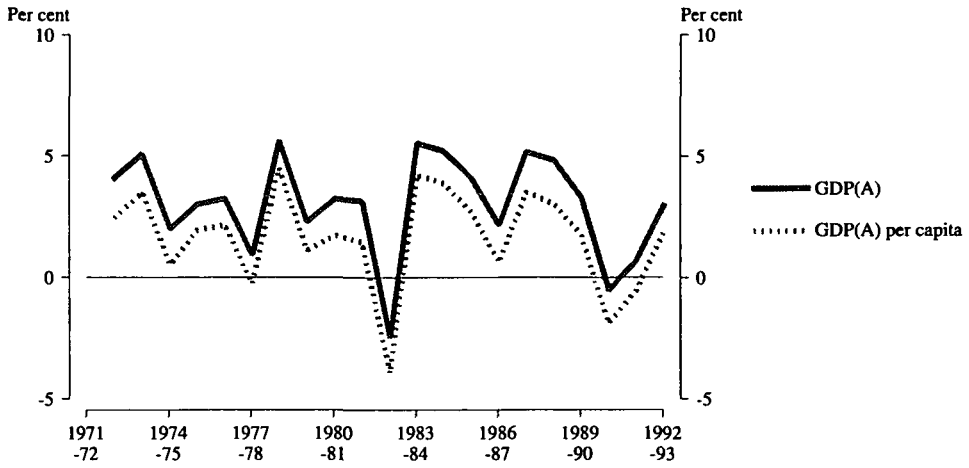
Year	*GDP(I)*	*GDP(E)*	*GDP(P)*	*GDP(A)*
1962–63	126,915	127,532	127,710	127,386
1963–64	135,903	136,453	136,323	136,226
1964–65	145,506	145,099	146,022	145,543
1965–66	148,671	148,449	147,942	148,355
1966–67	158,447	158,691	157,186	158,107
1967–68	164,357	165,242	164,168	164,589
1968–69	178,817	179,312	179,389	179,173
1969–70	188,842	188,687	188,756	188,763
1970–71	197,896	198,834	196,913	197,881
1971–72	207,471	207,579	203,008	204,886
1972–73	215,452	214,850	209,446	213,250
1973–74	225,460	221,783	225,145	224,103
1974–75	229,720	227,143	228,789	228,552
1975–76	236,474	237,123	232,651	235,416
1976–77	243,322	244,415	241,306	243,014
1977–78	245,826	245,899	244,030	245,252
1978–79	259,522	261,760	255,987	259,089
1979–80	264,915	268,036	262,143	265,032
1980–81	274,252	275,665	270,881	273,600
1981–82	280,499	284,635	281,495	282,210
1982–83	275,700	278,418	271,348	275,155
1983–84	292,436	293,605	284,878	290,306
1984–85	307,309	307,126	301,723	305,386
1985–86	318,881	320,937	313,928	317,916
1986–87	326,913	327,161	319,867	324,647
1987–88	343,857	342,780	337,599	341,412
1988–89	360,494	354,876	358,132	357,834
1989–90	370,929	366,516	370,929	369,458
1990–91	369,189	365,325	367,755	367,423
1991–92	371,114	371,468	367,215	369,932
1992–93	382,897	382,013	377,843	380,918

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

GDP(A) at average 1989–90 prices increased by 3.0 per cent in 1992–93, following a rise of 0.7 per cent in 1991–92. For some analytical purposes it is important to allow for the

impact of population growth on movements in GDP. Annual growth in GDP(A) per capita has been about 1.0 per cent to 1.8 per cent lower than that for GDP(A) since 1971–72 and was negative in 1990–91 and 1991–92.

25.2 GDP(A) AND GDP(A) PER CAPITA



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

Constant price or 'real' GDP

The expenditure approach to calculating GDP measures Australian production by summing the amounts spent by the final users on the goods and services produced. However, by itself this is not always a good measure of production, since the value of a particular good or service is affected by inflation.

For example, the national accounts may show that the amount spent on motor cars is 20 per cent higher this year than it was last year. If the price of cars has increased by 20 per cent over the last year, then the number of cars bought will not have changed — expenditure has risen only because the price of cars has risen.

For a lot of uses, it is necessary to know how much physical production (for example, the number of cars made) has changed, rather than just the current (or dollar) value of production. Constant price estimates are the way in which this is achieved. They provide a measure, in dollar values, which indicates changes in the actual *quantity* of items produced or purchased. Because of this, constant price estimates of GDP are often referred to as estimates of 'real' GDP.

In essence, estimates of GDP at constant prices involve finding indicators of price changes in the items included in the national accounts, and using these to remove the effects of inflation from the estimates of GDP. Constant price estimates are expressed in terms of the average prices prevailing in a selected base year (currently 1989–90). Some of the main indicators used in this process are the component series from the consumer price index, which measures changes over time in the price of a 'basket' of goods and services bought by households. Other price indexes produced by the ABS (such as the import price index) are also used extensively in compiling the constant price estimates.

Implicit price deflators

A by-product of the calculation of constant price estimates is the implicit price deflator (or IPD). An IPD is the price index obtained when a current price estimate is divided by the

corresponding constant price estimate. The ABS publishes a time series of IPDs for each of the expenditure side aggregates (excluding increase in stocks) in the domestic production account.

IPDs calculated from the major national accounting aggregates such as gross national expenditure are widely used as a broader measure of inflation in the economy than that available from any of the individual price indexes published by the ABS. However, care has to be taken in the interpretation of IPDs as they do not compare the price of a constant basket of goods between any two periods except when comparing the base period with another period. Therefore, they reflect a combination of the effects of actual price changes and changes in the composition of the aggregate from which the deflator is derived. An alternative set of price indexes, based on the expenditure side of the domestic production account, is fixed-weighted price indexes for the major expenditure aggregates. They measure the change in price of the basket of goods and services included in GDP in the proportions measured in 1989–90.

PRESENTATION OF THE AUSTRALIAN NATIONAL ACCOUNTS

National income, expenditure and product accounts

The Australian national income, expenditure and product accounts are compiled and published in some detail every quarter, in *Australian National Accounts: National Income, Expenditure and Product* (5206.0), and in greater detail once a year, in *Australian National Accounts: National Income, Expenditure and Product* (5204.0).

Domestic production account. The domestic production account indicates changes in Australian production over time. Table 25.4 shows that, in 'real' terms (that is, after the effects of inflation are removed from the dollar value of Australia's production) there was a fall in production during the 1990–91 financial year. However, the two years since the recession in 1990–91 have both shown moderate growth, although growth in 1991–92 was relatively low, it accelerated in 1992–93 with growth of approximately three per cent in that year.

The domestic production account can also be used to show changes in the share of income accruing to labour (that is, wages, salaries and supplements) compared with the share accruing to capital (that is, profits). Graphs 25.5 and 25.6 show how the shares of each of wages and profits (defined as the gross operating surplus of private corporate trading enterprises) to GDP(I) at factor cost have changed since 1962–63.

The highest recorded value of the wages share of GDP(I) at factor cost is 63.4 per cent in 1974–75. The wages share has recovered somewhat from its recent low value of 55.4 per cent in 1988–89, but remains at a relatively low level compared with most of the 1970s and early 1980s.

The profits (GOS of private corporate trading enterprises) share of GDP(I) at factor cost reached its highest recorded value in 1984–85 (17.2%), slightly above the most recent high value of 17.1 per cent in 1988–89. Although the ratio fell to 15.8 per cent in 1991–92, it rose to 16.1 per cent in 1992–93, and is at a relatively high level by past standards.

National income and outlay account. The national income and outlay account shows how much of the national income is spent on final consumption. That part of income which is not spent in this way is saving.

25.3 DOMESTIC PRODUCTION ACCOUNT
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Final consumption expenditure											
Private	10,658	15,677	25,987	56,933	105,966	175,367	195,804	218,071	231,320	242,750	253,952
Government	1,995	3,711	6,357	17,272	32,474	52,571	56,820	61,767	66,655	71,324	74,344
Private gross fixed capital expenditure	2,800	4,496	7,726	15,455	27,985	54,938	67,402	67,802	60,688	55,623	59,452
Public gross fixed capital expenditure	1,331	2,178	3,270	7,194	13,120	17,405	17,920	21,646	20,801	20,722	19,837
Increase in stocks	253	113	– 270	– 430	– 2,437	– 466	3,799	4,460	– 1,726	– 1,832	– 477
Gross national expenditure	*17,037*	*26,175*	*43,070*	*96,424*	*177,108*	*299,815*	*341,745*	*373,746*	*377,738*	*388,587*	*407,108*
Exports of goods and services	2,483	3,559	7,007	14,213	25,430	51,080	54,728	60,133	65,154	68,828	74,878
Imports of goods and services	2,596	4,115	5,382	15,176	28,967	52,819	61,109	67,363	65,764	67,807	77,074
Gross domestic product (GDP(E))	**16,924**	**25,619**	**44,695**	**95,461**	**173,571**	**298,076**	**335,364**	**366,516**	**377,128**	**389,608**	**404,912**
Statistical discrepancy	– 83	– 136	98	– 67	– 1,722	918	5,278	4,413	3,992	– 361	948
Wages, salaries and supplements	8,361	13,212	23,562	53,066	94,949	147,367	165,730	184,607	192,791	197,303	204,576
Gross operating surplus											
Trading enterprises	6,687	9,527	16,586	31,859	56,259	114,512	132,828	142,350	143,608	146,884	153,864
Total	6,850	9,812	17,125	32,772	57,394	114,506	133,636	141,837	143,568	147,489	155,520
Indirect taxes less subsidies	1,630	2,459	4,106	9,556	19,506	37,121	41,276	44,485	44,761	44,455	45,764
Gross domestic product (GDP(I))	**16,841**	**25,483**	**44,793**	**95,394**	**171,849**	**298,994**	**340,642**	**370,929**	**381,120**	**389,247**	**405,860**

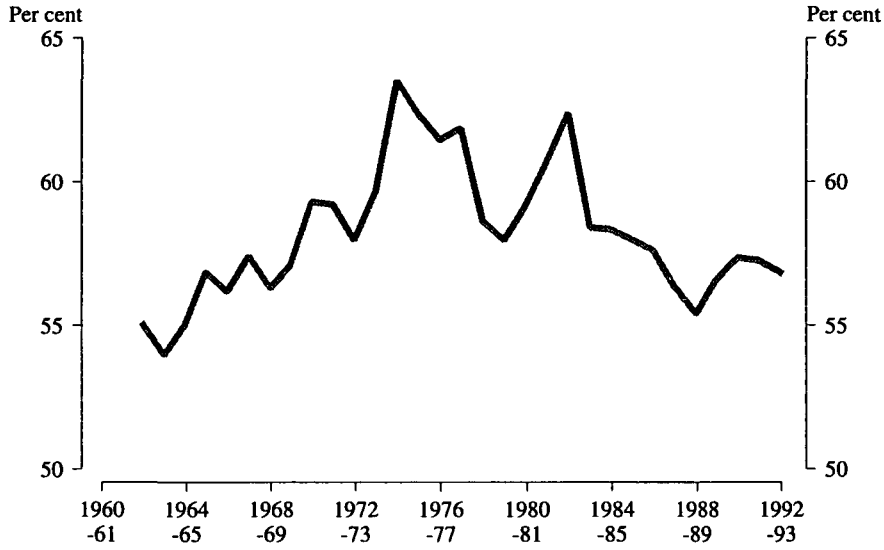
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.4 DOMESTIC PRODUCTION ACCOUNT AT CONSTANT PRICES (AVERAGE 1989–90 PRICES)(a)
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Final consumption expenditure											
Private	77,524	98,437	125,647	147,813	172,426	199,327	208,345	218,071	220,201	225,701	232,140
Government	17,750	26,528	31,174	41,254	47,265	58,190	59,542	61,767	63,308	65,784	66,767
Private gross fixed capital expenditure	21,375	30,575	40,472	40,704	46,448	62,126	71,192	67,802	59,990	55,079	57,559
Public gross fixed capital expenditure	10,422	14,373	16,398	18,267	19,426	19,236	18,864	21,646	20,340	20,290	19,301
Increase in stocks	1,374	1,242	– 1,128	– 1,021	– 3,624	– 383	4,043	4,460	– 1,279	– 2,020	– 61
Gross national expenditure	*130,127*	*171,192*	*212,444*	*247,082*	*282,420*	*338,496*	*361,986*	*373,746*	*362,560*	*364,834*	*375,706*
Exports of goods and services	13,660	18,691	27,956	32,815	36,650	56,263	57,012	60,133	66,791	72,852	76,691
Imports of goods and services	15,461	23,439	25,490	34,082	40,794	51,979	64,122	67,363	64,026	66,218	70,384
Gross domestic product (GDP(E))	**127,532**	**165,242**	**214,850**	**245,899**	**278,418**	**342,780**	**354,876**	**366,516**	**365,325**	**371,468**	**382,013**
Statistical discrepancy	– 617	– 885	602	– 73	– 2,718	1,077	5,618	4,413	3,864	– 354	884
Gross domestic product (GDP(I))	**126,915**	**164,357**	**215,452**	**245,826**	**275,700**	**343,857**	**360,494**	**370,929**	**369,189**	**371,114**	**382,897**

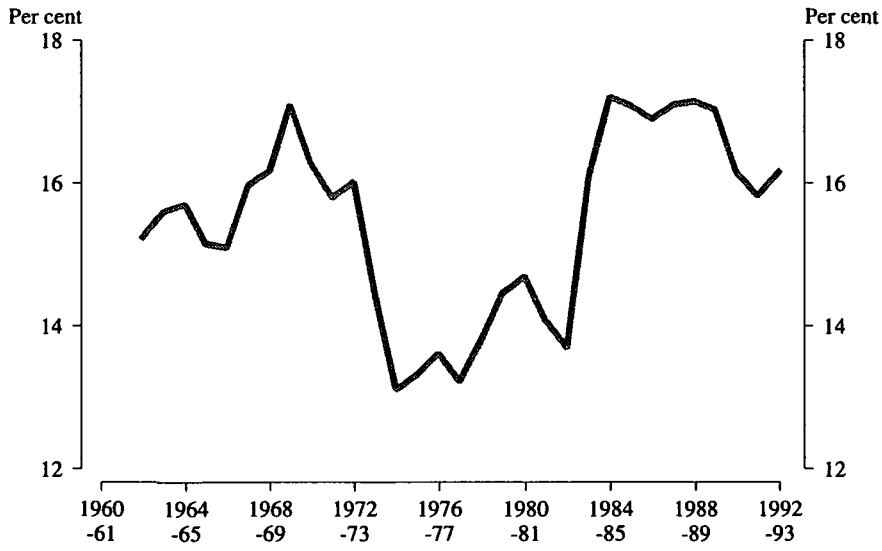
(a) Estimates prior to 1984–85 have been derived by linking estimates for earlier base years to estimates at average 1989–90 prices.
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.5 WAGES SHARE OF GDP(I) AT FACTOR COST



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.6 PROFITS SHARE OF GDP(I) AT FACTOR COST



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

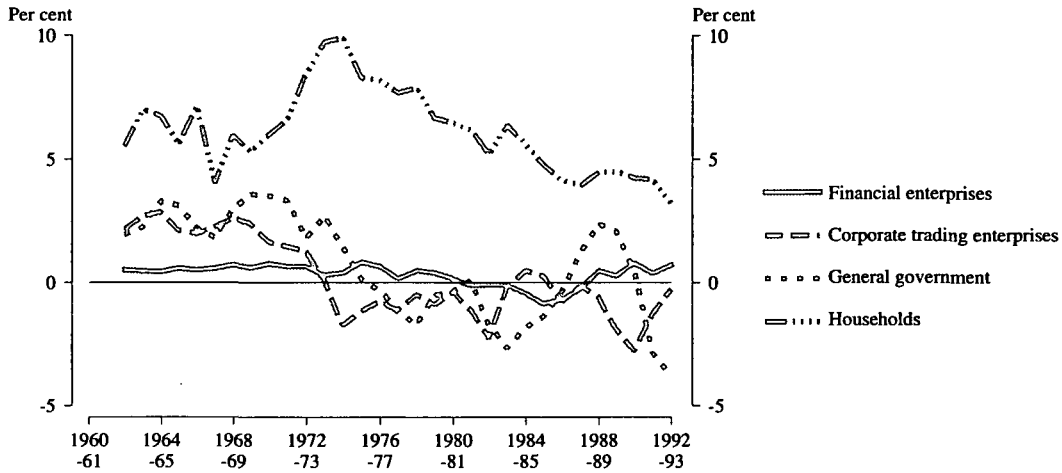
25.7 NATIONAL INCOME AND OUTLAY ACCOUNT
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Wages, salaries and supplements	8,361	13,212	23,562	53,066	94,949	147,367	165,730	184,607	192,791	197,303	204,576
Net operating surplus	4,709	6,493	11,276	18,431	29,593	67,803	82,357	85,979	85,261	87,563	92,950
Domestic factor incomes	*13,070*	*19,705*	*34,838*	*71,497*	*124,542*	*215,170*	*248,087*	*270,586*	*278,052*	*284,866*	*297,526*
Less net income paid overseas	233	343	550	1,210	3,579	10,252	13,655	17,480	17,656	15,690	14,099
Indirect taxes	1,738	2,680	4,572	10,848	22,686	41,521	45,808	49,028	50,481	50,354	52,264
Less subsidies	108	221	466	1,292	3,180	4,400	4,532	4,543	5,720	5,899	6,500
National income	*14,467*	*21,821*	*38,394*	*79,843*	*140,469*	*242,039*	*275,708*	*297,591*	*305,157*	*313,631*	*329,191*
Less net unrequited transfers to overseas	22	24	88	257	195	– 1,665	– 2,208	– 2,329	– 2,428	– 2,241	– 727
National disposable income	**14,445**	**21,797**	**38,306**	**79,586**	**140,274**	**243,704**	**277,916**	**299,920**	**307,585**	**315,872**	**329,918**
Final consumption expenditure											
Private	10,658	15,677	25,987	56,933	105,966	175,367	195,804	218,071	231,320	242,750	253,952
Government	1,995	3,711	6,357	17,272	32,474	52,571	56,820	61,767	66,655	71,324	74,344
Saving	1,792	2,409	5,962	5,381	1,834	15,766	25,292	20,082	9,610	1,798	1,622
Disposal of income	**14,445**	**21,797**	**38,306**	**79,586**	**140,274**	**243,704**	**277,916**	**299,920**	**307,585**	**315,872**	**329,918**
Gross national product	—	—	—	—	168,270	288,742	326,987	353,449	363,464	373,557	391,761

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

Household saving as a percentage of GDP(I) increased significantly between 1962–63 and 1974–75, but has fallen subsequently from its high of 9.9 per cent in 1974–75 to 3.2 per cent in 1992–93. General government saving has fallen for the fourth consecutive year as a percentage of GDP(I) (– 3.8% in 1992–93); in current value terms it was – $15.5 billion in 1992–93. Saving of corporate trading enterprises has been negative for 16 of the past 19 years. In 1992–93 it was – 0.2 per cent of GDP(I) (– $1.2 billion in current value terms).

25.8 SAVINGS, BY SECTOR, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

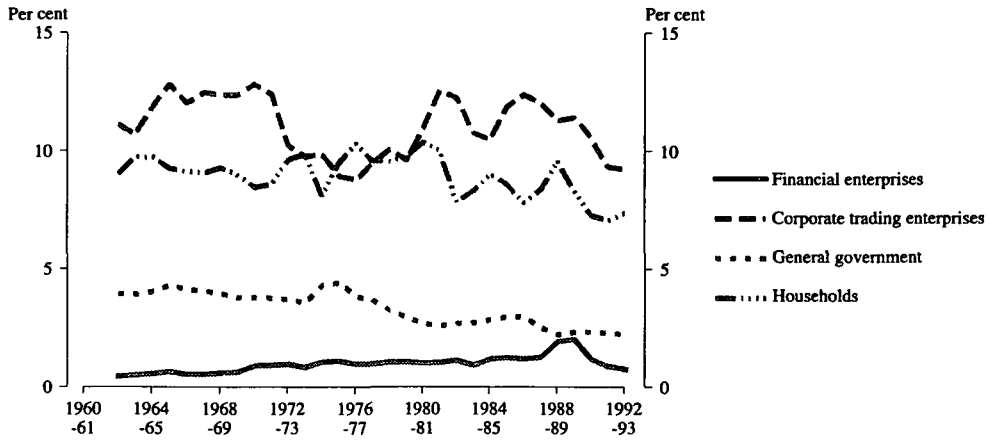
National capital account. The national capital account shows how the saving from the national income and outlay account is used to finance gross fixed capital expenditure. If, as is currently the case in Australia, the nation's saving is not sufficient to pay for all the capital equipment needed for Australian production, the shortfall must be borrowed from overseas. The amount borrowed from overseas is shown in the national capital account as a negative entry for net lending to overseas.

25.9 NATIONAL CAPITAL ACCOUNT
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Consumption of fixed capital	2,141	3,319	5,849	14,341	27,801	46,703	51,279	55,858	58,307	59,926	62,570
Saving											
Household	925	1,020	3,785	7,294	8,884	11,740	15,181	16,726	16,106	16,220	13,066
General government surplus on current transactions	325	465	802	– 1,116	– 2,933	3,367	8,032	7,697	1,850	– 11,208	– 15,506
Extraordinary insurance claims paid	—	—	—	—	200	—	—	654	—	—	—
Other	542	924	1,375	– 797	– 4,317	659	2,079	– 4,995	– 8,346	– 3,214	4,062
Finance of gross accumulation	**3,933**	**5,728**	**11,811**	**19,722**	**29,635**	**62,469**	**76,571**	**75,940**	**67,917**	**61,724**	**64,192**
Gross fixed capital expenditure											
Private	2,800	4,496	7,726	15,455	27,985	54,938	67,402	67,802	60,688	55,623	59,452
Public enterprises	666	1,143	1,615	3,695	8,495	9,895	10,348	13,011	12,026	11,747	10,925
General government	665	1,035	1,655	3,499	4,625	7,510	7,572	8,635	8,775	8,975	8,912
Increase in stocks											
Private non-farm	221	292	– 108	– 42	– 2,218	179	3,456	1,334	– 2,866	– 1,621	– 569
Farm and public authorities	32	– 179	– 162	– 388	– 219	– 645	343	3,126	1,140	– 211	92
Statistical discrepancy	– 83	– 136	98	– 67	– 1,722	918	5,278	4,413	3,992	– 361	948
Net lending to overseas	– 368	– 923	987	– 2,430	– 7,311	– 10,326	– 17,828	– 22,381	– 15,838	– 12,428	– 15,568
Gross accumulation	**3,933**	**5,728**	**11,811**	**19,722**	**29,635**	**62,469**	**76,571**	**75,940**	**67,917**	**61,724**	**64,192**

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

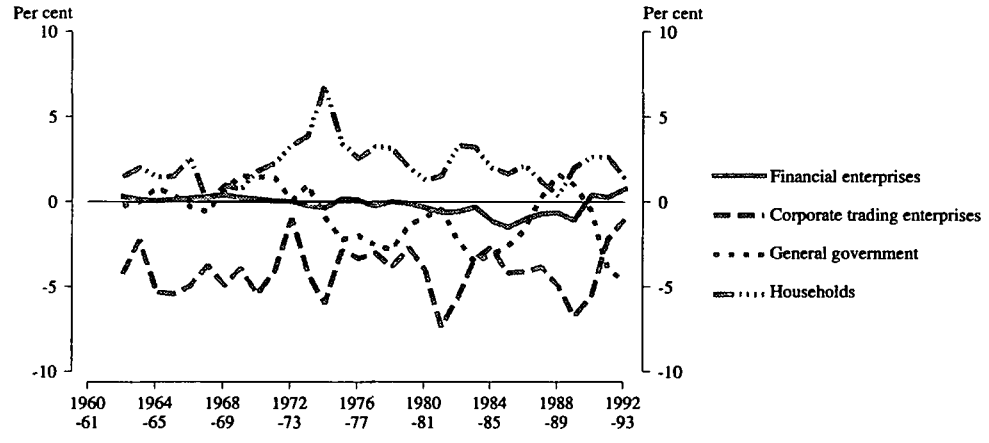
25.10 INVESTMENT, BY SECTOR, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

As a proportion of GDP(I), investment by corporate trading enterprises fell to very low levels during the 1970s and then rose to a peak of 12.4 per cent in 1986–87. It has subsequently fallen fairly steadily to 9.2 per cent in 1992–93. Household investment as a proportion of GDP(I) has fallen from 9.6 per cent in 1988–89 to 7.4 per cent in 1992–93. While general government investment as a proportion of GDP(I) peaked at 4.4 per cent in 1975–76, it has fallen steadily since then and is now 2.2 per cent of GDP(I).

25.11 NET LENDING, BY SECTOR, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.12 OVERSEAS TRANSACTIONS ACCOUNT
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Imports of goods and services	2,596	4,115	5,382	15,176	28,967	52,819	61,109	67,363	65,764	67,807	77,074
Interest, dividends, etc. to overseas	290	428	827	1,531	4,619	11,921	15,568	20,389	20,995	19,063	17,296
Labour income to overseas	5	9	25	57	135	210	279	406	429	326	311
Unrequited transfers to overseas	128	240	471	863	1,515	1,880	2,002	2,189	2,283	2,343	2,392
Net lending to overseas	- 369	- 923	987	- 2,430	- 7,311	- 10,326	- 17,828	- 22,381	- 15,838	- 12,428	- 15,568
Use of current receipts	**2,651**	**3,869**	**7,692**	**15,197**	**27,925**	**56,504**	**61,130**	**67,966**	**73,633**	**77,111**	**81,505**
Exports of goods and services	2,483	3,559	7,007	14,213	25,430	51,080	54,728	60,133	65,154	68,828	74,878
Interest, dividends, etc. from overseas	58	85	278	301	937	1,708	1,953	2,778	3,166	3,227	2,994
Labour income from overseas	4	9	24	77	158	171	239	387	452	472	514
Extraordinary insurance claims from overseas	—	—	—	—	80	—	—	150	150	—	—
Unrequited transfers from overseas	106	216	383	606	1,320	3,545	4,210	4,518	4,711	4,584	3,119
Current receipts from overseas	**2,651**	**3,869**	**7,692**	**15,197**	**27,925**	**56,504**	**61,130**	**67,966**	**73,633**	**77,111**	**81,505**

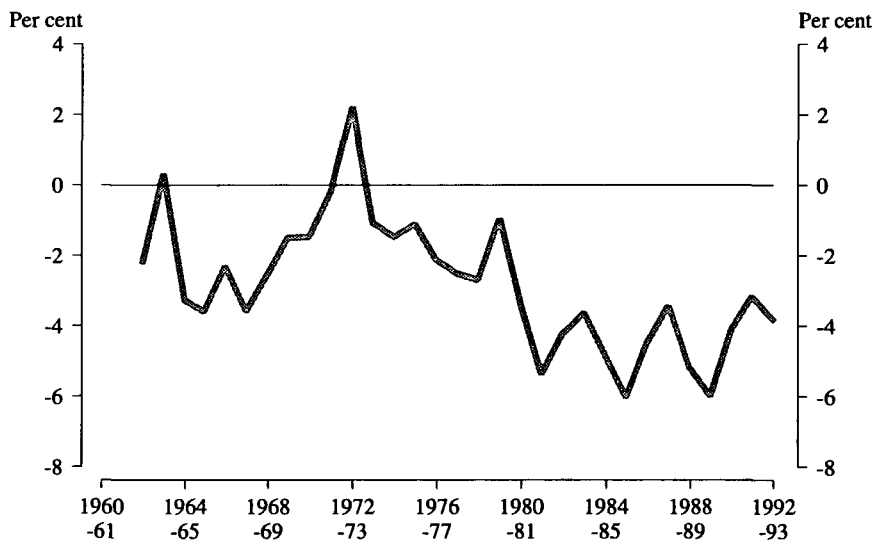
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

The household sector has been a lender to the other sectors in the economy for all years except 1967–68. As a proportion of GDP(I), lending by households in recent years has risen from 0.3 per cent in 1988–89 to 1.4 per cent in 1992–93. Borrowing (that is, negative net lending) by corporate trading enterprises has fluctuated significantly over the whole period from 1962–63 to 1992–93. However, there is no discernible increasing or decreasing trend as a proportion of GDP(I). After being a net lender for the period 1987–88 to 1989–90, general government has returned to being a significant borrower over the past three years.

Overseas transactions account. The overseas transactions account is actually derived from the detailed balance of payments current account — *see* Chapter 26. It shows Australia's exports and imports, incomes received by Australian residents from overseas, and incomes paid to overseas by Australian residents. The balance is net lending to overseas.

Australia has generally been a net borrower of capital from overseas. In the national accounts, this situation is reflected by a negative value for 'net lending to overseas'. Following one year where Australia actually loaned money to overseas in the early 1970s, net borrowing from overseas, expressed as a proportion of GDP(I), increased rapidly during the 1970s and has remained at relatively high levels since the early 1980s. The following graph shows this proportion since 1962–63.

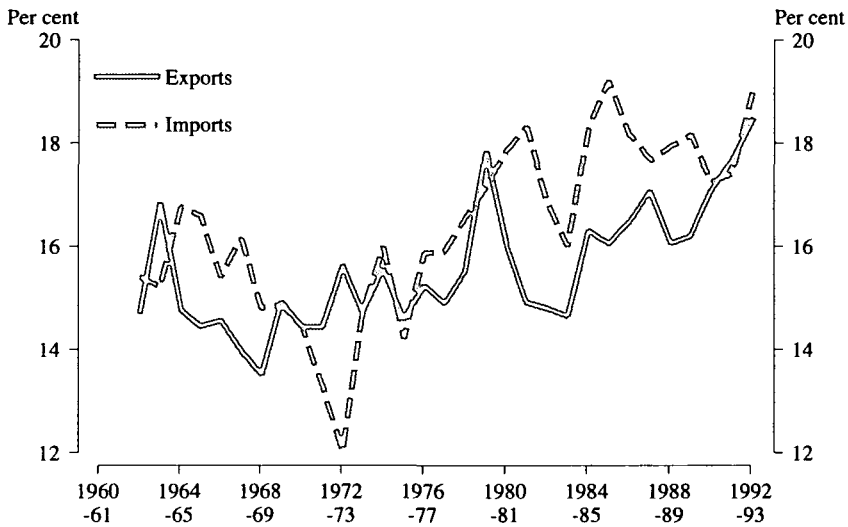
25.13 NET LENDING TO OVERSEAS, AS SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

The importance of foreign trade to the Australian economy is illustrated by the following graph, which shows the ratios of exports and imports of goods and services to GDP(I) for the financial years 1962–63 to 1992–93. In 1992–93 the import ratio was 19.0 per cent and the export ratio was 18.4 per cent. For a detailed discussion about a wide range of balance of payments ratios refer to *Balance of Payments, Australia, 1991–92* (5303.0).

25.14 EXPORTS AND IMPORTS, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

State accounts

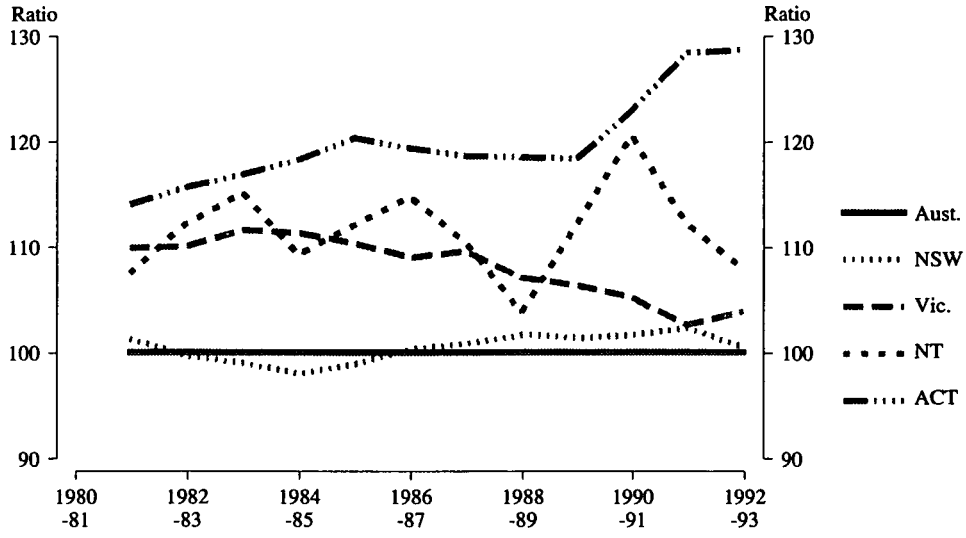
As well as Australia's national accounts, the ABS produces State accounts each quarter. These provide quarterly estimates of gross State product and State final demand. Gross State product is produced by summing the incomes generated in the production process (the income approach to measuring total production). At present, estimates of gross State product are only in current prices. State final demand is equal to the sum of private and government final consumption expenditure and gross fixed capital expenditure. Estimates of State final demand are available in both current and constant prices.

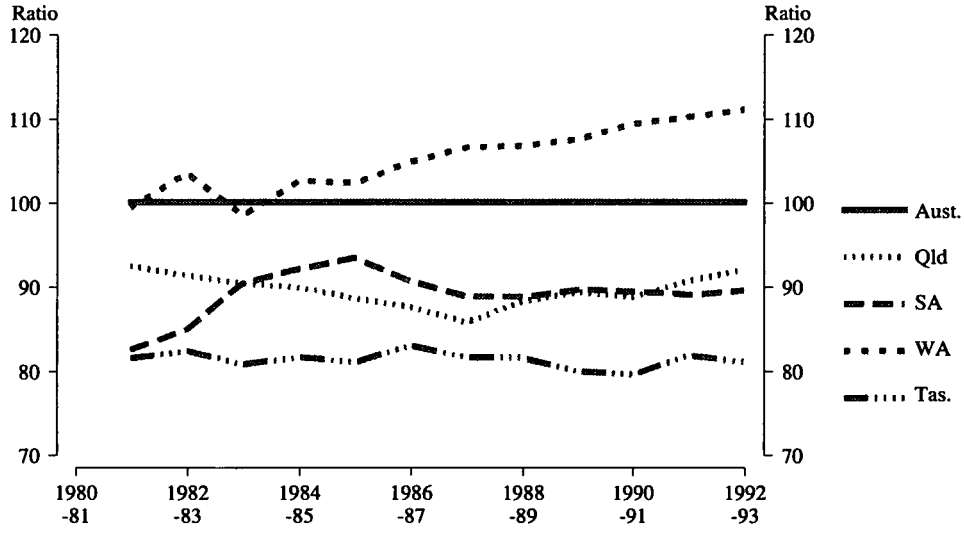
An important use of State accounts is to compare the performance of each State and Territory. The following graphs show gross State product, in current prices, per head of mean population for each State and Territory divided by the Australian value (GDP(I) per head of mean population) since 1980–81.

Gross State product per head of mean population in 1992–93 was above the national average in New South Wales, Victoria, Western Australia, the Northern Territory and the Australian Capital Territory. GSP per head of mean population has been below the national average for the whole length of the time series (that is, since 1980–81) in each of Queensland, South Australia and Tasmania.

The only States to experience a decline in this ratio in 1992–93 were New South Wales, Tasmania and the Northern Territory.

25.15 GROSS STATE PRODUCT PER HEAD OF MEAN POPULATION
(Australia = 100.0)





Source: Australian National Accounts: State Accounts (5220.0).

Input-output tables

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

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

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

7-sector input-output table. The following table and diagram show the flows of goods and services in respect of 1989–90.

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

Intermediate usage ($296,957 million) in the diagram is derived by summing from column 8 of the table — Intermediate usage ($260,666 million); Sales by final buyers ($833 million); Competing imports ($34,005 million); and Complementary imports ($1,453 million).

Gross value added ($375,511 million) in the diagram is derived by summing from column 14 of the table — Wages, salaries, and supplements ($172,529 million); Gross operating surplus ($158,551 million); and taxes: Commodity taxes (net) ($24,010 million), Indirect taxes n.e.c. (net) ($16,979 million) and Duty on competing imports ($3,442 million).

Domestic production ($672,468 million) in the diagram is derived by summing Intermediate usage from column 8 of the table ($260,666 million); total final demand at basic values from column 13 ($392,307 million); and the indirect taxes payable on those final demand items (*see* column 13): Commodity taxes (net) ($14,882 million), Indirect taxes n.e.c. (net) ($2,617 million) and Duty on competing imports ($1,996 million).

Imports ($67,835 million) in the diagram is derived by summing from column 14 of the table — Competing imports c.i.f. ($65,660 million) and Complementary imports c.i.f. ($2,175 million).

Total supply ($740,303 million), which must be equal to Total Demand, is the sum of Domestic production ($672,468 million) and Imports ($67,835 million).

Domestic final demand ($382,489 million) in the diagram is derived from the table by subtracting total Exports ($60,857 million), column 12, from total Final demand ($443,346 million), column 13.

Exports ($60,857 million) in the diagram is total Exports, column 12, in the table.

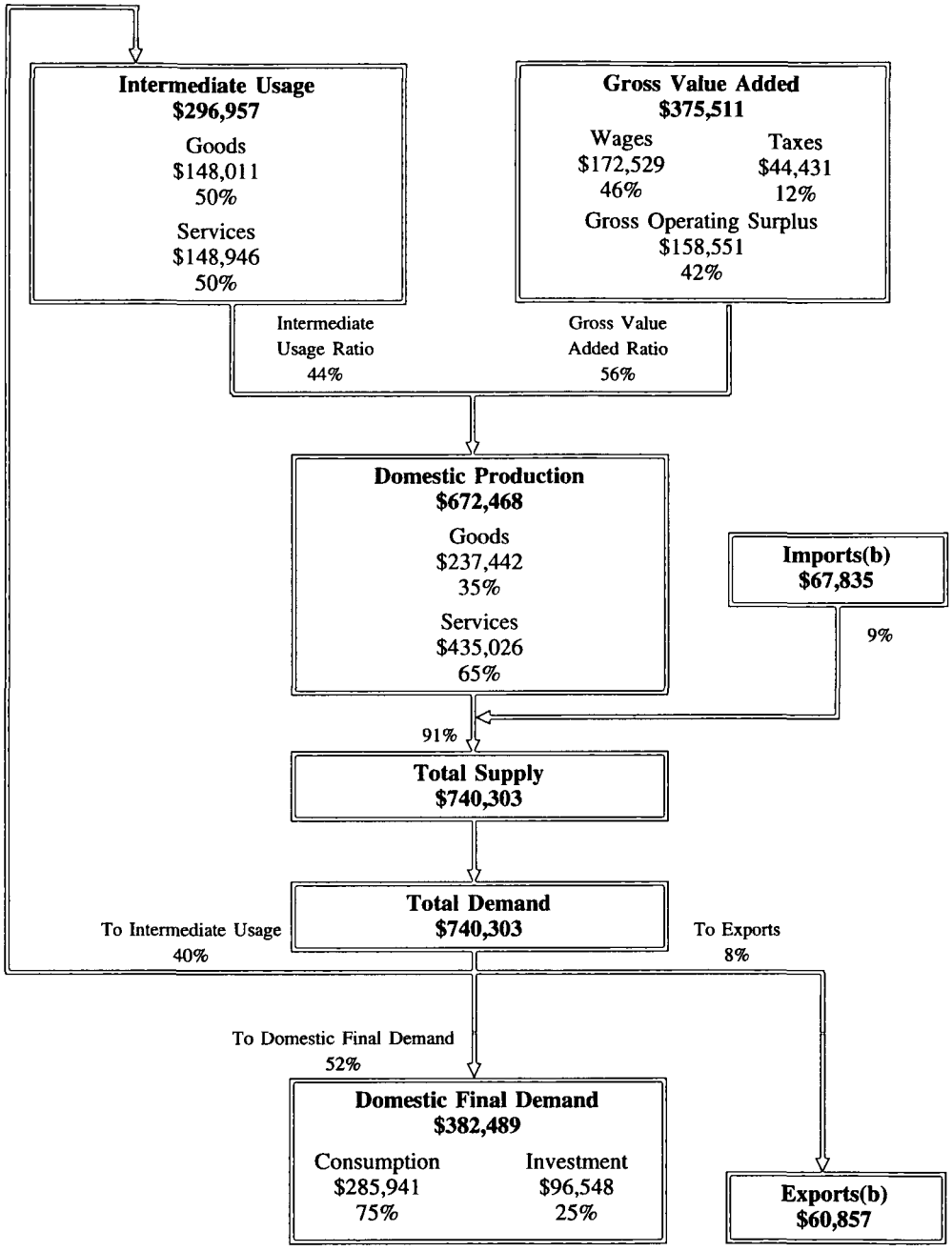
Total Demand ($740,303 million) is the sum of Domestic final demand ($382,489 million), Intermediate usage ($296,957 million), and Exports ($60,857 million).

25.16 INDUSTRY BY INDUSTRY FLOW MATRIX, BASIC VALUES, 1989–90
($ million)

	Use													
Supply	*Agri-culture (1)*	*Mining (2)*	*Manu-facturing (3)*	*Con-struction (4)*	*Trade and transport (5)*	*Service industries (6)*	*Public admin. and defence (7)*	*Inter-mediate usage (8) =Sum (1)-(7)*	*Final con-sumption expend-iture (9)*	*Gross fixed capital expend-iture (10)*	*Increase in stocks (11)*	*Exports (12)*	*Final demand (13) = Sum (9)-(12)*	*Total supply (14) = Sum (8)+(13)*
Agriculture	2,399	58	11,336	48	48	757	55	14,701	3,224	155	2,540	5,632	11,551	26,252
Mining	4	2,108	8,212	447	52	2,733	42	13,598	81	313	531	12,718	13,643	27,241
Manufacturing	3,362	2,267	40,944	15,902	11,673	10,518	3,533	88,199	39,893	15,611	1,354	22,012	78,870	167,069
Construction	17	181	106	68	623	1,504	314	2,813	3,884	49,549	2	81	53,516	56,329
Trade and transportation	1,937	2,038	15,824	5,217	12,965	10,669	2,791	51,441	57,342	7,738	244	11,523	76,847	128,288
Service industries	1,957	2,217	11,158	3,604	19,076	38,117	5,044	81,173	127,076	4,082	2	2,232	133,392	214,565
Public admin. and defence	86	40	874	546	628	955	5,612	8,741	24,329	—	—	159	24,488	33,229
Intermediate usage	*9,762*	*8,909*	*88,454*	*25,832*	*45,065*	*65,253*	*17,391*	*260,666*	*255,829*	*77,448*	*4,673*	*54,357*	*392,307*	*652,973*
Wages, salaries, supplements	3,268	4,104	27,835	12,276	39,950	73,076	12,020	172,529	—	—	—	—	—	172,529
Gross operating surplus	11,025	12,152	27,831	13,074	31,400	61,782	1,287	158,551	—	—	—	—	—	158,551
Commodity taxes (net)	627	307	2,759	637	3,031	1,767	—	9,128	12,670	1,766	88	358	14,882	24,010
Indirect taxes n.e.c. (net)	654	242	1,101	715	4,097	7,493	60	14,362	—	2,617	—	—	2,617	16,979
Sales by final buyers	—	5	800	1	—	27	—	833	3,188	-4,222	13	188	-833	—
Competing imports c.i.f.	882	1,445	17,046	3,459	4,425	4,842	1,906	34,005	12,308	13,048	345	5,954	31,655	65,660
Duty on competing imports	30	58	817	245	142	154	—	1,446	1,241	746	9	—	1,996	3,442
Complementary imports c.i.f.	2	20	425	89	178	174	565	1,453	705	37	-20	—	722	2,175
Duty on complementary imports	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Australian production	**26,250**	**27,242**	**167,068**	**56,328**	**128,288**	**214,568**	**33,229**	**652,973**	**285,941**	**91,440**	**5,108**	**60,857**	**443,346**	**1,096,319**

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

25.17 THE AUSTRALIAN ECONOMY, FLOW OF GOODS AND SERVICES (a)
($ million)



(a) Flows are based on 1989–90 Input-Output tables. (b) Includes re-exports

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

Financial accounts

In addition to the national accounts, the ABS produces quarterly information on the level of financial assets and liabilities of each institutional sector of the economy, the market for financial instruments and inter-sectoral transactions in financial assets and liabilities classified by financial instrument — *see* Chapter 23.

Further developments in Australia's national accounts

Environmental satellite accounts. The 1993 System of National Accounts (SNA) recommends the development of a system of environmental satellite accounts designed to enable the adjustment of GDP to take account of the depletion of natural resources and the degradation of the environment as a result of economic activity. International standards for environmental accounting are being developed and the ABS is monitoring the development of these standards with the ultimate aim of developing a system of environmental satellite accounts for Australia at some time in the future.

The value of unpaid work. Not all production that occurs in an economy is recorded in the national accounts. For example, the value of unpaid work, particularly unpaid work in the home and volunteer work, is excluded in accordance with prevailing international statistical standards. There is considerable interest, however, in the contribution of unpaid work to the economy and the 1993 SNA has recommended that the value of this work should be shown in satellite accounts.

Although it can be argued that unpaid household work comes within the definition of economic production, it has been excluded from the scope of GDP as defined by the SNA. This is because the major focus of the national accounts is on changes in the economic market sector. There are also significant conceptual problems and practical difficulties associated with the availability of data and the selection of appropriate shadow prices.

The ABS has produced a series of estimates of the value of unpaid household work based on different assumptions about the prices that could be assigned to value the various activities. The estimates were based on the results of the 1992 national Time Use Survey. Using the ABS preferred valuation method (individual function replacement cost method) unpaid work in 1992 was estimated to be 58 per cent of GDP.

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FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.