

# CHAPTER 17

## MANUFACTURING AND INTERNAL TRADE

### MANUFACTURING

#### Introduction

##### History

An historical summary of the development of the manufacturing industry in Australia since 1901 is contained in earlier issues of the Year Book (*see* No. 51, pages 143-4).

##### Decentralisation and manufacturing industries

The decentralisation of secondary industries, and the steps taken by the Commonwealth and State Governments towards its development, are referred to in previous issues of the Year Book (*see* No. 51, page 144).

##### Bounties on manufacture

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate, or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards. (*See* Chapter 22, Public Finance, for products on which bounties are paid.)

##### Government authorities

###### *Industries Assistance Commission*

The Industries Assistance Commission is a statutory authority which came into existence on 1 January 1974 as a result of a passing of the *Industries Assistance Commission Act 1973* by the Australian Parliament. The Commission replaced the Tariff Board, which since 1921 had been responsible for advising the Government on assistance for industries mainly in the secondary sector of the economy. (The *Industries Assistance Commission Act 1973* was amended in March 1978.)

The Commission is an advisory authority, advising the Government. Its functions are to hold inquiries and make reports to the Government in respect to matters of assistance to industries in the primary, secondary and tertiary sectors of the economy and in respect to other matters referred to the Commission by the Government. The Government is required to seek the Commission's advice before it makes changes in the long term assistance afforded industries; but the Government is not obliged to accept the Commission's advice.

References from the Government requiring the Commission to inquire and report on certain matters mainly arise from representations to the Government from organisations, companies or individuals seeking assistance. References are also initiated by the Government and the Commission itself has the power to initiate an inquiry.

The receipt of a reference from the Government is the official document directing the Commission to inquire and report on matters in accordance with the terms of reference and the guidelines as set by the Government.

Public hearings are held by the Commission in Canberra and in capital cities throughout Australia. At these hearings evidence is taken on oath or affirmation. The Act requires the Commission to take into consideration only sworn evidence. The inquiry subject and the date and location of public hearings are advertised in the press and advised by Commission circular.

If after receiving a report from the Commission, the Government decides that assistance afforded a particular industry should be changed, it introduces a proposal to this effect in Parliament. Thus the final responsibility for altering assistance given to particular industries within Australia rests with Parliament.

Copies of the Commission's reports, when released for publication by the Government, are sold by Australian Government Publishing Service bookshops.

The Commission is also required to report annually to the Government on its operations and on the general structure of industry assistance within Australia and its effects on the economy.

###### *Temporary Assistance Authority*

The Temporary Assistance Authority (TAA), which replaced the Special Advisory Authority set up under the *Tariff Board Act*, came into operation on 1 January 1974 under the provisions of the *Industries Assistance Commission Act 1973* (since amended).

The main function of the TAA is to undertake inquiries and submit reports to the Government within 45 days of receipt of a reference from the Government on the question of whether urgent action is necessary to provide assistance to any industry that is experiencing difficulty due to the importation of specified goods. If urgent action is necessary the Authority recommends the nature and extent of the assistance to be provided.

The Authority's reports on individual inquiries are normally made public once the Government's decision is announced and are available, as is the annual report, from the Australian Government Publishing Service bookshops.

#### *Bureau of Industry Economics*

In September 1976, the Australian Government announced that the Bureau of Industry Economics would be established as a centre for research into the manufacturing and commerce sectors. The Bureau began operations in May 1977. Being formally attached to the Department of Industry and Commerce, it has professional independence in the conduct and reporting of its research.

The major objectives of the Bureau are to:

- carry out research work needed to assist the Government in the formation of industrial policy
- assist the Industries Assistance Commission (IAC) and other government bodies by making submissions on the results of its research
- attract a high standard of professional staff and publish its research findings
- complement the work of other research agencies and co-operate with universities and colleges in developing research programs.

The Bureau is also concerned with developments in mining, rural industry, public services (for example education, health, defence) and trade in goods and services which are linked with the manufacturing and commerce sectors.

A Council has been set up to advise the Minister of Industry and Commerce about the Bureau's work and to ensure that it is relevant to contemporary and long term issues in manufacturing and commerce. Members of the Council are drawn from a wide range of industries and backgrounds, including the universities and the trade union movement. In this way the Council of Advice provides a major link between the Bureau and the community. The Council assists with the development of the work of the Bureau and the effective dissemination of the results of the Bureau's work.

In its investigations, the Bureau principally makes use of economics and related disciplines. Technical and social factors affecting industry structure and performance are also taken into account.

The techniques of economic analysis used include supply and demand estimation, industry structure-performance relationships, input-output analysis, econometrics, cost-benefit methods and socio-demographic investigations. In addition, the Bureau is associated with the large-scale models of the Australian economy under development by the IMPACT team and at the Melbourne University Institute of Applied Economic and Social Research.

The staff of the Bureau includes officers with backgrounds in business, consultancy, government and university teaching and research. An initial nucleus of about 30 persons has been established and it is envisaged that additional recruitment will bring the size of the Bureau to about 100 persons within a few years.

Project control and resource commitments are determined by means of a feasibility study. Within the broad topic under investigation, several specific projects may be justified in relation to previous research findings, data availability, relevance to long-term policy issues and overall budget constraints. Some projects require special surveys where existing data sources are inadequate or more detailed information is required for particular industries. In certain projects the Bureau will undertake joint research with organisations in the private sector and consultants may be engaged where this will significantly enhance the quality of the research or will remedy any lack of in-house expertise.

When initial findings are available, work-in-progress papers are prepared to discuss the methods employed and to ensure that specialist qualified observers have an opportunity to comment on objectives of the research programme. Final reports on projects will be widely distributed with the aim of informing industry groups, government policy makers and teaching and research institutions about industrial and commercial developments.

#### **Standardisation**

The *Commonwealth Scientific and Industrial Research Organization* has functions concerned with the improvement of efficiency in industrial operations. For further particulars see Chapter 25, Science and Technology, in this Year Book.

The *Standards Association of Australia* is the organisation responsible for the preparation, on a national basis, of Australian standards for materials and products and standard codes of practice.

Formed as the Australian Commonwealth Engineering Standards Association in 1922, it was reconstituted as the Standards Association of Australia in 1929, and was incorporated by Royal Charter in 1950. It is an independent body having the full recognition and support of the Commonwealth and State Governments and of industry. Approximately half its funds are provided by Commonwealth Government grant, the remainder coming primarily from membership subscriptions and from the sale of publications. Organisations, companies, and individuals are eligible for subscribing membership.

The Association is controlled by a Council comprising representatives from Commonwealth and State Governments and their departments, from associations of manufacturing and commercial interests, and from professional institutions. Standards are prepared by committees composed of expert representatives from the interests associated with the subject under consideration. This assistance is on a voluntary basis.

Preparation of a standard is undertaken in response to a request from any responsible source, subject to verification that the standard will meet a genuine need. Standards may relate to one or more of several aspects of industrial practice such as terminology, test methods, dimensions, specifications of performance and quality of products, and safety or design codes. In general, standards derive authority from voluntary adoption based on their intrinsic merit, but in many cases where safety of life or property or consumer protection is involved, they may have compulsory application through statutory reference.

The Association is the owner of a registered certification trade mark covering conformity of products to standards. Manufacturers of products covered by Australian standards may obtain a licence to use the Australian Standard Mark, under conditions established by the Association.

The Association has international affiliations and is a member, representing Australia, of the International Organization for Standardization (ISO) and of the International Electrotechnical Commission (IEC). Close links are maintained with overseas standards organisations, and the Association acts as Australian agent for the procurement of ISO and IEC publications and the standards of other countries.

The Association has two specialised libraries, one in Sydney and one in Melbourne, containing the national standards of all countries with standards organisations. These libraries provide necessary material for committee work and a free information service to those concerned with standards.

The headquarters office of the Association is in Sydney, and there is a major branch office in Melbourne, Branch offices are located also in other capital cities and at Newcastle, New South Wales.

The *National Association of Testing Authorities (NATA)* organises testing facilities throughout Australia to serve private and governmental needs. Membership is open to authorities whose testing laboratories conform to the standards of staffing and operations defined by the Association. Testing authorities may register their laboratories voluntarily. The Association assesses the competence of the laboratories and ensures that their standards of competence are maintained. Certificates of test issued by registered laboratories may be endorsed in the name of the Association. NATA endorsed test certificates are generally accepted by governmental, industrial and commercial interests.

Laboratories are registered for performance of specific tests in the fields of acoustic and vibration measurement, biological testing, chemical testing, electrical testing, heat and temperature measurement, mechanical testing, metrology, non-destructive testing and optics and photometry.

The *Industrial Design Council of Australia (IDCA)* is engaged in activities aimed at encouraging better design in Australian-made goods and fostering a wider appreciation of good design throughout the community. The Council is representative of industry, commerce and government, together with designers and educationists. It is financed by donations from industry and commerce, and by Commonwealth and State Government grants.

The Council's Field Advisory Service has a diagnostic and counselling role, assisting smaller manufacturers throughout Australia with product development policy and direction. Field advisers are based in IDCA State offices in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart.

The Australian Design Award is granted for high-quality products of Australian design and manufacture. An index of these products is held in each State office. These products are also displayed in Australian Design Centres.

Regular contact is maintained with senior executives of manufacturing companies, departmental officers and designers through the Design Delegate program of lectures. Inquirers seeking professional design services are referred to qualified industrial designers. The Council is also concerned with raising the standard of training in industrial design in co-operation with education authorities.

The Council's National Secretariat is in Melbourne.

### **Productivity Action**

For information about the Productivity Group Movement and Productivity Promotion Council of Australia see Chapter 25, Science and Technology.

### Manufacturing industry statistics

#### Manufacturing industry statistics from 1901 to 1967-68

A series of substantially uniform statistics exist from 1901 up until 1967-68 when the framework within which manufacturing statistics were collected was changed. The following table contains a summary of statistics on manufacturing activities in Australia over that period. More detailed manufacturing statistics in respect of this period were included in Year Book No. 57, pages 721-9, and in earlier issues.

MANUFACTURING INDUSTRY: AUSTRALIA<sup>(a)</sup>, 1901 TO 1967-68

Year	Factories	Employment <sup>(b)</sup>	Value of—					Land and buildings <sup>(e)</sup>	Plant and machinery <sup>(e)</sup>
			Salaries and wages paid <sup>(c)</sup>	Materials and fuel used	Output	Production <sup>(d)</sup>			
	No.	'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	
1901	11,143	198	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
1911	14,455	312	55,056	163,526	266,044	102,518	65,402	63,032	
1920-21	17,113	367	125,864	427,118	647,986	220,868	121,662	137,310	
1930-31	21,751	339	124,910	344,978	581,598	236,620	224,422	248,996	
1940-41	27,300	650	275,838	773,762	1,289,590	515,828	288,188	322,712	
1950-51	43,147	969	983,436	2,613,926	4,301,670	1,687,744	605,570	673,230	
1960-61	57,782	1,145	2,289,230	6,115,930	10,465,765	4,349,835	2,389,140	2,785,565	
1963-64	59,375	1,210	2,651,620	7,372,682	12,642,686	5,270,003	3,204,685	3,480,673	
1964-65	61,042	1,269	2,993,709	8,140,600	14,037,355	5,896,754	3,505,859	3,766,253	
1965-66	61,686	1,294	3,162,769	8,437,958	14,689,819	6,251,861	3,776,590	4,154,652	
1966-67	62,500	1,309	3,407,683	9,015,844	15,892,845	6,877,001	4,061,193	4,706,843	
1967-68	62,954	1,331	3,665,902	9,663,217	17,094,070	7,430,853	4,303,156	4,962,203	

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (b) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (c) Excludes amounts drawn by working proprietors. (d) Value added in process of manufacture (i.e. value of output less value of materials and fuel, etc. used). (e) Depreciated or book values at 30 June. Includes estimated values of rented premises and machinery.

#### Manufacturing industry statistics from 1968-69

As from the year ended June 1969, the Censuses of Manufacturing, Electricity and Gas have been conducted within the framework of the integrated economic censuses which include the Censuses of Mining, Retail Trade and Selected Services, and Wholesale Trade. As a result, manufacturing industry statistics for 1968-69 and subsequent years are not directly comparable with previous years. The electricity and gas industries, which were previously included in the Annual Factory Census, were the subject of separate censuses, details of which are given on page 389. The integration of these economic censuses was designed to increase substantially the usefulness and comparability of economic statistics collected and published by the Bureau and to form a basis for the sample surveys which supply current economic statistics from quarter to quarter, particularly those which provide data for the quarterly national income and expenditure estimates.

The integration of these economic censuses meant that for the first time they were being collected on the basis of a common framework of reporting units and data concepts and in accordance with a standard industrial classification. As a result, the statistics for the industries covered by the censuses are now provided with no overlapping or gaps in scope, and in such a way that aggregates for certain important economic data such as value added, employment, wages and salaries, fixed capital expenditure and stocks can be obtained on a consistent basis for all sectors of the economy covered by the censuses.

The standardisation of census units in the integration of economic censuses means that the basic census unit (the establishment), in general, now covers all the operations carried on under the one ownership at a single physical location. The manufacturing establishment is thus one predominantly engaged in manufacturing, but the data supplied for it now cover (with a few exceptions) all activities at the location.

The establishment statistics also include data relating to separately located administrative offices and ancillary units serving the establishment and forming part of the business (enterprise) which owns and operates the establishment. These units were formerly excluded from the manufacturing census. They are units such as head offices, storage premises and manufacturers' sales branches or sales offices (except those of the kind which distribute to customers from stocks held by such branches or offices which are treated as establishments in the Wholesale Census).

The Australian Standard Industrial Classification (ASIC), described in the Bureau publication *Australian Standard Industrial Classification (Preliminary Edition)*, 1969, Vol. 1, defines the industries in the economy for statistical purposes, thus permitting the scope of the different economic censuses to be specified without gaps or overlapping between them. It also sets out standard rules for identifying the statistical units (e.g. establishments) and for coding them to the industries of the classification. This classification is broadly convertible to the International Standard Industrial Classification adopted by the United Nations Statistical Commission. The adoption of the ASIC has resulted in changes in scope between the integrated economic censuses introduced in 1968-69 and the individual economic censuses conducted in previous years.

In the 1967-68 census there were approximately 62,600 manufacturing establishments (excluding electricity and gas establishments) with employment of 1,276,000. Of these, approximately 35,400, with employment of 1,097,000 (but see footnote (b) to the following table) would have been included in the 1967-68 census if ASIC had been used. Figures for the individual States and Territories are given below.

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Approximate number of manufacturing establishments—									
1967-68 census	24,900	18,000	6,100	6,200	5,300	1,800	180	240	62,600
1967-68 census if ASIC had been used(a)	13,800	11,400	3,500	3,000	2,500	960	70	100	35,400
Approximate number of employees (thousands)—									
1967-68 census	512	433	114	116	63	34	5		1,276
1967-68 census if ASIC had been used(b)	445	376	95	100	51	27	3		1,097

(a) Excludes establishments engaged in slaughtering, milk treating and printing. (b) These figures relate to employment as defined for the 1967-68 and previous year censuses. They thus exclude employment at the establishments referred to in (a) in the paragraph above, sales and distribution employees, employees connected with non-manufacturing activities and employees at separately located administrative offices and ancillary units serving manufacturing establishments. The figures, therefore, are not directly comparable with those for 1968-69 and subsequent years, which include the aforementioned employees.

In integrating the censuses, the items of data on the census forms were standardised for all census sectors, which has meant changes in the content of the statistics. For example, the value of 'turnover' is now collected instead of the 'value of output' at the factory, and purchases and selected expenses are collected as well as the value of specified materials, fuels, etc., used. However the underlying concept of 'value added', is similar to the former concept 'value of production', even though its method of derivation is different. 'Value added', the basic measure of the establishment's contribution to total production, is now calculated as turnover less purchases and transfers in (from other establishments of the enterprise), plus increase (or less decrease) in stocks. In the past, the corresponding item, 'value of production', was obtained by deducting the value of materials, fuels, etc., used from the value of output at the factory.

Even though the concept of 'value added' is similar to 'value of production', direct comparison of 1968-69 and previous figures will not be possible because of the change in census units already mentioned which has resulted in the 'value added' for the whole establishment being reported, not merely the 'value added' for the manufacturing process. Comparison is also affected, of course, by the change in the scope of the manufacturing census due to the adoption of ASIC. In addition, 'value added' as calculated for the Manufacturing Census differs from the concept used in National Accounts where the concept of 'value added' also excludes some administrative expenses and sundry charges and the change in stocks component is measured by valuing the physical change in stocks at current prices. It is not practicable in the Manufacturing Census to collect data fully in accord with the national accounts concept of 'value added'.

Commencing with the 1975-76 Manufacturing Census, only a limited range of data (i.e. employment and wages and salaries) is collected from single establishment manufacturing enterprises with less than four persons employed. This procedure is expected to significantly reduce both the statistical reporting obligations of small businesses and the collecting and processing costs of the Australian Bureau of Statistics without affecting the reliability of information for the evaluation of trends in the manufacturing sector of the economy (as these small enterprises contribute only marginally to statistical aggregates).

For a more detailed description of the Integrated Economic Censuses reference should be made to Year Book No. 56, Chapter 31.

### Multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed

Main structural aggregates relating to number of establishments, employment, wages and salaries, turnover, purchases, transfers in and selected expenses, stocks, and value added are shown in the following tables. Further detailed statistics are contained in the following ABS statistical bulletins: *Manufacturing Establishments, Details of Operations by Industry Class (8203.0)*, *Manufacturing Establishments, Summary of Operations by Industry Class (8202.0)* and *Manufacturing Establishments: Selected Items of Data Classified by Industry and Employment Size, Australia (8204.0)*.

#### Summary of operations

The following table shows the summary of operations for manufacturing establishments.

#### MANUFACTURING ESTABLISHMENTS—SUMMARY OF OPERATIONS, BY INDUSTRY SUB-DIVISION: AUSTRALIA 1975-76(a) AND 1976-77(a)

Industry sub-division	ASIC code (b)	Number of establishments operating at end of June	Persons employed (c)			Wages and salaries \$m	Turn-over \$m	Stocks at 30 June		Purchases, transfers in and selected expenses \$m	Value added \$m	Fixed capital expenditure (d) \$m
			Males No.	Females No.	Total No.			Opening \$m	Closing \$m			
1975-76												
Food, beverages and tobacco	21-2	3,535	144,705	52,194	196,899	1,557	8,557	1,003	1,057	5,537	3,074	305
Textiles	23	700	24,601	19,375	43,976	322	1,278	240	267	763	542	28
Clothing and footwear	24	2,445	20,383	68,640	89,023	547	1,701	243	282	898	842	16
Wood, wood products and furniture	25	4,040	67,040	11,428	78,468	535	2,055	260	297	1,110	982	84
Paper and paper products, printing	26	2,650	72,015	25,874	97,889	807	2,772	395	367	1,352	1,391	84
Chemical, petroleum, and coal products	27	913	44,166	16,127	60,293	569	3,124	601	590	1,851	1,262	149
Non-metallic mineral products	28	1,557	43,288	5,079	48,367	438	1,778	216	249	941	870	129
Basic metal products	29	550	87,096	6,819	93,915	856	4,671	908	1,105	3,210	1,658	284
Fabricated metal products	31	3,937	83,550	21,271	104,821	793	2,870	471	521	1,532	1,387	79
Transport equipment	32	1,301	125,327	16,916	142,243	1,154	4,098	775	768	2,297	1,795	110
Other machinery and equipment	33	3,805	132,935	45,233	178,168	1,394	4,725	1,163	1,202	2,521	2,243	122
Miscellaneous manufacturing	34	2,074	43,417	22,961	66,378	501	1,855	307	319	994	873	62
<b>Total manufacturing</b>		<b>27,507</b>	<b>888,523</b>	<b>311,917</b>	<b>1,200,440</b>	<b>9,472</b>	<b>39,485</b>	<b>6,581</b>	<b>7,023</b>	<b>23,007</b>	<b>16,921</b>	<b>1,452</b>
1976-77												
Food, beverages and tobacco	21-2	3,388	144,563	51,400	195,963	1,754	9,649	1,048	1,175	6,275	3,501	384
Textiles	23	668	22,278	16,950	39,228	325	1,393	268	279	840	563	27
Clothing and footwear	24	2,305	19,427	64,614	84,041	581	1,822	288	309	949	894	15
Wood, wood products and furniture	25	3,964	66,568	11,293	77,861	603	2,347	304	352	1,281	1,115	81
Paper and paper products, printing	26	2,608	71,577	25,850	97,427	911	3,139	365	432	1,590	1,616	114
Chemical, petroleum and coal products	27	914	44,538	15,934	60,472	640	3,666	589	683	2,300	1,459	171
Non-metallic mineral products	28	1,538	42,703	4,905	47,608	486	2,035	246	309	1,099	999	99
Basic metal products	29	550	87,084	6,721	93,805	993	5,621	1,112	1,293	3,820	1,981	250
Fabricated metal products	31	3,920	82,653	20,295	102,948	882	3,237	506	562	1,754	1,539	80
Transport equipment	32	1,290	125,992	17,162	143,154	1,307	4,713	770	976	2,787	2,132	141
Other machinery and equipment	33	3,695	126,123	42,258	168,381	1,492	5,082	1,171	1,278	2,742	2,446	124
Miscellaneous manufacturing	34	2,009	43,086	22,185	65,271	557	2,118	319	358	1,166	991	63
<b>Total manufacturing</b>		<b>26,849</b>	<b>876,592</b>	<b>299,567</b>	<b>1,176,159</b>	<b>10,531</b>	<b>44,823</b>	<b>6,986</b>	<b>8,004</b>	<b>26,603</b>	<b>19,237</b>	<b>1,551</b>

(a) See, Manufacturing industry statistics from 1968-69, page 382. (b) Australian Standard Industrial Classification. (c) Average over whole year. Includes working proprietors. (d) Outlay on fixed tangible assets less disposals.

**Employment**

The statistics on the number of persons employed shown in the following table relate to the average whole year employment, including working proprietors and those persons working at separately located administrative offices and ancillary units in the State.

It should be noted that persons employed in each State (and their wages and salaries) relate to those employed at establishments, administrative offices or ancillary units located in that State, even though the administrative offices or ancillary units may have served establishments located in another State.

**MANUFACTURING ESTABLISHMENTS—MALES, FEMALES AND PERSONS EMPLOYED BY INDUSTRY SUB-DIVISION, 1976-77, AND TOTAL MANUFACTURING, 1974-75 AND 1975-76(a)**

Industry sub-division	ASIC code(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>MALES EMPLOYED</b>										
Food, beverages and tobacco	21-2	46,532	42,633	27,917	12,734	10,017	4,048	228	454	144,563
Textiles	23	6,369	12,277	633	1,352	485	1,162	—	—	22,278
Clothing and footwear	24	5,778	11,555	806	968	243	77	—	—	19,427
Wood, wood products and furniture	25	21,441	16,549	9,648	7,787	6,536	4,167	62	378	66,568
Paper and paper products, printing	26	25,509	24,027	6,725	5,392	4,067	4,798	69	990	71,577
Chemical, petroleum and coal products	27	20,027	15,328	2,863	2,320	2,761	1,239	—	—	44,538
Non-metallic mineral products	28	15,379	11,882	5,631	4,028	4,580	889	792	235	42,703
Basic metal products	29	50,248	11,829	5,616	9,464	5,812	n.p.	—	—	87,084
Fabricated metal products	31	29,924	28,538	8,916	6,861	6,612	1,331	128	343	82,653
Transport equipment	32	34,557	52,211	10,484	22,296	5,464	938	—	—	125,992
Other machinery and equipment	33	53,056	43,532	9,196	13,079	6,335	735	82	153	126,123
Miscellaneous manufacturing	34	16,137	18,645	2,795	3,829	1,407	n.p.	—	—	43,086
<b>Total manufacturing</b>	<b>1976-77</b>	<b>324,957</b>	<b>289,006</b>	<b>91,230</b>	<b>90,110</b>	<b>54,319</b>	<b>23,056</b>	<b>1,361</b>	<b>2,553</b>	<b>876,592</b>
	1975-76	333,322	291,736	92,289	90,272	53,696	22,827	1,721	2,660	888,523
	1974-75	348,638	302,234	90,202	94,275	53,207	23,699	1,788	2,773	916,816
<b>FEMALES EMPLOYED</b>										
Food, beverages and tobacco	21-2	16,320	15,753	7,708	5,407	4,254	1,722	64	172	51,400
Textiles	23	5,174	8,812	596	971	274	1,123	—	—	16,950
Clothing and footwear	24	21,245	35,382	3,421	3,145	1,259	162	—	—	64,614
Wood, wood products and furniture	25	3,719	3,085	1,658	1,233	1,208	314	25	51	11,293
Paper and paper products, printing	26	10,349	8,686	2,167	1,895	1,500	709	30	514	25,850
Chemical, petroleum and coal products	27	9,301	5,165	547	460	366	95	—	—	15,934
Non-metallic mineral products	28	1,899	1,695	443	408	376	53	87	23	4,905
Basic metal products	29	3,647	1,369	310	840	359	n.p.	—	—	6,721
Fabricated metal products	31	7,825	7,325	1,978	1,741	1,105	197	46	78	20,295
Transport equipment	32	3,916	9,953	635	2,271	243	142	—	—	17,162
Other machinery and equipment	33	20,277	14,595	1,133	5,242	906	64	2	44	42,258
Miscellaneous manufacturing	34	9,938	8,639	1,133	1,876	557	n.p.	—	—	22,185
<b>Total manufacturing</b>	<b>1976-77</b>	<b>113,610</b>	<b>120,459</b>	<b>21,729</b>	<b>25,489</b>	<b>12,407</b>	<b>4,737</b>	<b>254</b>	<b>882</b>	<b>299,567</b>
	1975-76	120,405	125,371	21,936	25,833	12,257	4,926	315	874	311,917
	1974-75	129,544	130,617	22,220	26,966	12,645	5,153	289	899	328,333
<b>PERSONS EMPLOYED</b>										
Food, beverage and tobacco	21-2	62,852	58,386	35,625	18,141	14,271	5,770	292	626	195,963
Textiles	23	11,543	21,089	1,229	2,323	759	2,285	—	—	39,228
Clothing and footwear	24	27,023	46,937	4,227	4,113	1,502	239	—	—	84,041
Wood, wood products and furniture	25	25,160	19,634	11,306	9,020	7,744	4,481	87	429	77,861
Paper and paper products, printing	26	35,858	32,713	8,892	7,287	5,567	5,507	99	1,504	97,427
Chemical, petroleum and coal products	27	29,328	20,493	3,410	2,780	3,127	1,334	—	—	60,472
Non-metallic mineral products	28	17,278	13,577	6,074	4,436	4,956	942	879	258	47,608
Basic metal products	29	53,895	13,198	5,926	10,304	6,171	n.p.	—	—	93,805
Fabricated metal products	31	37,749	35,863	10,894	8,602	7,717	1,528	174	421	102,948
Transport equipment	32	38,473	62,164	11,119	24,567	5,707	1,080	—	—	143,154
Other machinery and equipment	33	73,333	58,127	10,329	18,321	7,241	799	84	197	168,381
Miscellaneous manufacturing	34	26,075	27,284	3,928	5,705	1,964	n.p.	—	—	65,271
<b>Total manufacturing</b>	<b>1976-77</b>	<b>438,567</b>	<b>409,465</b>	<b>112,959</b>	<b>115,599</b>	<b>66,726</b>	<b>27,793</b>	<b>1,615</b>	<b>3,435</b>	<b>1,176,159</b>
	1975-76	453,727	417,107	114,225	116,105	65,953	27,753	2,036	3,534	1,200,440
	1974-75	478,182	432,851	112,422	121,241	65,852	28,852	2,077	3,672	1,245,149

(a) See 'Manufacturing industry statistics from 1968-69', page 382.

(b) Australian Standard Industrial Classification.

**Wages and salaries**

The following table shows wages and salaries of all employees of manufacturing establishments including those working at separately located administrative offices and ancillary units in the State. Drawings of working proprietors are not included.

**MANUFACTURING ESTABLISHMENTS—WAGES AND SALARIES BY INDUSTRY SUB-DIVISION,  
1976-77, AND TOTAL MANUFACTURING, 1974-75 AND 1975-76**

(\$ million)

<i>Industry sub-division</i>	<i>ASIC code(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Food, beverages and tobacco . . . . .	21-2	583	529	321	143	123	47	3	6	1,754
Textiles . . . . .	23	97	176	8	19	6	18	—	—	325
Clothing and footwear . . . . .	24	187	330	26	28	9	1	—	—	581
Wood, wood products and furniture . . . . .	25	200	151	83	70	60	34	1	4	603
Paper and paper products, printing . . . . .	26	342	310	77	65	48	54	1	13	911
Chemical, petroleum and coal products . . . . .	27	306	219	37	30	34	14	—	—	640
Non-metallic mineral products . . . . .	28	182	141	59	43	48	9	—	—	486
Basic metal products . . . . .	29	563	141	67	99	75	n.p.	11	3	993
Fabricated metal products . . . . .	31	330	315	89	68	64	12	2	4	882
Transport equipment . . . . .	32	358	575	94	221	49	9	—	—	1,307
Other machinery and equipment . . . . .	33	656	524	88	150	63	7	1	2	1,492
Miscellaneous manufacturing . . . . .	34	219	243	30	47	15	n.p.	—	—	557
<b>Total manufacturing</b> . . . . .	<b>1976-77</b>	<b>4,024</b>	<b>3,656</b>	<b>979</b>	<b>982</b>	<b>594</b>	<b>246</b>	<b>18</b>	<b>31</b>	<b>10,531</b>
	1975-76	3,670	3,287	874	872	509	211	21	29	9,472
	1974-75	3,365	2,961	734	797	434	195	20	27	8,533

(a) Australian Standard Industrial Classification.

**Turnover**

The following table shows the value of turnover of manufacturing establishments. The figures include sales of goods whether produced by the establishment or not; transfers out of goods to other establishments of the same enterprise; bounties and subsidies on production; plus all other operating revenue from outside the enterprise, such as commission, repair and service revenue and the value of capital work done on own account. Rents, leasing revenue, interest (other than hire purchase), royalties and receipts from the sale of fixed tangible assets are excluded.

**MANUFACTURING ESTABLISHMENTS—TURNOVER, BY INDUSTRY SUB-DIVISION, 1976-77(a) AND  
TOTAL MANUFACTURING, 1974-75 AND 1975-76(a)**

(\$ million)

<i>Industry sub-division</i>	<i>ASIC code(b)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Food, beverages and tobacco . . . . .	21-2	2,949	3,103	1,952	718	610	283	14	20	9,649
Textiles . . . . .	23	468	699	39	92	26	68	—	—	1,393
Clothing and footwear . . . . .	24	649	1,003	64	82	20	4	—	—	1,822
Wood, wood products and furniture . . . . .	25	769	606	296	294	207	159	2	14	2,347
Paper and paper products, printing . . . . .	26	1,224	1,052	253	229	145	199	2	35	3,139
Chemical, petroleum and coal products . . . . .	27	1,754	1,078	400	141	230	62	—	—	3,666
Non-metallic mineral products . . . . .	28	686	579	290	189	223	46	—	—	2,035
Basic metal products . . . . .	29	2,591	744	707	438	777	n.p.	—	—	5,621
Fabricated metal products . . . . .	31	1,183	1,103	361	272	256	43	7	12	3,237
Transport equipment . . . . .	32	1,106	2,311	466	684	118	27	—	—	4,713
Other machinery and equipment . . . . .	33	2,244	1,811	313	479	209	17	3	6	5,082
Miscellaneous manufacturing . . . . .	34	804	956	123	158	64	n.p.	—	—	2,118
<b>Total manufacturing</b> . . . . .	<b>1976-77</b>	<b>16,428</b>	<b>15,047</b>	<b>5,264</b>	<b>3,776</b>	<b>2,884</b>	<b>1,197</b>	<b>124</b>	<b>103</b>	<b>44,823</b>
	1975-76	14,555	13,220	4,564	3,461	2,433	1,030	127	96	39,485
	1974-75	13,238	11,730	4,034	3,003	2,032	906	95	95	35,132

(a) See 'Manufacturing industry statistics from 1968-69', page 382.

(b) Australian Standard Industrial Classification.

**Purchases, transfers in and selected expenses**

The following table gives details of the value of purchases, transfers in and selected expenses. Figures include purchases of materials, fuel, power, containers, etc., plus transfers in of goods from other establishments of the enterprise, plus charges for commission and sub-contract work, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.

**MANUFACTURING ESTABLISHMENTS—PURCHASES, TRANSFERS IN AND SELECTED EXPENSES,  
BY INDUSTRY SUB-DIVISION, 1976-77, AND TOTAL MANUFACTURING, 1974-75 AND 1975-76**  
(*\$ million*)

<i>Industry sub-division</i>	<i>ASIC code(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Food, beverages and tobacco	21-2	1,931	1,998	1,305	443	399	178	9	12	6,275
Textiles	23	301	407	22	62	16	33	—	—	840
Clothing and footwear	24	359	513	26	42	7	2	—	—	949
Wood, wood products and furniture	25	424	330	160	173	104	80	1	7	1,281
Paper and paper products, printing	26	628	538	127	121	68	100	—	8	1,590
Chemical, petroleum and coal products	27	1,040	678	313	83	149	37	—	—	2,300
Non-metallic mineral products	28	379	285	168	102	123	26	—	—	1,099
Basic metal products	29	1,674	498	499	298	598	n.p.	69	11	3,820
Fabricated metal products	31	638	576	203	156	148	24	4	5	1,754
Transport equipment	32	583	1,353	313	471	57	10	—	—	2,787
Other machinery and equipment	33	1,197	1,001	175	256	103	8	1	3	2,742
Miscellaneous manufacturing	34	443	528	70	81	37	n.p.	—	—	1,166
<b>Total manufacturing</b>	<b>1976-77</b>	<b>9,596</b>	<b>8,705</b>	<b>3,380</b>	<b>2,287</b>	<b>1,809</b>	<b>694</b>	<b>84</b>	<b>47</b>	<b>26,603</b>
	1975-76	8,331	7,564	2,851	2,012	1,544	577	83	44	23,007
	1974-75	7,815	7,032	2,542	1,807	1,332	559	70	47	21,203

(a) Australian Standard Industrial Classification.

**Stocks**

Statistics on the value of opening and closing stocks at 30 June are shown in the following table. Figures include all the stocks of materials, fuels, etc., and finished goods and work-in-progress of the establishment whether located at the establishment or elsewhere.

**MANUFACTURING ESTABLISHMENTS—OPENING AND CLOSING STOCKS BY INDUSTRY  
SUB-DIVISION, 1976-77(a) AND TOTAL MANUFACTURING, 1974-75 AND 1975-76(a)**  
(*\$ million*)

<i>Industry sub-division</i>	<i>ASIC code(b)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>OPENING STOCKS AT 30 JUNE 1976</b>										
Food, beverages and tobacco	21-2	329	383	109	152	39	34	1	1	1,048
Textiles	23	89	140	7	14	4	14	—	—	268
Clothing and footwear	24	98	159	13	16	2	—	—	—	288
Wood, wood products and furniture	25	92	74	38	48	24	27	—	1	304
Paper and paper products, printing	26	139	133	28	21	16	24	—	3	365
Chemical, petroleum and coal products	27	315	176	42	16	28	13	—	—	589
Non-metallic mineral products	28	109	57	33	17	24	5	—	—	246
Basic metal products	29	538	131	116	102	123	n.p.	33	2	1,112
Fabricated metal products	31	186	194	46	40	31	7	1	2	506
Transport equipment	32	169	382	69	132	12	6	—	—	770
Other machinery and equipment	33	484	474	63	104	43	2	—	2	1,171
Miscellaneous manufacturing	34	123	151	16	21	7	n.p.	—	—	319
<b>Total manufacturing</b>		<b>2,670</b>	<b>2,451</b>	<b>580</b>	<b>683</b>	<b>352</b>	<b>204</b>	<b>35</b>	<b>11</b>	<b>6,986</b>
<b>CLOSING STOCKS AT 30 JUNE 1977</b>										
Food, beverages and tobacco	21-2	385	409	126	171	43	39	1	1	1,175
Textiles	23	96	143	8	14	4	14	—	—	278
Clothing and footwear	24	106	167	14	19	2	—	—	—	309
Wood, wood products and furniture	25	108	83	45	55	30	30	—	1	352
Paper and paper products, printing	26	165	152	34	26	20	32	—	3	432
Chemical, petroleum and coal products	27	363	201	54	17	34	14	—	—	683
Non-metallic mineral products	28	127	74	43	25	32	5	—	—	309
Basic metal products	29	634	161	116	115	149	n.p.	39	2	1,293
Fabricated metal products	31	203	213	53	44	39	8	1	2	562
Transport equipment	32	206	471	107	171	16	6	—	—	976
Other machinery and equipment	33	530	504	74	114	52	3	1	2	1,278
Miscellaneous manufacturing	34	136	168	19	23	8	n.p.	—	—	358
<b>Total manufacturing</b>		<b>3,056</b>	<b>2,744</b>	<b>692</b>	<b>795</b>	<b>430</b>	<b>232</b>	<b>42</b>	<b>11</b>	<b>8,004</b>
Opening stocks	1975-76	2,532	2,364	504	638	298	201	34	9	6,581
	1974-75	2,053	1,919	395	495	218	135	18	9	5,241
Closing stocks	1975-76	2,680	2,472	591	676	354	205	36	10	7,023
	1974-75	2,529	2,344	503	635	297	190	34	10	6,542

(a) See 'Manufacturing industry statistics from 1968-69', page 382.

(b) Australian Standard Industrial Classification.

**Value added**

The statistics on 'value added' contained in the following table have been calculated by adding to the value of turnover the increase (or deducting the decrease) in the value of stocks, and deducting the value of purchases, transfers in and selected expenses. A more detailed description of the method of deriving 'value added' is given on page 383.

**MANUFACTURING ESTABLISHMENTS—VALUE ADDED, BY INDUSTRY SUB-DIVISION, 1976-77, AND  
TOTAL MANUFACTURING, 1974-75 AND 1975-76**  
(*\$ million*)

<i>Industry sub-division</i>	<i>ASIC code(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Food, beverages and tobacco . . . . .	21-2	1,073	1131	664	294	215	110	6	8	3,501
Textiles . . . . .	23	174	295	19	30	10	35	-	-	563
Clothing and footwear . . . . .	24	298	499	38	44	13	2	-	-	894
Wood, wood products and furniture . . . . .	25	361	285	143	127	109	83	1	7	1,115
Paper and paper products, printing . . . . .	26	623	532	132	113	81	107	2	27	1,616
Chemical, petroleum and coal products . . . . .	27	763	425	99	58	88	26	-	-	1,459
Non-metallic mineral products . . . . .	28	325	312	132	94	108	21	32	5	999
Basic metal products . . . . .	29	1,012	277	208	154	206	n.p.	3	7	1,981
Fabricated metal products . . . . .	31	562	546	165	121	115	20	3	7	1,539
Transport equipment . . . . .	32	559	1,047	191	252	66	16	3	4	2,132
Other machinery and equipment . . . . .	33	1,092	841	149	233	116	10	3	4	2,446
Miscellaneous manufacturing . . . . .	34	375	445	56	80	27	n.p.	-	-	991
<b>Total manufacturing . . . . .</b>	<b>1976-77</b>	<b>7,218</b>	<b>6,635</b>	<b>1,996</b>	<b>1,600</b>	<b>1,154</b>	<b>531</b>	<b>47</b>	<b>57</b>	<b>19,237</b>
	1975-76	6,371	5,765	1,800	1,486	945	456	46	53	16,921
	1974-75	5,900	5,123	1,600	1,335	780	402	41	49	15,230

(a) Australian Standard Industrial Classification.

**Number of establishments**

The following table shows the number of establishments in each State in operation at 30 June for the years indicated. These figures relate to manufacturing establishments as such and do not include the numbers of separately located administrative offices and ancillary units.

**MANUFACTURING ESTABLISHMENTS—NUMBER OF ESTABLISHMENTS IN OPERATION AT 30  
JUNE 1977(a) BY INDUSTRY SUB-DIVISION, AND TOTAL MANUFACTURING 1974-75 AND 1975-76(a)**

<i>Industry sub-division</i>	<i>ASIC code(b)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Food, beverages and tobacco . . . . .	21-2	986	962	612	381	301	114	17	15	3,388
Textiles . . . . .	23	237	318	35	37	28	13	-	-	668
Clothing and footwear . . . . .	24	914	1,141	100	83	55	12	-	-	2,305
Wood, wood products and furniture . . . . .	25	1,281	1,091	617	342	398	200	11	24	3,964
Paper and paper products, printing . . . . .	26	1,108	867	220	198	147	44	4	20	2,608
Chemical, petroleum and coal products . . . . .	27	423	283	67	56	63	22	-	-	914
Non-metallic mineral products . . . . .	28	521	373	259	141	161	53	13	17	1,538
Basic metal products . . . . .	29	214	174	59	47	38	12	4	2	550
Fabricated metal products . . . . .	31	1,534	1,122	467	349	342	76	15	15	3,920
Transport equipment . . . . .	32	395	428	155	139	145	25	1	2	1,290
Other machinery and equipment . . . . .	33	1,580	1,282	251	300	231	40	2	9	3,695
Miscellaneous manufacturing . . . . .	34	814	705	168	178	125	17	1	1	2,009
<b>Total manufacturing . . . . .</b>	<b>1976-77</b>	<b>10,007</b>	<b>8,746</b>	<b>3,010</b>	<b>2,251</b>	<b>2,034</b>	<b>628</b>	<b>68</b>	<b>105</b>	<b>26,849</b>
	1975-76	10,329	8,873	3,122	2,287	2,054	667	69	106	27,507
	1974-75	10,134	8,924	3,008	2,131	1,974	628	68	104	26,971

(a) See 'Manufacturing industry statistics from 1968-69', page 382.

(b) Australian Standard Industrial Classification.

## Single establishment manufacturing enterprises with less than four persons employed

### Summary of operations

The following table shows the summary of operations for single establishment manufacturing enterprises with less than four persons employed.

**SINGLE ESTABLISHMENT MANUFACTURING ENTERPRISES WITH LESS THAN FOUR PERSONS EMPLOYED: SUMMARY OF OPERATIONS, BY INDUSTRY SUB-DIVISION: AUSTRALIA, 1976-77(a) AND TOTAL MANUFACTURING 1975-76(a)**

Industry sub-division	ASIC code(b)	Number of establishments operating at end of June	Persons employed at end of June 1977(c)			Wages and salaries
			Males	Females	Total	
			No.	No.	No.	\$m
Food, beverages and tobacco . . . . .	21-2	679	1,011	494	1,505	3.7
Textiles . . . . .	23	197	247	164	411	1.1
Clothing and footwear . . . . .	24	511	436	599	1,035	2.7
Wood, wood products and furniture . . . . .	25	2,509	4,052	867	4,919	11.0
Paper and paper products, printing . . . . .	26	1,107	1,452	794	2,246	7.1
Chemical, petroleum and coal products . . . . .	27	223	315	126	441	1.7
Non-metallic mineral products . . . . .	28	424	700	167	867	2.8
Basic metal products . . . . .	29	95	165	28	193	0.8
Fabricated metal products . . . . .	31	1,839	3,045	693	3,738	11.2
Transport equipment . . . . .	32	550	944	189	1,133	3.3
Other machinery and equipment . . . . .	33	1,466	2,262	653	2,915	9.7
Miscellaneous manufacturing . . . . .	34	1,439	1,995	769	2,764	6.2
<b>Total manufacturing . . . . .</b>	<b>1976-77</b>	<b>11,039</b>	<b>16,624</b>	<b>5,543</b>	<b>22,167</b>	<b>61.2</b>
	<b>1975-76</b>	<b>10,307</b>	<b>15,361</b>	<b>5,185</b>	<b>20,546</b>	<b>52.5</b>

(a) See 'Manufacturing industry statistics from 1968-69', page 382.  
(c) Including working proprietors.

(b) Australian Standard Industrial Classification.

## Electricity and gas establishments

As mentioned on page 382 the electricity and gas industries, which were previously included in the Annual Factory Census, have been the subject of separate censuses as from 1968-69. In addition, the Electricity and Gas Census has been extended to cover distribution as well as production. The following tables show statistics for the years 1971-72 and 1974-75. Censuses were not conducted for 1970-71, 1972-73 or for 1973-74.

For electricity and gas, the basic census unit is an exception to the general concept of the standardised unit. Because of the nature of the activities of electricity and gas undertakings, the single operating location basis is not suitable. The establishment unit used consists of all locations, including administrative offices and ancillary units which are mainly concerned with the production and/or distribution of electricity or gas and which are operated by the undertaking in the one State. The use of this concept is one of the reasons for the number of electricity and gas establishments since 1968-69 being considerably less than in previous years. The other main reason is that until 1967-68 a number of electricity generating stations operated by enterprises principally for their own use were included. However, as from 1968-69, these generating stations have been included in the Electricity Census only if sales and transfers of electricity exceeded \$100,000 in value.

## ELECTRICITY AND GAS ESTABLISHMENTS(a) SUMMARY OF OPERATIONS STATES AND TERRITORIES, 1971-72 AND 1974-75

State or Territory	Number of establishments operating during year	Persons employed(b)			Wages and salaries (\$m)	Turnover (c) (\$m)	Stocks at 30 June		Purchases, transfers in and selected expenses (\$m)	Value added (\$m)	Fixed capital expenditure(d) (\$m)
		Males (No.)	Females (No.)	Total (No.)			Opening (\$m)	Closing (\$m)			
1971-72											
New South Wales—											
Electricity	49	23,469	2,395	25,864	140	707	50	54	345	367	154
Gas	23	2,352	524	2,876	13	49	3	3	18	30	4
Victoria—											
Electricity	13	16,409	1,816	18,225	99	375	27	28	136	239	116
Gas	4										
Queensland—											
Electricity	21	8,038	837	8,875	45	194	13	14	79	116	66
Gas	7	565	104	669	3	12	1	1	5	7	1
South Australia—											
Electricity	14	6,174	358	6,532	34	106	9	9	29	78	42
Gas	2										
Western Australia—											
Electricity	46	4,275	331	4,606	23	82	8	8	23	60	81
Gas	2										
Tasmania—											
Electricity	3	2,727	244	2,971	15	48	5	5	2	46	35
Gas	2										
Northern Territory—											
Electricity	6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Gas	..										
Australian Capital Territory—											
Electricity	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Gas	..										
Australia—											
Electricity	153	57,089	5,391	62,480	332	1,444	105	112	591	861	452
Gas	40	7,409	1,298	8,707	41	148	10	11	57	91	43
1974-75											
New South Wales—											
Electricity	47	22,988	2,370	25,358	218	974	73	83	462	522	173
Gas	22	2,385	550	2,935	22	79	9	16	36	51	36
Victoria—											
Electricity	13	17,025	1,763	18,788	167	563	30	39	206	366	121
Gas	1										
Queensland—											
Electricity	20	8,151	858	9,009	78	319	15	17	137	184	59
Gas	8	476	64	540	4	17	1	1	7	10	2
South Australia—											
Electricity	10	5,764	340	6,104	52	145	11	13	57	92	35
Gas	2										
Western Australia—											
Electricity	16	4,964	399	5,363	41	145	12	15	55	94	57
Gas	2										
Tasmania—											
Electricity	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Gas	2										
Northern Territory—											
Electricity	6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Gas	—										
Australian Capital Territory—											
Electricity	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Gas	—										
Australia—											
Electricity	115	57,273	5,318	62,591	545	2,091	136	161	881	1,235	465
Gas	37	7,662	1,332	8,994	71	254	20	31	114	151	69

(a) Covers production and distribution. (b) At end of June. (c) In some States electricity is produced by certain undertakings and sold to other undertakings for distribution. In these States sales of electricity are duplicated due to the inclusion of the bulk sales to these distributors. (d) Outlay on fixed tangible assets less disposals.

## Principal Manufacturing Commodities

The production of certain commodities is shown in the monthly and quarterly publications of the ABS, and in the annual publication, *Manufacturing Commodities, Selected Principal Articles Produced (Preliminary)* (8365.0) A more comprehensive list of articles produced is contained in the annual publication, *Manufacturing Commodities, Principal Articles Produced* (8303.0).

The following table shows the total recorded production of some of the principal articles (i.e. of those for which production can be represented in quantitative terms) manufactured in Australia. A more complete list, where available, is published in ABS bulletin 8303.0 mentioned above.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS:  
AUSTRALIA

Commodity code	Article		1974-75	1975-76	1976-77 <sup>p</sup>
	<b>Acid (in terms of 100%)—</b>				
401.29	Hydrochloric . . . . .	tonnes	43,419	48,046	51,526
401.37	Nitric . . . . .	"	168,315	165,091	177,647
401.57	Sulphuric . . . . .	'000 tonnes	1,730	1,281	1,721
171.03, 04, 07, 08	Aerated and carbonated waters . . . . .	'000 litres	845,418	891,234	792,507
	<b>Air-conditioning equipment—</b>				
657.03, 05	Room air conditioners (refrigerated) . . . . .	No.	52,737	31,666	41,006
657.13, 15	Room air coolers (evaporative coolers) . . . . .	"	128,728	85,752	n.y.a.
657.21, 22, 23	Package unit air conditioners . . . . .	"	21,604	17,901	23,003
	<b>Animal feeds—</b>				
	<b>From wheat—</b>				
152.06	Pollard . . . . .	'000 tonnes	269	254	237
159.11	Poultry pellets and crumbles . . . . .	"	1,111	1,104	1,088
159.15	Poultry mash . . . . .	"	225	235	218
159.21	Other prepared stock and poultry feed . . . . .	"	501	490	540
159.01	Canned dog and cat foods . . . . .	'000 kg	133,845	150,866	169,896
159.02	Dog biscuits (whole) . . . . .	"	20,060	19,223	n.y.a.
159.03	Other manufactured dog and cat food . . . . .	"	40,518	42,879	n.y.a.
475.04, 06, 07, 85	Asbestos cement building sheets (finished) . . . . .	'000 m <sup>2</sup>	42,424	39,976	n.y.a.
	<b>Bags, leather, fibre, etc.—</b>				
	<b>Handbags—</b>				
864.31	Leather . . . . .	'000	273	336	n.y.a.
864.33	Plastic . . . . .	"	1,316	1,158	n.y.a.
864.39	Other . . . . .	"	355	410	n.y.a.
946.01-52	Hessian and calico bags . . . . .	'000 doz	1,858	1,113	n.y.a.
864.11-19	Suitcases, kitbags and trunks . . . . .	'000	1,290	1,149	n.y.a.
	<b>Bath heaters—</b>				
652.01	Electric . . . . .	No.	6,027	8,819	8,047
652.03, 06, 08	Gas . . . . .	"	2,586	n.a.	n.a.
652.05	Solid fuel . . . . .	"	1,978	1,669	1,665
779.02-37	Bathing suits (a) . . . . .	'000 doz	238	273	240
	<b>Baths (exclude infants baths)—</b>				
671.03	Pressed steel—Enamelled . . . . .	'000	130	142	142
671.01, 04, 08	Other (exclude pressed steel, galvanised) . . . . .	"	45	37	39
	<b>Batteries, wet cell type—</b>				
685.13, 15	Auto (S.L.I.) 6 volts . . . . .	'000	350	314	298
685.17, 19	Auto (S.L.I.) 12 volts . . . . .	"	2,317	2,468	2,573
685.33, 35	Radio, homelighter, fencer . . . . .	No. of 2 volts cells	38,198	26,159	16,089
685.43-65	Traction, plant and other . . . . .	"	192,349	163,767	151,466
172.02, 04, 06	Beer (excluding waste beer) . . . . .	mil. litres	1,954	1,916	1,939
064.21	Biscuits . . . . .	'000 kg	119,707	117,863	127,293
372.52-56, 374.51-57	Blankets, Woollen—Pure and Mixtures . . . . .	'000	1,470	2,022	1,581
152.02	Bran (wheaten) . . . . .	'000 tonnes	137	130	115
172.21	Brandy . . . . .	'000 litre al	1,608	1,552	n.y.a.
777.41, 49	Brassieres . . . . .	'000 doz	596	723	637
066.01-31	Breakfast food, cereal (ready to eat) . . . . .	tonnes	62,531	67,344	n.y.a.
472.01, 03	Bricks, clay . . . . .	million	1,722	1,815	1,830
261.41	Briquettes, brown coal . . . . .	'000 tonnes	1,092	946	1,035
051.30, 052.20	Butter—from cream (exclude whey cream) . . . . .	'000 kg	155,689	145,916	n.y.a.
773.51, 53, 74, 75, 83	Cardigans, jumpers, etc. . . . .	'000 doz	1,739	1,965	1,879
474.02	Cement, Portland . . . . .	'000 tonnes	5,068	5,100	5,007

(a) Includes swim shorts. Excludes infants' and babies' swim-wear.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS:  
AUSTRALIA—continued

Commodity code	Article		1974-75	1975-76	1976-77p
053.45	Cheese (non-processed)	'000kg	98,630	112,617	103,549
	Cloth (including mixtures)—				
373.10-52	Cotton (a)	'000m <sup>2</sup>	43,822	44,708	39,608
374.02-16	Rayon and acetate	"	16,279	16,936	16,595
374.20-34	Synthetic (non-cellulosic)	"	94,725	100,994	96,909
372.02-50	Wool (excluding blanketing and rug)	"	10,607	14,297	6,539
435.22	Coke—Metallurgical	'000 tonnes	5,103	4,732	4,876
475.90	Concrete, ready mixed	'000m <sup>3</sup>	10,229	10,273	10,331
	Confectionery—				
104.06-18	Chocolate	'000 kg	61,690	55,251	56,345
104.21-29	Other	"	62,740	63,273	60,331
452.04	Copper, refined (b)	'000 tonnes	178	164	157
171.06, 10	Cordials and syrups	'000 litres	89,203	100,759	104,415
777.01-29	Corsets and corselets	'000 doz	197	188	185
611.01	Cycles (complete)	'000	193	217	258
804.01	Dentifrices (toothpaste)	'000 kg	6,410	6,704	n.y.a.
499.42	Electricity	mil. kWh	73,933	76,597	82,522
523.76-78	Electrodes for manual welding	'000 kg	25,704	22,997	20,093
502.22-39	Engines, spark and compression ignition (c)	'000	434	342	n.y.a.
	Essences, flavouring—				
139.31	Domestic	'000 litres	432	332	n.y.a.
139.35	Industrial	"	4,304	4,609	n.y.a.
696.01, 03, 05	Fans, electric (propellor type)	No.	701,375	541,766	499,210
045.01, 51	Fish, canned (including fish loaf)	'000 kg	9,587	7,273	6,191
	Floorboards—				
332.06	Australian timber	m <sup>3</sup>	280,818	276,536	n.y.a.
332.08	Imported timber	m <sup>3</sup>			
	Floor coverings—				
841.01-07	Textile	'000 m <sup>2</sup>	22,738	31,939	29,057
841.31-61, 69	Smooth surface and embossed	"	9,589	7,366	5,947
841.67, 68	Timber parquetry	"	136	122	150
841.85	Underfelts, underlays, etc. (d)	"	15,172	11,641	10,488
692.21, 23	Floor polishers, electric	No.	25,277	23,586	17,645
	Flour—				
068.01	Self-raising	'000 kg	46,459	37,423	n.y.a.
062.01, 10, 32	Wheaten (e)	'000 tonnes	1,247	1,242	1,182
	Fruit juices, natural—				
074.61-69, 79	Single strength	'000 litres	179,777	187,762	n.y.a.
074.76, 89	Concentrated (f)	"	11,792	16,269	n.y.a.
781.06-29	Gloves, work (g)	'000 doz pairs	3,859	3,829	3,712
127.21	Glucose	'000 kg	58,807	51,880	50,540
832.58, 59	Golf clubs	doz	42,186	52,324	n.y.a.
	Handkerchiefs				
786.01	Men's	'000 doz	1,156 } 594 }	865	n.y.a.
786.11	Women's	"			
	Heaters, room—				
651.01, 03	Solid fuel	No.	3,842	3,547	3,542
651.11-20	Electric radiators and fires	'000	739	648	683
651.04, 05, 21, 22, 26, 27	Gas fires and space heaters	No.	65,951	61,620	61,179
775	Hosiery—				
	Women's (including panty hose)	'000 doz pairs	n.a.	6,756	6,422
	Men's	"	1,753	1,993	1,881
	Children's and infants'	"	982	1,112	1,120
051.61	Ice cream (h)	'000 litres	206,652	213,275	211,240
051.87, 89, 90	Infants', invalids' and health beverages from cows milk (i)	'000 kg	29,487	29,804	28,811
	Ink, printing—				
419.31	News	"	8,683	6,596	n.y.a.
419.43-59	Other	"	12,424	n.a.	n.y.a.

(a) Excludes tyre-cord fabric and towelling. (b) Primary origin only. (c) Petrol and diesel. Excludes car, motorcycle, truck, tractor, aero, and marine engines. (d) Needled (or bonded) felts of jute or jute/hair mixtures (for all purposes). (e) Includes wheatmeal for baking and sharps and other flour. (f) Excludes grape must. (g) Excludes fabric liners for dipped gloves but includes moulded or heat-sealed work gloves. (h) Includes ice-cream combined with other confections. Including those aerated milk-based confections which contain 10% or more butterfat. (i) Includes malted milk and milk sugar (lactose).

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS:  
 AUSTRALIA—continued

Commodity code	Article		1974-75	1975-76	1976-77 <sup>p</sup>
	<b>Iron and steel—</b>				
442.04, 08	Pig iron . . . . .	'000 tonnes	7,531	7,331	6,958
442.80-83	Steel ingots . . . . .	"	7,856	7,832	n.y.a.
442.28	Blooms and slabs( <i>a</i> ) . . . . .	"	6,594	6,477	6,028
693.51, 61, 63	Irons, electric (hand, domestic) . . . . .	'000	798	746	901
076.60	Jams (including conserves, jellies, etc.) . . . . .	'000 kg	31,588	31,121	26,998
391.04	Lard . . . . .	"	3,210	2,466	n.y.a.
	<b>Lawn mowers—</b>				
699.52, 53	Petrol, rotary . . . . .	No.	353,512	336,866	307,173
699.41, 45, 55, 61	Other types( <i>b</i> ) . . . . .	"	19,340	19,559	13,711
453.04	Lead refined( <i>c</i> ) . . . . .	'000 tonnes	171	168	n.y.a.
	<b>Leather—</b>				
	<b>Dressed or finished—</b>				
301.43-65	Chrome tanned (including retanned) . . . . .	'000 m <sup>2</sup>	5,059	5,015	n.y.a.
301.31-37, 83-89	Vegetable tanned, by weight . . . . .	'000 kg	n.a.	n.a.	n.y.a.
301.67, 69	Vegetable tanned, by measurement . . . . .	'000 m <sup>2</sup>	136	141	n.y.a.
	<b>Lime—</b>				
275.43, 45	Crushed . . . . .	tonnes	201,483	228,220	n.y.a.
479.18	Hydrated . . . . .	'000 tonnes	120	110	n.y.a.
479.12	Quick . . . . .	"	563	564	n.y.a.
802.21	Lipstick . . . . .	'000 kg	40	41	n.y.a.
063.11-21, 31	Malt (excluding extract) . . . . .	'000 tonnes	442	403	386
	<b>Margarine—</b>				
121.01	Table . . . . .	'000 kg	28,763	46,482	67,765
121.06, 08	Other . . . . .	"	54,872	56,635	50,484
	<b>Mattresses—</b>				
844.22, 25, 27	Inner spring . . . . .	'000	652	630	685
844.42, 45, 47	Rubber . . . . .	"	n.a.	16	17
844.52-67	Other . . . . .	"	522	542	551
027.02-77	Meat, canned( <i>d</i> ) . . . . .	'000 kg	42,397	43,878	52,677
	<b>Meters (domestic)—</b>				
702.01	Electricity consumption . . . . .	'000	293	248	285
703.01	Gas consumption . . . . .	"	65	62	96
703.11	Water consumption . . . . .	"	207	189	173
	<b>Milk, condensed, concentrated and evaporated—</b>				
051.21, 22	Full cream, coffee and milk, sweetened . . . . .	'000 kg	14,113	15,364	19,081
051.23, 052.42	Full cream, unsweetened . . . . .	"	34,592	34,350	39,378
051.28	Skim . . . . .	"	15,277	22,312	21,684
	<b>Milk powder in powdered form—</b>				
051.72, 73	Full cream . . . . .	"	43,126	43,977	58,634
051.76-79	Skim . . . . .	"	160,954	149,097	96,659
051.81, 82	Buttermilk or mixed skim and buttermilk . . . . .	"	11,516	11,676	8,791
503.13-32	Motors, electric (excl. automotive) . . . . .	'000	4,536	4,140	n.y.a.
	<b>Motor vehicles, finished—</b>				
581.02-08	Cars . . . . .	No.	319,877	308,537	308,704
581.10-16	Station wagons . . . . .	"	57,076	55,289	58,567
582.04	Utilities . . . . .	"	32,526	26,031	24,745
582.06	Panel vans . . . . .	"	29,147	28,195	24,653
582.08-24	Truck and truck-type vehicles . . . . .	"	7,869	7,488	10,694
	<b>Motor vehicles, partly finished—</b>				
581.22-28, 582.31, 32	Cars, station wagons, utilities, vans . . . . .	"	1,145	1,489	1,536
582.33-46	Trucks and truck-type vehicles . . . . .	"	25,023	22,834	22,709
589.81-89	Motor vehicle safety belts . . . . .	'000	3,009	2,193	n.y.a.
465.16, 17	Nails . . . . .	"	23,295	22,683	20,899
	<b>Oatmeal and rolled oats—</b>				
062.61, 63	For porridge, etc. . . . .	tonnes	15,171	14,863	13,412
393, 394	Oils and fats, crude—Vegetable . . . . .	'000 kg	75,139	69,230	65,698
	<b>Paints, etc.—</b>				
	<b>Architectural and decorative(<i>e</i>)—</b>				
	<b>Solvent thinned—</b>				
410.01	Primers and undercoats . . . . .	'000 litres	11,935	12,596	12,153
410.03, 05, 07	Finishing coats . . . . .	"	29,892	30,823	28,901
	<b>Water thinned—</b>				
410.11, 13, 15	Plastic latex . . . . .	"	27,766	32,277	35,133
410.17	Other water based . . . . .	"	245	254	256

(*a*) Primary mills output. (*b*) Petrol cylinder, electric and hand. (*c*) Includes lead content of lead alloys from primary sources but excludes lead-silver bullion. (*d*) Excludes poultry and baby food. (*e*) Excludes heavy duty coatings.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS:  
AUSTRALIA—continued

Commodity code	Article		1974-75	1975-76	1976-77p
410.25	Tinting colours (all types) packed for sale or transfer out . . . . .	'000 litres	522	508	582
	Paper—				
351.11	Newsprint . . . . .	'000 tonnes	196	206	207
351.18-79	Other . . . . .	"	574	536	584
352.11-33	Paperboard . . . . .	"	378	380	436
336.12	Particle board (resin bonded) . . . . .	'000 m <sup>2</sup>	389	460	515
975.04, 09, 11	Perambulators, pushers and strollers . . . . .	'000	n.a.	n.a.	n.a.
479.22	Plaster of paris . . . . .	'000 tonnes	339	347	381
479.32, 33	Plaster sheets—Non-acoustic . . . . .	'000 m <sup>2</sup>	42,372	44,794	50,503
334.32, 34, 36, 38	Plywood, 1 mm basis . . . . .	"	n.a.	78,191	n.y.a.
	Preserves—				
	Fruit—				
076.01-50	Canned or bottled . . . . .	'000 kg	226,210	175,317	179,666
074.01	Pulp and puree—single strength . . . . .	"	4,381	5,598	n.y.a.
	Vegetables—				
094.02-47	Canned or bottled . . . . .	"	133,131	122,856	125,180
092.02, 06, 10, 19	Quick frozen . . . . .	"	96,235	130,627	135,369
	Pyjamas—				
774.20, 22, 27, 29	Men's, youth's and boy's (suits only) . . . . .	'000 doz	350	340	296
774.50-59, 64, 66	Women's, maid's and girl's (incl. nightdresses) . . . . .	"	875	748	704
832.65, 85	Racquet frames (all types) . . . . .	doz.	14,639	12,792	9,571
643.01-37	Radio receiving sets (including radiograms) . . . . .	No.	352,321	117,350	50,300
	Records (phonograph)—				
646.35, 65	Single play . . . . .	'000	6,324	5,512	6,843
646.37, 41, 67, 71	Extended play . . . . .	"	510	328	177
646.43, 45, 73, 75	Long play . . . . .	"	21,860	21,245	21,174
657.33, 34, 35, 41	Refrigerators, domestic, electric and gas . . . . .	"	247	230	n.y.a.
403.404	Resins, plastics and synthetic, for all purposes . . . . .	'000 tonnes	438	380	469
061.67, 69	Rice, polished, unpolished and broken . . . . .	'000 kg	228,895	298,051	n.y.a.
372.70, 72, 374.59	Rugs . . . . .	'000	117	159	130
123.18-25	Sauce . . . . .	'000 litres	34,259	28,142	n.y.a.
062.04	Semolina . . . . .	'000 tonnes	24	27	28
773.02-09	Shirts (men's, youths' and boys'), collar attached (a) . . . . .	'000 doz	576	595	480
653.01	Sink heaters, electric . . . . .	No.	7,830	9,838	10,602
671.11-18	Sinks, steel and other (standard size) . . . . .	"	210,243	244,821	260,737
805.01-13	Soap, for personal toilet use (b) . . . . .	tonnes	29,357	28,464	28,281
	Soup—				
122.02, 09	Canned . . . . .	'000 litres	53,268	37,572	32,966
122.13, 15	Dry-mix . . . . .	'000 kg	7,086	5,524	n.y.a.
127.11-19	Starch (incl. cornflour) . . . . .	"	149,012	126,478	132,959
401.53	Stearine (stearic acid) . . . . .	"	4,758	4,602	n.y.a.
461.20	Steel, constructional, fabricated . . . . .	tonnes	688,345	537,124	n.y.a.
	Stoves, ovens and ranges, domestic cooking—				
661.01-11	Electric(c) . . . . .	No.	257,732	247,148	244,924
662.26, 31, 34, 36, 42, 43	Gas(d) . . . . .	"	105,454	108,448	109,197
662.01, 03	Solid fuel . . . . .	"	4,781	4,048	3,081
	Sugar—				
102.01	Raw . . . . .	'000 tonnes	2,849	2,850	n.y.a.
102.12	Refined . . . . .	"	709	702	n.y.a.
405.36	Sulphate of ammonia . . . . .	tonnes	275,224	223,784	201,589
415.07	Superphosphate(e) . . . . .	'000 tonnes	3,092	2,316	3,137
803.61	Talcum powder . . . . .	'000 kg	4,409	4,173	n.y.a.
	Tallow (including dripping), rendered—				
391.15	Edible . . . . .	"	74,335	86,908	n.y.a.
391.24	Inedible . . . . .	"	272,379	294,573	n.y.a.
643.57-60, 68	Television sets (colour) . . . . .	No.	163,472	441,735	n.y.a.
645.51-58	Television picture tubes incorp. new screens . . . . .	"	256,089	45,606	n.y.a.
	Tiles, roofing—				
475.30	Concrete . . . . .	'000	202,209	219,663	229,892
472.12	Terracotta . . . . .	"			

(a) Business or formal. (b) Excludes powdered shampoo. (c) Includes wall ovens but excludes cooking tops and portable units. (d) Upright and elevated (with ovens) including wall ovens, but excluding hotplates, stovettes, etc. (e) Includes ammonium phosphate.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS:  
AUSTRALIA—continued

Commodity code	Article		1974-75	1975-76	1976-77p
	Timber—				
	From native logs—				
331.01-07	Hardwood, etc.	'000 m <sup>3</sup>	2,407	2,372	
331.09-19	Softwood	"	823	856	3,468
331.23, 25	From imported logs	"	2	n.a.	n.y.a.
661.21, 23	Toasters, electric (domestic)	No.	613,606	592,344	625,816
183.21-28	Tobacco	'000 kg	2,430	2,101	n.y.a.
094.51	Tomato juice	'000 litres	14,208	7,229	7,497
094.53	Tomato paste and puree	"	n.a.	n.a.	n.y.a.
373.58-64	Towels	'000 doz	779	784	813
671.51-59	Toilet cisterns	No.	444,590	494,273	546,334
683.03-11	Transformers, chokes and ballasts, for distribution of power and light, etc.	"	17,181	15,185	17,647
863.01	Umbrellas, street and general purpose	'000	925	666	n.y.a.
773.90-97					
774.01-18, 36-49, 61-73, 91-97	Underwear (men's, women's, children's)	'000 doz	6,797	6,271	n.y.a.
692.02, 04	Vacuum cleaners (domestic)	'000	250	251	195
	Wash basins—				
671.37	Earthenware	"	279	276	295
693.02-18	Washing machines, household, electric	"	333	351	299
	Weatherboards—				
332.12	Australian timber	m <sup>3</sup>	32,858	33,457	n.y.a.
332.14	Imported timber	"	1,376	2,317	n.y.a.
152.14	Wheatmeal for stock feed	'000 tonnes	636	539	n.y.a.
519.01	Wheelbarrows (metal)	No.	159,099	182,794	n.y.a.
	Wine, beverage—				
172.42	Fortified	'000 litres	66,022	68,586	n.y.a.
172.46	Unfortified	"	158,078	164,014	n.y.a.
341.31-45	Wood pulp (air dried)	'000 tonnes	577	555	597
242.07-11	Wool, scoured or carbonised	tonnes	52,899	69,272	75,273
242.33, 35	Wool tops, pure	'000 kg	8,413	15,416	16,532
	Yarn (including mixtures)—				
364.11-50	Cotton	"	23,492	24,486	20,735
363.47-75	Woollen	"	13,837	16,247	13,864
363.17-31	Wool worsted	"	4,569	6,131	5,467
365.38-65	Rayon and acetate, spun	"	1,391	2,321	n.y.a.
365.90, 366.03, 04, 16, 29, 30, 42, 55, 56, 88, 96, 97	Synthetic (non-cellulosic) fibres spun	"	11,271	15,033	12,686
457.04	Zinc, refined (a)	'000 tonnes	243	205	262

(a) Primary origin only includes small quantities of zinc dust.

## Australian Standard Commodity Classification

The ABS has developed and recently published a new classification manual called the *Australian Standard Commodity Classification* (ASCC) (1207.0) to enable users to compare statistics of commodities produced in Australia with statistics of commodities imported and exported.

The first edition of the ASCC manual, which relates to the year 1975-76, links production, import and export items at their most detailed level of comparability, in the form of standard (ASCC) commodity items. In a large number of cases, however, due to the differences between production, imports and export items, comparability is only achieved at fairly broad aggregate levels. In the ASCC, commodities are grouped under industries (as defined in the Australian Standard Industrial Classification (ASIC)) in which they are typically produced. The first edition of the ASCC only covers commodities originating in manufacturing industries.

Considerable further development will take place over the coming years to improve the alignment between production, import and export items in the ASCC.

In 1979 the ABS will be publishing a new statistical bulletin containing comparable commodity statistics of Australian production, imports and exports based on the ASCC (standard) items contained in the ASCC manual.

Additionally, the introduction of the ASCC will affect the publication of traditional manufacturing and overseas trade commodity statistics in those instances where detailed commodity items are

being combined either for confidentiality reasons or for the publication of more summary commodity statistics. In these instances the commodity groupings will, where appropriate, reflect the classification requirements embodied in the ASCC. This will be particularly relevant in the case of manufacturing commodity statistics.

### **Enterprise and Industry Concentration Statistics**

Industry statistics shown earlier in this chapter relate to *establishments*. Statistics are also available from the 1968-69 Economic Censuses for *enterprises* engaged in manufacturing industry. A description of the statistics and broad summary tables are given in Year Book No. 61, pages 1077-81.

Similarly, *industry concentration* statistics have been published for 1968-69 and 1972-73. These aim to show the extent to which individual enterprise groups dominate particular industries. A description and summary tables of these statistics are given in Year Book No. 61, pages 1081-4 for 1968-69, and the publication *Manufacturing Census, Industry Concentration Statistics, Australia* (8207.0) for 1972-73.

### **Foreign Ownership and Control in Manufacturing Industry**

Summary information on foreign ownership and control in manufacturing industry is shown in Chapter 24. More detailed statistics are available in *Foreign Control in Manufacturing Industry, Study of Large Enterprise Groups, 1972-73 (Advance Release)* (5314.0), *Foreign Control in Manufacturing Industry, Study of Large Enterprise Groups, 1972-73* (5315.0), *Foreign Ownership and Control in Manufacturing Industry, 1972-73 (Advance Release)* (5321.0) and *Foreign Ownership and Control in Manufacturing Industry, 1972-73* (5322.0).

## **INTERNAL TRADE**

### **Wholesale Trade**

For summary tables showing final figures from the 1968-69 census of Wholesale Trade see Year Book No. 61, pages 1070-2. Further and more detailed statistics are included in separate bulletins published by Central and State offices of ABS.

### **Retail Trade**

#### **Retail census**

The definition of retail trade, for the purpose of the most recent retail census which was taken for the year ended 30 June 1974, is the resale of new and used goods to final consumers for personal and household consumption. For information and detailed tables relating to the 1973-74 Retail Census, reference should be made to Year Book No. 61, pages 1072-6, and census bulletins *Census of Retail Establishments and Selected Service Establishments 1973-74—Final Bulletins* (8614.0 to 8619.0, 8620.0 and 8621.0). Summary of operations details of establishments classified by industry group for Australia for 1973-74 are set out in the following table.

**RETAIL ESTABLISHMENTS AND SELECTED SERVICE ESTABLISHMENTS: SUMMARY OF OPERATIONS, BY INDUSTRY GROUP, 1973-74**

Industry group	Number of establishments at 30 June 1974	Employment at end of June 1974 (a)			Wages and salaries (b)	Retail sales	Whole-sale sales	Other operating revenue	Turn-over
		Males	Females	Persons					
<b>RETAIL ESTABLISHMENTS</b>									
	No.	No.	No.	No.	\$m	\$m	\$m	\$m	\$m
Department variety and general stores	1,672	36,721	85,582	122,303	407.2	2,399.8	85.0	52.1	2,536.9
Food stores	47,957	99,692	127,582	227,274	429.0	5,073.8	25.1	34.5	5,133.5
Clothing, fabrics and furniture stores	19,334	30,308	57,170	87,478	239.2	2,076.1	7.5	10.0	2,093.6
Household appliance and hardware stores	9,734	26,625	20,044	46,669	151.5	1,110.0	47.2	129.2	1,286.4
Motor vehicle dealers, petrol and tyre retailers	28,170	155,807	36,445	192,252	681.6	5,340.0	1,222.5	915.9	7,478.4
Other retailers	20,139	30,436	48,147	78,583	171.2	1,461.1	13.4	26.7	1,501.2
<b>Total retail establishments</b>	<b>127,006</b>	<b>379,589</b>	<b>374,970</b>	<b>754,559</b>	<b>2,079.7</b>	<b>17,460.9</b>	<b>1,400.7</b>	<b>1,168.4</b>	<b>20,030.1</b>
<b>SELECTED SERVICE ESTABLISHMENTS</b>									
Restaurants and licensed hotels	11,478	63,364	88,871	152,235	416.9	1,290.9	1.7	625.1	1,917.6
Licensed clubs	3,287	33,526	18,186	51,712	185.6	310.9	0.8	348.4	660.0
Hairdressing and beauty salons	9,349	5,896	20,562	26,458	46.7	8.0	—	117.9	125.9
<b>Total selected service establishments</b>	<b>24,114</b>	<b>102,786</b>	<b>127,619</b>	<b>230,405</b>	<b>649.2</b>	<b>1,609.8</b>	<b>2.5</b>	<b>1,091.3</b>	<b>2,703.6</b>
<b>Total retail and selected service establishments</b>	<b>151,120</b>	<b>482,375</b>	<b>502,589</b>	<b>984,964</b>	<b>2,729.0</b>	<b>19,070.7</b>	<b>1,403.2</b>	<b>2,259.8</b>	<b>22,733.7</b>

(a) At end of June; includes working proprietors but excludes unpaid helpers working at least 15 hours during the week. (b) Excludes drawings by working proprietors.

**Retail surveys**

In intercensal periods, estimates of the value of retail sales by broad commodity groups are obtained quarterly by means of sample surveys for each State and Australia.

The following table shows the value of retail sales of goods in each of the commodity groups specified. The figures have been obtained from a sample based on the 1973-74 Retail Census. More detailed information concerning the quarterly surveys of retail trade is contained in the quarterly publication *Retail Sales of Goods* (8503.0).

**VALUE OF RETAIL SALES: COMMODITY GROUPS (a)**  
 (\$ million)

Commodity group	1975-76	1976-77	1977-78
Groceries	3,156.7	3,711.5	4,273.4
Butchers' meat	1,114.0	1,269.4	1,417.9
Other food (b)	1,857.3	2,082.1	2,331.1
<i>Total, food and groceries</i>	<i>6,128.0</i>	<i>7,063.0</i>	<i>8,022.4</i>
Beer, wine and spirits	2,534.9	2,840.6	3,123.7
Clothing and drapery	2,925.9	3,241.3	3,584.2
Footwear	453.3	508.1	573.0
Hardware, china and glassware(c)	768.4	838.2	959.6
Electrical goods(d)	1,742.9	1,929.9	1,888.0
Furniture and floor coverings	1,088.5	1,211.3	1,294.6
Chemists' goods	1,053.5	1,138.1	1,232.0
Newspapers, books and stationery	686.3	773.2	861.2
Other goods(e)	1,663.5	1,832.1	2,036.3
<b>Total (excluding motor vehicles, etc.)</b>	<b>19,045.2</b>	<b>21,375.8</b>	<b>23,575.0</b>

(a) Excludes Northern Territory and Australian Capital Territory. (b) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, and wrapped lunches. (c) Excludes basic building materials, builders' hardware and supplies such as tools of trade, paint, etc. (d) Includes radios, television and accessories, musical instruments, domestic refrigerators, etc. (e) Includes tobacco, cigarettes, etc., sporting goods, etc., but excludes grain and produce and business machines.

**Retail sales of goods at constant prices**

The following table shows series of the value of retail sales of goods at constant prices. The scope of the series at average 1968-69 prices is identical to that of the series at current prices based on the

1968-69 Retail Census, while the scope of the series at average 1974-75 prices is identical to that of the series at current prices based on the 1973-74 Retail Census.

A detailed description of the nature of these estimates at constant prices, and of the sources and methods used in preparing them, can be found in the Explanatory Notes of the March 1978 issue of *Retail Sales of Goods* (8503.0).

**VALUE OF RETAIL SALES OF GOODS AT CONSTANT PRICES BY BROAD COMMODITY GROUPS<sup>(a)</sup>**  
(**\$ million**)

<i>Broad commodity group</i>	<i>At average 1968-69 prices<sup>(b)</sup></i>		<i>At average 1974-75 prices<sup>(c)</sup></i>			
	<i>1973-74</i>	<i>1974-75</i>	<i>1974-75</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>
Food and drink . . . . .	4,907.9	5,023.0	7,429.6	7,621.0	7,917.4	8,184.0
Clothing, hardware, electrical and furniture . . . . .	4,040.2	4,115.1	5,984.9	6,217.3	6,202.6	6,110.8
Other . . . . .	1,801.2	1,901.2	2,925.2	2,929.9	2,964.1	3,047.3
<b>Total (excluding motor vehicles, parts, petrol, etc.) . . . . .</b>	<b>10,749.3</b>	<b>11,039.3</b>	<b>16,339.7</b>	<b>16,768.2</b>	<b>17,084.1</b>	<b>17,342.1</b>

(a) Excludes Northern Territory and Australian Capital Territory.  
1973-74 Retail Census.

(b) Series based on 1968-69 Retail Census.

(c) Series based on