

## CHAPTER 17

# MANUFACTURING AND INTERNAL TRADE

## MANUFACTURING

### Introduction

#### History

An historical summary of the development of 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).

#### *Industries Assistance Commission and Temporary Assistance Authority*

Both of these authorities are described in Chapter 24, Overseas Transactions.

#### 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 subjects 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 metrology, mechanical testing, electrical testing, optics and photometry, non-destructive testing, heat and temperature measurement, chemical testing, biological testing, and acoustic and vibration measurement.

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 and Perth. The Australian Design Index, published by the Council in five illustrated volumes covering specific product fields, provides details of articles which have received the *IDCA Design Label*. These products are also displayed in Australian Design Centres and in other exhibits arranged by the Council.

Regular contact is maintained with senior executives of manufacturing companies, departmental officers and designers through the Design Delegate program of lectures and information. Inquiries 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.

Publications include a monthly bulletin, *Design Report*. The Council's national office 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(a), 1901 TO 1967-68

Year	Factories	Employment(b)	Salaries and wages paid(c)	Value of—		Production (d)	Land and buildings (e)	Plant and machinery (e)
				Materials and fuel used	Output			
	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 433. 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 economic censuses of Manufacturing, Mining and Retail Trade previously conducted in Australia were originally designed and subsequently developed primarily to provide statistics for particular industries on a basis which would best suit the requirements of users interested in statistics of those industries. More recently there has been a growth of interest in statistics describing activity in the economy as a whole—reflected, for example, in the development of employment and earnings statistics, surveys of capital expenditure and stocks and the whole field of national accounts statistics. For such purposes statistics derived from economic censuses in the past have had serious limitations, despite the fact that they covered a broad area of the whole economy. Because of the special-purpose nature of each of the censuses, there were no common definitions of data, there was no common system of reporting units, and, as a standard industrial classification was not used for these censuses, industry boundaries were not defined in ways which would avoid overlapping or gaps occurring between the industrial sectors covered. For these reasons, direct aggregation and comparison of statistics from different censuses were not possible.

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.

For the integration of the various censuses it was necessary to undertake three major developments:

- (a) The census units for which the statistics were to be collected (factories, mines, shops, etc.) had to be defined and identified in consistent ways and recorded in a central register, together with identifying data about the businesses owning and operating them;

- (b) A standard industrial classification had to be adopted so that the census units could be classified in consistent ways and to enable the boundaries of the various economic censuses to be determined without gaps or overlapping between them;
- (c) In order to bring the items of data to a consistent basis of definition in all censuses, it was necessary to revise all the forms used in previous 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. Previously, the manufacturing establishment covered only a specified manufacturing activity primary to one class of industry. It now covers, in addition, subject to certain exceptions mentioned below:

- (a) any other manufacturing activity (i.e. production of goods primary to another class of industry);
- (b) any selling and distribution activities connected with the products manufactured;
- (c) any non-manufacturing activity (e.g. merchandising of goods not manufactured by the establishment; extraction of raw materials for use by the establishment).

The exceptions, in general, relate to locations where the subsidiary activities (in terms of gross value) exceed a specified value (currently \$1.8 million); these locations are treated for statistical purposes as two or more establishments corresponding to the various kinds of activity carried on.

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. The main changes in scope in the manufacturing census, apart from providing for a separate census for electricity and gas, are as follows:

- (a) Establishments mainly engaged in the following activities, previously included in manufacturing censuses, are excluded as from 1968-69: motor vehicle repairing but not engine reconditioning; repairing and servicing of agricultural machinery; dry-cleaning, laundering and clothes dyeing services; watch, clock and jewellery repairing; boot and shoe repairing; tyre retreading and repairing; custom dressmaking and tailoring (including clothing repairs and alterations); installing and repairing of blinds and awnings, making-up and installing curtains; and repairing domestic appliances. Establishments mainly engaged in these activities are now included in the periodic Retail Trade or Wholesale Trade Censuses.
- (b) Establishments mainly engaged in non-manufacturing activities but which also carry out, as a subsidiary activity, some manufacturing activities and which, in respect of those manufacturing activities, were previously included in the manufacturing census are excluded as from 1968-69 unless such establishments have manufacturing activities in excess of a specified value (currently \$1.8 million).
- (c) Establishments mainly engaged in the following activities, previously excluded in most States from manufacturing censuses, are included as from 1968-69: slaughtering, milk treating, and publishing.

An indication of the effect of the changes referred to above can be gained from the following comparison. 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 the establishments referred to in (c), in the paragraph above. (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 (c) 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.

The third step in integrating the censuses, whereby the items of data on the census forms were standardised for all census sectors, 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. A detailed comparison of the method of derivation is shown in the following table.

<i>Value of production 1967-68</i>	<i>Value added as from 1968-69</i>
Selling value at works, exclusive of all delivery costs or charges, of goods manufactured, treated or worked up during the year, including by-products, plus Value of other work done, . . . such as repairing and making up for customers, etc.	Sales and transfers out (to other establishments of the enterprise), of goods manufactured by the establishment, plus Sales and transfers out of goods not manufactured by the establishment, plus Bounties and subsidies on production, plus All other operating income, plus Capital work done for own use, or for rental or lease
<i>Equals: Value of output</i>	<i>Equals: Value of turnover</i>
<i>Less—</i> Value of materials used Power, fuel and light used Water used Lubricating oils used Repairs, etc. Containers used	<i>Plus: Closing stocks</i> <i>Less: Opening stocks</i> <i>Less—</i> Purchases and transfers in of materials, electricity, fuels, containers, etc. Purchases and transfers in of goods for resale Charges for commission and subcontract work Repair and maintenance expenses Outward freight and cartage, motor vehicle running expenses, sales commission payments
<i>Equals: Value of production</i>	<i>Equals: Value added</i>

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). To provide a link between past and future series, data for the 1974-75 Manufacturing Census are shown separately for manufacturing establishments owned by multi-establishment enterprises, for single establishment manufacturing enterprises with four or more persons employed, and for single establishment manufacturing enterprises with less than four persons employed.

A Census of Manufacturing was not conducted in Australia for the year 1970-71.

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

### Summary of operations

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

### MANUFACTURING ESTABLISHMENTS—SUMMARY OF OPERATIONS, BY INDUSTRY SUB-DIVISION: AUSTRALIA, 1974-75(a) AND 1975-76(a)

Industry sub-division	ASIC code (b)	Number of estab- lish- ments opera- ting at end of June	Persons employed(c)			Wages and salaries \$m	Turn- over \$m	Stocks at 30 June		Pur- chases, trans- fers in and selected ex- penses \$m	Value added \$m	Fixed capital expen- diture(d) \$m
			Males No.	Females No.	Total No.			Opening \$m	Closing \$m			
1974-75												
Food, beverages and tobacco	21-2	3,489	142,672	54,194	196,866	1,315	7,689	814	996	5,220	2,651	282
Textiles	23	682	24,422	18,809	43,231	265	1,038	274	240	596	409	36
Clothing and footwear	24	2,555	20,564	69,731	90,295	455	1,459	260	247	749	697	14
Wood, wood products and furniture	25	3,895	66,775	11,334	78,109	462	1,736	218	253	927	845	75
Paper and paper products, printing	26	2,600	75,278	27,792	103,070	736	2,443	287	392	1,269	1,279	97
Chemical, petroleum, and coal products	27	879	46,444	17,505	63,949	512	2,698	407	589	1,706	1,173	136
Non-metallic mineral products	28	1,488	45,698	5,273	50,971	394	1,505	162	215	790	768	109
Basic metal products	29	546	90,712	7,555	98,267	829	4,509	643	893	3,121	1,638	284
Fabricated metal products	31	3,916	87,874	22,278	110,152	727	2,548	401	469	1,373	1,243	82
Transport equipment	32	1,227	129,277	18,151	147,428	1,068	3,599	592	764	2,160	1,611	134
Other machinery and equipment	33	3,693	142,608	51,514	194,122	1,321	4,274	922	1,167	2,384	2,135	129
Miscellaneous manufacturing	34	2,003	44,572	24,205	68,777	450	1,636	262	317	901	790	68
Total manufacturing		26,973	916,896	328,341	1,245,237	8,533	35,134	5,241	6,543	21,196	15,240	1,446
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
Total manufacturing		27,507	888,523	311,917	1,200,440	9,472	39,485	6,581	7,023	23,007	16,921	1,452

(a) See, Manufacturing industry statistics from 1968-69, page 425.

(c) Average over whole year. Includes working proprietors.

(b) Australian Standard Industrial Classification.

(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, 1975-76, AND  
TOTAL MANUFACTURING, 1973-74 AND 1974-75(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	46,548	42,879	27,654	12,606	10,096	4,195	288	439	144,705
Textiles	23	7,041	13,762	685	1,446	390	1,277	..	..	24,601
Clothing and footwear	24	6,136	11,830	878	1,157	299	83	..	..	20,383
Wood, wood products and furniture	25	21,886	16,301	9,877	7,674	6,624	4,233	78	367	67,040
Paper and paper products, printing	26	26,207	23,944	6,939	5,329	3,948	4,520	106	1,022	72,015
Chemical, petroleum and coal products	27	20,069	15,061	2,849	2,244	2,715	1,228	..	..	44,166
Non-metallic mineral products	28	16,507	11,787	5,351	3,849	4,366	1,001	..	..	43,288
Basic metal products	29	51,099	11,353	5,778	9,124	5,856	3,070	953	290	87,096
Fabricated metal products	31	30,340	28,495	9,073	6,983	6,928	1,229	136	366	83,550
Transport equipment	32	35,344	51,001	10,651	22,206	5,053	977	..	..	125,327
Other machinery and equipment	33	55,635	46,682	9,695	13,881	6,046	763	160	176	132,935
Miscellaneous manufacturing	34	16,510	18,662	2,859	3,773	1,354	251	..	..	43,417
Total manufacturing	1975-76	333,322	291,757	92,289	90,272	53,675	22,827	1,721	2,660	888,523
	1974-75	348,638	302,234	90,202	94,275	53,207	23,779	1,788	2,773	916,896
	1973-74	371,364	320,921	93,777	98,721	54,402	25,203	2,114	2,836	969,338
<b>FEMALES EMPLOYED</b>										
Food, beverages and tobacco	21-2	16,889	16,293	7,481	5,308	4,208	1,764	88	163	52,194
Textiles	23	5,992	10,049	691	1,105	261	1,277	..	..	19,375
Clothing and footwear	24	22,974	37,611	3,530	3,122	1,245	158	..	..	68,640
Wood, wood products and furniture	25	3,904	3,000	1,649	1,266	1,208	341	15	45	11,428
Paper and paper products, printing	26	10,450	8,583	2,264	1,895	1,455	691	33	503	25,874
Chemical, petroleum and coal products	27	9,471	5,178	534	477	361	106	..	..	16,127
Non-metallic mineral products	28	2,122	1,737	327	364	405	84	..	..	5,079
Basic metal products	29	3,723	1,356	320	854	347	104	122	33	6,819
Fabricated metal products	31	8,457	7,494	2,054	1,863	1,098	188	33	84	21,271
Transport equipment	32	4,078	9,390	646	2,441	235	122	..	..	16,916
Other machinery and equipment	33	22,099	15,702	1,261	5,207	871	50	24	46	45,233
Miscellaneous manufacturing	34	10,246	8,981	1,179	1,931	560	41	..	..	22,961
Total manufacturing	1975-76	120,405	125,374	21,936	25,833	12,254	4,926	315	874	311,917
	1974-75	129,544	130,617	22,220	26,966	12,645	5,161	289	899	328,341
	1973-74	144,857	148,917	24,783	29,449	13,482	6,324	336	893	369,041
<b>PERSONS EMPLOYED</b>										
Food, beverages and tobacco	21-2	63,437	59,172	35,135	17,914	14,304	5,959	376	602	196,899
Textiles	23	13,033	23,811	1,376	2,551	651	2,554	..	..	43,976
Clothing and footwear	24	29,110	49,441	4,408	4,279	1,544	241	..	..	89,023
Wood, wood products and furniture	25	25,790	19,301	11,526	8,940	7,832	4,574	93	412	78,468
Paper and paper products, printing	26	36,657	32,527	9,203	7,224	5,403	5,211	139	1,525	97,889
Chemical, petroleum and coal products	27	29,540	20,239	3,383	2,721	3,076	1,334	..	..	60,293
Non-metallic mineral products	28	18,629	13,524	5,678	4,213	4,771	1,085	1,075	323	48,367
Basic metal products	29	54,822	12,709	6,098	9,978	6,203	3,174	..	..	93,915
Fabricated metal products	31	38,797	35,989	11,127	8,846	8,026	1,417	169	450	104,821
Transport equipment	32	39,422	60,391	11,297	24,647	5,288	1,099	..	..	142,243
Other machinery and equipment	33	77,734	62,384	10,956	19,088	6,917	813	184	222	178,168
Miscellaneous manufacturing	34	26,756	27,643	4,038	5,704	1,914	292	..	..	66,378
Total manufacturing	1975-76	453,727	417,131	114,225	116,105	65,929	27,753	2,036	3,534	1,200,440
	1974-75	478,182	432,851	112,422	121,241	65,852	28,940	2,077	3,672	1,245,237
	1973-74	516,221	469,838	118,560	128,170	67,884	31,527	2,450	3,729	1,338,379

(a) See 'Manufacturing industry statistics from 1968-69', page 424.

(b) Australian Standard Industrial Classification.



MULTI-ESTABLISHMENT ENTERPRISES AND SINGLE ESTABLISHMENT 431  
MANUFACTURING ENTERPRISES

### 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, 1975-76, AND TOTAL MANUFACTURING, 1973-74 AND 1974-75**  
(\$ million)

Industry sub-division	ASIC code(a)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Food, beverages and tobacco	21-2	521	472	280	129	105	42	3	5	1,557
Textiles	23	97	177	9	18	5	17	..	..	322
Clothing and footwear	24	179	309	25	25	8	1	..	..	547
Wood, wood products and furniture	25	182	132	75	62	51	30	1	3	535
Paper and paper products, printing	26	309	273	69	58	41	44	1	12	807
Chemical, petroleum and coal products	27	276	193	33	25	30	12	..	..	569
Non-metallic mineral products	28	175	124	49	35	41	9	12	3	438
Basic metal products	29	488	120	60	84	64	30	1	4	856
Fabricated metal products	31	302	277	78	62	59	9	1	4	793
Transport equipment	32	328	494	87	196	41	8	..	..	1,154
Other machinery and equipment	33	616	495	82	140	52	6	2	2	1,394
Miscellaneous manufacturing	34	198	221	28	39	12	2	..	..	501
Total manufacturing	1975-76	3,670	3,287	874	872	509	211	21	29	9,472
	1974-75	3,365	2,961	734	797	434	195	19	27	8,533
	1973-74	2,842	2,524	596	665	347	161	18	22	7,176

(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,  
1975-76(a) AND TOTAL MANUFACTURING, 1973-74 AND 1974-75(a)**  
(\$ million)

Industry sub-division	ASIC code(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Food, beverages and tobacco	21-2	2,579	2,767	1,752	637	536	256	14	16	8,557
Textiles	23	419	674	36	73	19	57	..	..	1,278
Clothing and footwear	24	602	942	64	72	18	3	..	..	1,701
Wood, wood products and furniture	25	684	521	258	258	175	143	3	11	2,055
Paper and paper products, printing	26	1,072	939	230	211	119	169	3	29	2,772
Chemical, petroleum and coal products	27	1,524	904	315	122	203	55	..	..	3,124
Non-metallic mineral products	28	630	487	240	163	185	41	97	22	1,778
Basic metal products	29	2,213	577	586	372	612	223	6	13	4,671
Fabricated metal products	31	1,057	959	312	249	238	37	..	..	2,870
Transport equipment	32	973	1,909	371	718	104	22	..	..	4,098
Other machinery and equipment	33	2,091	1,696	291	450	174	15	4	4	4,725
Miscellaneous manufacturing	34	713	845	108	133	47	8	..	..	1,855
Total manufacturing	1975-76	14,555	13,222	4,564	3,461	2,431	1,030	127	96	39,485
	1974-75	13,238	11,730	4,034	3,003	2,032	908	95	95	35,134
	1973-74	11,933	10,669	3,261	2,662	1,741	818	87	76	31,247

(a) See 'Manufacturing industry statistics from 1968-69', page 425.

(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, 1975-76, AND TOTAL  
MANUFACTURING, 1973-74 AND 1974-75**  
(\$ million)

Industry sub-division	ASIC code(a)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Food, beverages and tobacco	21-2	1,669	1,808	1,137	401	345	158	10	8	5,537
Textiles	23	259	391	22	50	11	30	..	..	763
Clothing and footwear	24	332	495	29	34	7	2	..	..	898
Wood, wood products and furniture	25	368	286	138	151	87	72	2	6	1,110
Paper and paper products, printing	26	528	467	102	108	55	85	..	7	1,352
Chemical, petroleum and coal products	27	882	514	234	70	119	31	..	..	1,851
Non-metallic mineral products	28	345	239	128	88	101	21	67	15	941
Basic metal products	29	1,432	378	434	251	515	139	3	6	3,210
Fabricated metal products	31	560	497	171	141	135	20	..	..	1,532
Transport equipment	32	495	1,093	235	141	51	8	..	..	2,297
Other machinery and equipment	33	1,085	938	161	238	90	7	1	2	2,521
Miscellaneous manufacturing	34	377	460	59	66	27	4	..	..	994
Total manufacturing	1975-76	8,331	7,565	2,851	2,012	1,543	577	83	44	23,007
	1974-75	7,815	7,024	2,542	1,807	1,332	560	70	47	21,196
	1973-74	7,135	6,486	2,100	1,651	1,116	495	46	39	19,067

(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, 1975-76(a) AND TOTAL MANUFACTURING, 1973-74 AND 1974-75(a)**  
(\$ million)

Industry sub-division	ASIC code(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<b>OPENING STOCKS AT 30 JUNE 1975</b>										
Food, beverages and tobacco	21-2	320	382	100	132	33	33	1	1	1,003
Textiles	23	80	126	6	11	2	14	..	..	240
Clothing and footwear	24	85	130	12	13	2	..	..	..	243
Wood, wood products and furniture	25	79	64	34	35	20	27	..	1	260
Paper and paper products, printing	26	155	138	32	23	14	30	..	3	395
Chemical, petroleum and coal products	27	312	189	37	17	35	11	..	..	601
Non-metallic mineral products	28	97	52	27	15	20	4	32	2	216
Basic metal products	29	451	105	79	87	88	67	..	..	908
Fabricated metal products	31	..	..	..	..	..	..	..	..	..
Transport equipment	32	176	180	43	33	29	7	1	2	471
Other machinery and equipment	33	162	379	65	152	11	5	..	1	775
Miscellaneous manufacturing	34	494	475	55	99	37	2	..	1	1,163
Total manufacturing		2,532	2,364	504	638	298	201	34	9	6,581
<b>CLOSING STOCKS AT 30 JUNE 1976</b>										
Food, beverages and tobacco	21-2	324	396	113	149	38	34	1	1	1,057
Textiles	23	89	139	7	14	4	14	..	..	267
Clothing and footwear	24	95	154	14	16	2	..	..	..	282
Wood, wood products and furniture	25	92	72	38	41	24	29	..	1	297
Paper and paper products, printing	26	140	134	28	22	15	24	..	3	367
Chemical, petroleum and coal products	27	316	176	41	16	29	12	..	..	590
Non-metallic mineral products	28	109	57	34	19	24	5	33	2	249
Basic metal products	29	538	130	110	102	123	70	1	2	1,105
Fabricated metal products	31	195	197	45	40	33	6	..	..	520
Transport equipment	32	164	377	75	133	13	3	..	1	768
Other machinery and equipment	33	493	491	68	104	42	3	..	1	1,202
Miscellaneous manufacturing	34	126	149	17	19	7	1	36	10	319
Total manufacturing		2,680	2,473	591	676	354	205	36	10	7,023
Opening stocks	1974-75	2,052	1,919	395	495	218	135	18	9	5,241
	1973-74	1,675	1,353	337	404	191	117	17	6	4,299
Closing stocks	1974-75	2,529	2,344	503	634	297	190	34	10	6,543
	1973-74	2,062	1,915	397	502	224	134	26	8	5,268

(a) See 'Manufacturing industry statistics from 1968-69', page 425.

(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 427.

**MANUFACTURING ESTABLISHMENTS—VALUE ADDED, BY INDUSTRY SUB-DIVISION,  
1975-76, AND TOTAL MANUFACTURING, 1973-74 AND 1974-75**  
(\$ million)

Industry sub-division	ASIC code(a)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Food, beverages and tobacco	21-2	913	973	628	252	195	99	4	8	3,074
Textiles	23	169	296	15	26	8	28	..	..	542
Clothing and footwear	24	281	471	36	41	11	2	..	..	842
Wood, wood products and furniture	25	329	244	125	113	93	72	1	5	982
Paper and paper products, printing	26	529	468	124	103	65	78	2	22	1,391
Chemical, petroleum and coal products	27	645	377	86	51	78	25	..	..	1,262
Non-metallic mineral products	28	298	254	119	78	89	21	..	..	870
Basic metal products	29	867	225	184	136	132	88	32	7	1,658
Fabricated metal products	31	515	479	144	116	107	16	3	7	1,387
Transport equipment	32	481	814	146	285	54	15	..	..	1,795
Other machinery and equipment	33	1,004	775	143	218	90	8	4	3	2,243
Miscellaneous manufacturing	34	340	390	52	65	22	4	..	..	873
<b>Total manufacturing</b>	<b>1975-76</b>	<b>6,371</b>	<b>5,765</b>	<b>1,800</b>	<b>1,486</b>	<b>944</b>	<b>456</b>	<b>46</b>	<b>53</b>	<b>16,921</b>
	<b>1974-75</b>	<b>5,899</b>	<b>5,131</b>	<b>1,600</b>	<b>1,335</b>	<b>780</b>	<b>404</b>	<b>41</b>	<b>49</b>	<b>15,240</b>
	<b>1973-74</b>	<b>5,184</b>	<b>4,546</b>	<b>1,220</b>	<b>1,110</b>	<b>658</b>	<b>340</b>	<b>51</b>	<b>40</b>	<b>13,149</b>

(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 1976(a) BY INDUSTRY SUB-DIVISION, AND  
TOTAL MANUFACTURING 1973-74 AND 1974-75(a)**

Industry sub-division	ASIC code(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Food, beverages and tobacco	21-2	1,054	992	646	384	311	118	14	16	3,535
Textiles	23	247	332	39	38	28	16	..	..	700
Clothing and footwear	24	961	1,219	118	78	57	12	..	..	2,445
Wood, wood products and furniture	25	1,327	1,083	647	337	397	219	9	21	4,040
Paper and paper products, printing	26	1,125	875	232	194	154	46	4	20	2,650
Chemical, petroleum and coal products	27	429	280	62	59	63	20	..	..	913
Non-metallic mineral products	28	541	367	248	147	166	58	19	17	1,557
Basic metal products	29	212	176	59	49	37	11	..	..	550
Fabricated metal products	31	1,553	1,087	469	367	345	80	17	19	3,937
Transport equipment	32	400	427	163	143	137	27	..	..	1,301
Other machinery and equipment	33	1,644	1,299	263	315	231	40	6	13	3,805
Miscellaneous manufacturing	34	836	737	176	176	127	20	..	..	2,074
<b>Total manufacturing</b>	<b>1975-76</b>	<b>10,329</b>	<b>8,874</b>	<b>3,122</b>	<b>2,287</b>	<b>2,053</b>	<b>667</b>	<b>69</b>	<b>106</b>	<b>27,507</b>
	<b>1974-75</b>	<b>10,134</b>	<b>8,924</b>	<b>3,008</b>	<b>2,131</b>	<b>1,974</b>	<b>630</b>	<b>68</b>	<b>104</b>	<b>26,973</b>
	<b>1973-74</b>	<b>13,809</b>	<b>12,070</b>	<b>4,290</b>	<b>2,984</b>	<b>2,818</b>	<b>935</b>	<b>102</b>	<b>135</b>	<b>37,143</b>

(a) See 'Manufacturing industry statistics from 1968-69', page 425. (b) Australian Standard Industrial Classification.

**Electricity and gas establishments**

As mentioned on page 425 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.

**Electricity and gas establishments**

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.

### 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, 1974-75(a) AND 1975-76(a)

1974-75												
Industry sub-division	ASIC code (b)	Number of establish- ments operat- ing at end of June	Persons employed(c)			Wages and salaries	Turn- over	Stocks at 30 June		Pur- chases, transfers in and selected expenses	Value added	Fixed capital expendi- ture(d)
			Males	Females	Total			Opening	Closing			
			No.	No.	No.	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Food, beverages and tobacco	21-2	665	959	483	1,442	3.3	34.8	2.6	2.9	22.6	12.6	1.3
Textiles	23	165	208	133	341	0.7	5.9	0.7	0.7	3.3	2.6	0.1
Clothing and footwear	24	432	365	529	894	2.6	13.4	1.7	1.3	7.0	6.0	0.3
Wood, wood products and furniture	25	2,183	3,397	789	4,186	8.9	57.9	3.6	4.2	28.9	29.7	2.2
Paper and paper products, printing	26	1,065	1,386	741	2,127	6.5	33.2	1.9	2.1	15.6	17.9	0.8
Chemical, petroleum, and coal products	27	251	347	146	493	2.0	11.6	1.5	1.7	7.1	4.7	0.1
Non-metallic mineral products	28	364	589	130	719	2.2	17.5	0.8	0.9	10.9	6.6	0.6
Basic metal products	29	75	148	27	175	0.8	5.0	0.2	0.2	3.1	1.9	0.1
Fabricated metal products	31	1,516	2,483	578	3,061	9.1	53.0	3.8	4.4	27.6	25.9	1.6
Transport equipment	32	446	693	181	874	2.3	15.7	1.5	1.9	8.9	7.2	0.5
Other machinery and equipment	33	1,398	2,133	640	2,773	10.2	48.8	4.1	4.9	24.8	24.8	1.7
Miscellaneous manufacturing	34	1,303	1,763	722	2,485	5.9	37.4	3.9	4.2	19.0	18.7	1.4
<b>Total manufacturing</b>		<b>9,863</b>	<b>14,471</b>	<b>5,099</b>	<b>19,570</b>	<b>54.5</b>	<b>334.3</b>	<b>26.2</b>	<b>29.5</b>	<b>178.9</b>	<b>158.7</b>	<b>10.5</b>
1975-76												
Industry sub-division	ASIC code(b)	Number of establishments operating at end of June	Persons employed(c)			Wages and salaries						
			Males	Females	Total							
			No.	No.	No.	\$m						
Food, beverages and tobacco	21-2	633	942	481	1,423	3.0						
Textiles	23	179	215	152	367	0.9						
Clothing and footwear	24	491	429	587	1,016	2.6						
Wood, wood products and furniture	25	2,265	3,584	795	4,379	9.3						
Paper and paper products, printing	26	1,085	1,436	720	2,156	6.1						
Chemical, petroleum and coal products	27	239	324	135	459	1.7						
Non-metallic mineral products	28	370	586	139	725	2.1						
Basic metal products	29	82	148	26	174	0.6						
Fabricated metal products	31	1,713	2,834	638	3,472	10.0						
Transport equipment	32	473	785	146	931	2.2						
Other machinery and equipment	33	1,417	2,186	631	2,817	9.0						
Miscellaneous manufacturing	34	1,393	1,926	747	2,673	5.4						
<b>Total manufacturing</b>		<b>10,340</b>	<b>15,395</b>	<b>5,197</b>	<b>20,592</b>	<b>52.9</b>						

(a) See 'Manufacturing industry statistics from 1968-69', page 425. (b) Australian Standard Industrial Classification. (c) Including working proprietors. (d) Outlay on fixed tangible assets less disposals.

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	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
Gas . . .	..										
Australian Capital Territory—											
Electricity . . .	1	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
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	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
Gas . . .	2										
Northern Territory—											
Electricity . . .	6	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
Gas . . .	..										
Australian Capital Territory—											
Electricity . . .	1	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
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. (e) Not available for publication. Included in total for Australia.

## Principal factory products

The factory 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* (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		1972-73	1973-74	1974-75	1975-76 <sup>p</sup>	
	Acid (in terms of 100%)—						
401.29	Hydrochloric . . . . .	tonnes	40,719	46,668	43,419	48,046	
401.37	Nitric . . . . .	"	149,092	185,646	(a)	(a)	
401.57	Sulphuric . . . . .	'000 tonnes	2,266	2,434	1,730	1,281	
171.03, 04, 07, 08	Aerated and carbonated waters . . . . .	'000 litres	861,070	884,757	845,418	892,260	
	Air-conditioning equipment—						
657.03, 05	Room air conditioners (refrigerated) . . . . .	No.	29,506	49,229	52,737	31,666	
657.13, 15	Room air coolers (evaporative coolers) . . . . .	"	44,033	105,317	128,728	85,752	
657.21, 22, 23	Package unit air conditioners . . . . .	"	8,623	20,037	21,604	17,901	
	Animal feeds—						
	From wheat—						
152.06	Pollard . . . . .	'000 tonnes	232	242	269	254	
159.11	Poultry pellets and crumbles . . . . .	"	925	1,093	1,111	1,074	
159.15	Poultry mash . . . . .	"	237	239	225	240	
159.21	Other prepared stock and poultry feed . . . . .	"	564	552	501	480	
159.01	Canned dog and cat foods . . . . .	'000 kg	118,312	126,374	133,845	150,867	
159.02	Dog biscuits (whole) . . . . .	"	18,718	19,995	20,000	17,435	
159.03	Other manufactured dog and cat food . . . . .	"	31,646	38,307	40,518	42,813	
475.04, 06, 07, 85	Asbestos cement building sheets (finished) . . . . .	'000 m <sup>2</sup>	38,646	43,723	42,424	39,977	
	Bags, leather, fibre, etc.—						
	Handbags—						
864.31	Leather . . . . .	'000	371	334	273	336	
864.33	Plastic . . . . .	"	1,271	1,279	1,316	1,158	
864.39	Other . . . . .	"	359	346	355	410	
946.01-52	Hessian and calico bags . . . . .	'000 doz	2,085	2,689	1,858	1,121	
864.11-19	Suitcases, kitbags and trunks . . . . .	'000	1,707	1,543	1,290	1,149	
	Bath heaters—						
652.01	Electric . . . . .	No.	7,001	8,679	6,027	8,819	
652.03, 06, 08	Gas . . . . .	"	2,767	2,346	2,586	810	
652.05	Solid fuel . . . . .	"	3,779	3,932	1,978	1,669	
779.02-36	Bathing suits(b) . . . . .	'000 doz	322	345	228	268	
	Baths (exclude infants baths)—						
671.03	Pressed steel—Enamelled . . . . .	'000	153	165	130	142	
671.01, 04, 08	Other (exclude pressed steel, galvanised) . . . . .	"	51	47	45	37	
	Batteries, wet cell type—						
685.13, 15	Auto (S.L.I.) 6 volts . . . . .	'000	372	375	350	314	
685.17, 19	Auto (S.L.I.) 12 volts . . . . .	"	2,089	2,168	2,317	2,468	
685.33, 35	Radio, homelighter, fencer . . . . .	No. of 2 volt cells	47,194	50,233	38,198	26,159	
685.43-65	Traction, plant and other . . . . .	"	140,399	196,132	192,349	163,767	
172.02, 04, 06	Beer (excluding waste beer) . . . . .	mil. litres	1,756	1,868	1,954	1,916	
064.21	Biscuits . . . . .	'000 kg	117,701	120,628	119,707	117,858	
372.52-56, 374.51-57	Blankets, Woollen—Pure and Mixtures . . . . .		'000	1,688	1,700	1,470	2,022
152.02	Bran (wheat) . . . . .	'000 tonnes	126	124	137	130	
172.21	Brandy . . . . .	'000 litre al	3,561	2,401	1,608	1,552	
777.41, 49	Brassieres . . . . .	'000 doz	807	812	596	723	
066.01-31	Breakfast food, cereal (ready to eat) . . . . .	tonnes	57,366	58,780	62,531	67,344	
472.01, 03	Bricks, clay . . . . .	million	1,881	2,050	1,722	1,815	
261.41	Briquettes, brown coal . . . . .	'000 tonnes	1,221	1,164	1,092	946	
051.30, 052.20	Butter—from cream (exclude whey cream) . . . . .	'000 kg	184,081	174,122	155,689	145,916	
773.51, 53, 74, 75, 83	Cardigans, jumpers, etc. . . . .		'000 doz	2,050	2,041	1,739	1,965
474.02	Cement, Portland . . . . .	'000 tonnes	5,097	5,412	5,273	5,100	
053.45	Cheese (non-processed) . . . . .	'000kg	93,445	95,793	98,630	103,315	
	Cloth (including mixtures)—						
373.10-52	Cotton(c) . . . . .	'000 m <sup>2</sup>	46,391	50,361	43,822	44,708	
374.02-16	Rayon and acetate . . . . .	"	22,957	23,082	16,279	16,936	
374.20-34	Synthetic (non-cellulosic) . . . . .	"	85,761	107,278	94,725	102,445	
372.02-50	Wool (excluding blanketing and rug) . . . . .	"	16,424	16,427	10,607	14,297	
435.22	Coke—Metallurgical . . . . .	'000 tonnes	4,926	4,927	5,103	(a)	
475.90	Concrete, ready mixed . . . . .	'000 m <sup>3</sup>	10,403	10,849	10,229	10,333	
	Confectionery—						
104.06-18	Chocolate . . . . .	'000 kg	50,151	55,799	61,690	55,251	
104.21-29	Other . . . . .	"	61,191	60,993	62,740	63,273	
452.04	Copper, refined(d) . . . . .	'000 tonnes	136	149	178	164	

(a) Not available for publication. (b) Includes swim shorts. Excludes infants' and babies' swim-wear. (c) Excludes tyre-cord fabric and towelling. (d) Primary origin only.

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

Commodity code	Article		1972-73	1973-74	1974-75	1975-76p
171.06, 10	Cordials and syrups . . . . .	'000 litres	81,217	92,833	89,203	105,259
777.01-29	Corsets and corselets . . . . .	'000 doz	n.a.	237	197	188
611.01	Cycles (complete) . . . . .	'000	166	193	193	217
804.01	Dentifrices (toothpaste) . . . . .	'000 kg	5,266	5,653	6,410	6,704
499.42	Electricity . . . . .	mil. kWh	64,802	69,743	73,933	76,597
523.76-78	Electrodes for manual welding . . . . .	'000 kg	21,000	24,890	25,704	22,997
502.22-39	Engines, spark and compression ignition(a) . . . . .	'000	430	484	434	342
139.31	Essences, flavouring— Domestic . . . . .	'000 litres	398	393	432	332
139.35	Industrial . . . . .	"	5,409	6,310	4,304	4,609
696.01, 03, 05	Fans, electric (propeller type) . . . . .	No.	457,110	622,993	701,375	541,766
045.01, 51	Fish, canned (including fish loaf) . . . . .	'000 kg	7,136	6,140	9,587	7,273
332.06	Floorboards— Australian timber . . . . .	m <sup>3</sup>	331,516	320,319	280,818	276,536
332.08	Imported timber . . . . .	"	366	286		
841.01-07	Floor coverings— Textile . . . . .	'000 m <sup>2</sup>	25,671	30,747	24,166	31,939
841.31-61, 69	Smooth surface and embossed . . . . .	"	13,057	11,893	9,589	7,366
841.67, 68	Timber parquetry . . . . .	"	224	201	136	121
841.85	Underfelts, underlays, etc.(b) . . . . .	"	16,454	17,116	15,172	11,641
692.21, 23	Floor polishers, electric . . . . .	No.	30,816	30,234	25,277	23,586
068.01	Flour— Self-raising . . . . .	'000 kg	38,496	43,057	46,459	36,767
062.01, 10, 32	Wheaten(c) . . . . .	'000 tonnes	1,134	1,178	1,247	1,242
074.61-69, 79	Fruit juices, natural— Single strength . . . . .	'000 litres	186,769	166,327	179,777	187,762
074.76, 89	Concentrated(d) . . . . .	"	13,939	7,634	11,792	16,269
781.06-29	Gloves, work(e) . . . . .	'000 doz pairs	3,438	3,844	3,859	3,818
127.21	Glucose . . . . .	'000 kg	57,414	59,661	58,807	51,880
832.58, 59	Golf clubs . . . . .	doz	59,725	64,769	42,186	52,324
786.01	Handkerchiefs Men's . . . . .	'000 doz	1,215	1,213	1,156	(k)
786.11	Women's . . . . .	"	1,212	1,395	594	498
651.01, 03	Heaters, room— Solid fuel . . . . .	No.	6,823	5,246	3,842	3,547
651.11-20	Electric radiators and fires . . . . .	'000	801	845	739	648
651.04, 05, 21, 22, 26, 27 } 775	Gas fires and space heaters . . . . .	No.	67,583	74,764	65,591	61,620
	Hosiery— Women's (including panty hose) . . . . .	'000 doz pairs	8,920	(k)	(k)	(k)
	Men's . . . . .	"	1,975	2,172	1,753	2,007
	Children's and infants' . . . . .	"	1,244	1,189	982	1,120
051.61	Ice cream(f) . . . . .	'000 litres	210,387	215,063	206,652	213,275
051.87, 89, 90	Infants', invalids' and health beverages from cows milk(g) . . . . .	'000 kg	26,882	24,247	29,487	29,805
419.31	Ink, printing— News . . . . .	"	10,940	9,486	8,683	6,596
419.43-59	Other . . . . .	"	13,880	(k)	12,424	13,502
442.04, 08	Iron and steel— Pig iron . . . . .	'000 tonnes	7,021	7,444	7,531	7,331
442.80-83	Steel ingots . . . . .	"	7,209	7,504	7,856	7,832
442.28	Blooms and slabs (h) . . . . .	"	6,180	6,467	6,594	(k)
693.51, 61, 63	Irons, electric (hand, domestic) . . . . .	'000	643	675	798	746
076.60	Jams (including conserves, jellies, etc.) . . . . .	'000 kg	34,769	32,745	31,588	31,121
391.04	Lard . . . . .	"	2,736	3,207	3,210	2,466
699.52, 53	Lawn mowers— Petrol, rotary . . . . .	No.	340,656	395,399	353,512	339,560
699.41, 45, 55, 61	Other types(i) . . . . .	"	15,883	21,769	19,340	19,559
453.04	Lead refined(j) . . . . .	'000 tonnes	174	201	171	168

(a) Petrol and diesel. Excludes car, motor cycle, truck, tractor, aero, and marine engines. (b) Needled (or bonded) felts of jute or jute/hair mixtures (for all purposes). (c) Includes wheatmeal for baking and sharps and other flour. (d) Excludes grape must. (e) Excludes fabric liners for dipped gloves but includes moulded or heat-sealed work gloves. (f) Includes ice-cream combined with other confections. Including those aerated milk-based confections which contain 10% or more butterfat. (g) Includes malted milk and milk sugar (lactose). (h) Primary mills output. (i) Petrol cylinder, electric and hand. (j) Includes lead content of lead alloys from primary sources, but excludes lead-silver bullion. (k) Not available for publication.

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

Commodity code	Article		1972-73	1973-74	1974-75	1975-76p
	<b>Leather—</b>					
	<b>Dressed or finished—</b>					
301.43-65	Chrome tanned (including retanned)	'000 m <sup>2</sup>	5,489	5,982	5,059	5,309
301.31-37, 83-89	Vegetable tanned, by weight	'000 kg	3,873	n.a.	n.a.	n.a.
301.67, 69	Vegetable tanned, by measurement	'000 m <sup>2</sup>	191	165	136	141
	<b>Lime—</b>					
275.43, 45	Crushed	tonnes	222,598	239,047	201,483	228,220
479.18	Hydrated	'000 tonnes	147	130	120	110
479.12	Quick	"	448	539	563	564
802.21	Lipstick	'000 kg	42	53	40	41
063.11-21, 31	Malt (excluding extract)	'000 tonnes	339	378	442	403
	<b>Margarine—</b>					
121.01	Table	'000 kg	21,615	25,963	28,763	46,482
121.06, 08	Other	"	55,972	57,120	54,872	56,636
	<b>Mattresses—</b>					
844.22, 25, 27	Inner spring	'000	738	751	652	680
844.42, 45, 47	Rubber	"	34	39	(d)	54
844.52-67	Other	"	477	583	521	504
027.02-77	Meat, canned(a)	'000 kg	51,019	52,903	42,396	43,878
	<b>Meters (domestic)—</b>					
702.01	Electricity consumption	'000	287	312	293	248
703.01	Gas consumption	"	65	66	65	62
703.11	Water consumption	"	167	193	207	189
	<b>Milk, condensed, concentrated and evaporated—</b>					
051.21, 22	Full cream, coffee and milk, sweetened	'000 kg	14,635	13,392	14,113	15,364
051.23, 052.42	Full cream, unsweetened	"	38,293	33,203	34,592	34,350
051.28	Skim	"	11,943	15,878	19,481	22,312
	<b>Milk powder in powdered form—</b>					
051.72, 73	Full cream	"	37,080	36,991	43,126	43,977
051.76-79	Skim	"	117,576	143,789	160,954	149,097
051.81, 82	Buttermilk or mixed skim and buttermilk	"	15,422	16,199	11,516	11,676
053.13-32	Motors, electric (excl. automotive)	'000	3,680	4,658	4,536	4,144
	<b>Motor vehicles, finished—</b>					
581.02-08	Cars	No.	319,561	331,303	319,877	308,537
581.10-16	Station wagons	"	50,017	51,028	57,076	55,289
582.04	Utilities	"	31,411	29,215	32,526	26,031
582.06	Panel vans	"	25,456	26,715	29,147	28,195
582.08-24	Truck and truck-type vehicles	"	5,496	4,786	7,869	7,488
	<b>Motor vehicles, partly finished—</b>					
581.22-28	Cars, station wagons, utilities vans	"	1,729	1,424	1,145	1,489
582.31, 32	Trucks and truck-type vehicles	"	20,256	24,943	25,023	22,834
582.33-46	Motor vehicle safety belts	'000	3,139	2,997	3,009	2,193
589.81-89						
465.16, 17	Nails	"	25,259	27,351	23,295	22,683
	<b>Oatmeal and rolled oats—</b>					
062.61, 63	For porridge, etc.	tonnes	14,419	13,187	15,171	14,863
393						
394	Oils and fats, crude—Vegetable	'000 kg	75,390	75,048	75,139	72,395
	<b>Paints, etc.—</b>					
	<b>Architectural and decorative(b)—</b>					
	<b>Solvent thinned—</b>					
410.01	Primers and undercoats	'000 litres	13,139	12,797	11,935	12,596
410.03, 05, 07	Finishing coats	"	31,957	32,524	29,892	30,831
	<b>Water thinned—</b>					
410.11, 13, 15	Plastic latex	"	27,241	28,908	27,766	32,269
410.17	Other water based	"	377	322	245	254
410.25	Tinting colours (all types) packed for sale or transfer out	"	407	445	522	508
	<b>Paper—</b>					
351.11	Newsprint	'000 tonnes	199	204	196	206
351.18-79	Other	"	548	653	574	536
352.11-33	Paperboard	"	411	444	378	384
336.12	Particle board (resin bonded)	'000 m <sup>2</sup>	(c)	(c)	389	460
975.04, 09, 11	Perambulators, pushers and strollers	'000	197	207	(d)	(d)
479.22	Plaster of paris	'000 tonnes	342	361	339	347
479.32, 33	Plaster sheets—Non-acoustic	'000 m <sup>2</sup>	39,151	44,105	42,372	44,794
334.32, 34, 36, 38	Plywood, 1 mm basis	"	114,173	n.a.	n.a.	78,513

(a) Excludes poultry and baby food. (b) Excludes heavy duty coatings. (c) Not available on this basis.  
(d) Not available for publication.



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

Commodity code	Article		1972-73	1973-74	1974-75	1975-76p
	Preserves—					
	Fruit					
076.01-50	Canned or bottled	'000 kg	272,983	213,112	226,210	175,317
074.01	Pulp and puree—single strength	"	3,876	4,708	4,381	5,598
	Vegetables—					
094.02-47	Canned or bottled	"	105,933	121,940	133,131	123,677
092.02, 06, 10, 19	Quick frozen	"	94,380	93,250	96,235	119,212
	Pyjamas—					
774.20, 22, 27, 29	Men's, youth's and boy's (suits only)	'000 doz	413	414	350	339
774.50-59, 64, 66	Women's, maid's and girl's (incl. night-dresses)	"	814	853	875	778
832.65, 85	Racquet frames (all types)	doz.	19,896	19,952	14,639	12,792
643.01-37	Radio receiving sets (including radiograms)	No.	879,848	n.a.	354,169	117,350
	Records (phonograph)—					
646.35, 65	Single play	'000	5,470	6,050	6,324	5,512
646.37, 41, 67, 71	Extended play	"	862	676	510	328
646.43, 45, 73, 75	Long play	"	15,666	20,212	21,860	21,245
657.32, 41	Refrigerators, domestic, electric and gas	"	236	274	247	230
403.404	Resins, plastics and synthetic, for all purposes	'000 tonnes	339	386	436	379
061.67, 69	Rice, polished, unpolished and broken	'000 kg	216,187	203,536	228,895	298,051
372.70, 72	Rugs	'000	126	133	117	159
374.59						
123.18-25	Sauce	'000 litres	27,392	30,434	34,259	28,142
062.04	Semolina	'000 tonnes	22	25	24	27
773.02-09	Shirts (men's, youths' and boys'), collar attached(a)	'000 doz	700	770	576	595
653.01	Sink heaters, electric	No.	9,509	10,463	7,830	9,838
671.11-18	Sinks, steel and other (standard size)	"	253,758	262,275	(f)	246,472
805.01-13	Soap, for personal toilet use (b)	tonnes	29,069	31,433	29,357	28,464
	Soup—					
122.02, 09	Canned	'000 litres	48,825	51,202	53,268	37,572
122.13, 15	Dry-mix	'000 kg	6,693	9,048	7,086	5,524
127.11-19	Starch (incl. cornflour)	"	143,799	164,787	149,012	130,953
401.53	Stearine (stearic acid)	"	5,620	5,854	4,758	4,602
461.20	Steel, constructional, fabricated	tonnes	651,204	600,138	688,345	730,277
	Stoves, ovens and ranges, domestic cooking—					
661.01-11	Electric(c)	No.	247,460	258,984	257,732	247,148
662.26, 31, 34, 36, 42, 43	Gas(d)	"	92,996	113,649	105,454	108,448
662.01, 03	Solid fuel	"	6,200	5,150	4,781	4,048
	Sugar—					
102.01	Raw	'000 tonnes	2,811	2,531	2,849	2,850
102.12	Refined	"	653	657	709	702
405.36	Sulphate of ammonia	tonnes	227,864	246,014	275,224	223,784
415.07	Superphosphate(e)	'000 tonnes	4,962	5,288	3,092	2,316
803.61	Talcum powder	'000 kg	4,148	4,133	4,409	4,173
	Tallow (including dripping), rendered—					
391.15	Edible	"	94,892	88,655	74,335	87,708
391.24	Inedible	"	278,485	230,331	272,374	309,353
643.49-67	Television sets	No.	396,540	446,988	457,758	533,585
645.51-58	Television picture tubes incorp. new screens	"	355,307	393,287	256,089	45,606
	Tiles, roofing—					
475.30	Concrete	'000 }	222,970	241,386	202,209	219,663
472.12	Terracotta	"				
	Timber—					
	From native logs—					
331.01-07	Hardwood, etc.	'000 m <sup>3</sup>	2,560	2,563	2,407	2,372
331.09-19	Softwood	"	848	773	823	856
331.23, 25	From imported logs	"	5	1	(f)	2
661.21, 23	Toasters, electric (domestic)	No.	453,637	547,591	613,606	592,344
183.21-28	Tobacco	'000 kg	2,671	2,399	2,430	2,101
094.51	Tomato juice	'000 litres	9,786	9,845	14,208	7,229
094.53	Tomato paste and puree	"	9,342	15,367	(f)	(f)
373.58-64	Towels	'000 doz	889	1,020	779	784
671.51-59	Toilet cisterns	No.	463,828	545,346	444,590	494,273
683.03-11	Transformers, chokes and ballasts, for distribution of power and light, etc.	"	11,754	13,397	17,181	15,385
763.01	Umbrellas, street and general purpose	'000	735	896	925	666
773.90-97						
774.01-18, 36-49, 61-73, 91-97	Underwear (men's, women's, children's)	'000 doz	6,884	8,430	6,797	6,289

(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. (f) Not available for publication.

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

<i>Commodity code</i>	<i>Article</i>		<i>1972-73</i>	<i>1973-74</i>	<i>1974-75</i>	<i>1975-76p</i>
692.02,04	Vacuum cleaners (domestic)	'000	209	240	250	251
	Wash basins—					
671.37	Earthenware	"	278	292	279	276
693.02-18	Washing machines, household, electric	"	340	375	333	351
	Weatherboards—					
332.12	Australian timber	m <sup>3</sup>	35,083	34,148	32,858	33,457
332.14	Imported timber	"	5,944	2,291	1,376	2,317
152.14	Wheatmeal for stock feed	'000 tonnes	496	621	636	539
519.01	Wheelbarrows (metal)	No.	169,400	179,841	159,099	182,794
	Wine, beverage—					
172.42	Fortified	'000 litres	54,536	49,747	66,022	68,586
172.46	Unfortified	"	115,738	133,602	158,078	164,014
341.31-45	Wood pulp (air dried)	'000 tonnes	532	617	577	555
242.07-11	Wool, scoured or carbonised	tonnes	59,338	53,687	52,899	69,272
242.33,35	Wool tops, pure	'000 kg	19,735	14,240	8,413	15,416
	Yarn (including mixtures)—					
364.11-50	Cotton	"	28,216	30,996	23,492	24,486
363.47-75	Woollen	"	17,914	17,721	13,837	16,247
363.17-31	Wool worsted	"	8,759	7,219	4,569	6,131
365.38-65	Rayon and acetate, spun	"	5,088	3,610	1,391	2,856
365.90, 366.03, 04, 16, 29, 30, 42, 55, 56, 88, 96, 97	Synthetic (non-cellulosic) fibres spun	"	11,467	15,080	11,271	14,961
457.04	Zinc, refined(a)	'000 tonnes	299	282	243	205

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

### 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					
RETAIL ESTABLISHMENTS									
	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
Total retail establishments . .	127,006	379,589	374,970	754,559	2,079.7	17,460.9	1,400.7	1,168.4	20,030.1
SELECTED SERVICE ESTABLISHMENTS									
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
Total selected service establishments . . . . .	24,114	102,786	127,619	230,405	649.2	1,609.8	2.5	1,091.3	2,703.6
Total retail and selected service establishments . . . . .	151,120	482,375	502,589	984,964	2,729.0	19,070.7	1,403.2	2,259.8	22,733.7

(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)

<i>Commodity group</i>	<i>1974-75</i>	<i>1975-76</i>	<i>1976-77</i>
Groceries . . . . .	2,647.7	3,145.8	3,701.6
Butchers' meat . . . . .	1,040.8	1,107.3	1,268.2
Other food(b) . . . . .	1,633.4	1,844.8	2,092.4
<i>Total, food and groceries . . . . .</i>	<i>5,321.9</i>	<i>6,097.9</i>	<i>7,062.2</i>
Beer, wine and spirits . . . . .	2,075.5	2,525.4	2,853.6
Clothing and drapery . . . . .	2,589.7	2,897.1	3,234.3
Footwear . . . . .	395.6	448.9	505.3
Hardware, china and glassware(c) . . . . .	652.9	758.4	834.8
Electrical goods(d) . . . . .	1,360.1	1,724.2	1,935.6
Furniture and floor coverings . . . . .	925.4	1,067.5	1,192.3
Chemists' goods . . . . .	893.7	1,043.8	1,130.6
Newspapers, books and stationery . . . . .	587.3	679.0	778.2
Other goods(e) . . . . .	1,413.2	1,640.2	1,829.1
<i>Total (excluding motor vehicles, etc.) . . . . .</i>	<i>16,215.3</i>	<i>18,882.4</i>	<i>21,356.0</i>

(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 June 1977 issue of *Retail Sales of Goods* (8503.0).

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

<i>Broad commodity group</i>	<i>At average 1968-69 prices(b)</i>			<i>At average 1974-75 prices(c)</i>		
	<i>1972-73</i>	<i>1973-74</i>	<i>1974-75</i>	<i>1974-75</i>	<i>1975-76</i>	<i>1976-77</i>
Food and drink . . . . .	4,765.4	4,907.9	5,023.0	7,397.4	7,586.3	7,926.2
Clothing, hardware, electrical and furniture . . . . .	3,587.4	4,040.2	4,115.1	5,923.7	6,143.9	6,182.0
Other . . . . .	1,657.9	1,801.2	1,901.2	2,894.2	2,895.1	2,959.4
<i>Total (excluding motor vehicles, parts, petrol, etc.) . . . . .</i>	<i>10,010.7</i>	<i>10,749.3</i>	<i>11,039.3</i>	<i>16,215.3</i>	<i>16,625.3</i>	<i>17,067.6</i>

(a) Excludes Northern Territory and Australian Capital Territory. (b) Series based on 1968-69 Retail Census. (c) Series based on 1973-74 Retail Census.