Australian commodity statistics

2009

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Foreword

Australian commodity statistics is an invaluable reference book for anyone associated with Australia's agricultural and resources industries. It is a comprehensive publication, containing overview and macroeconomic information as well as key statistics on the supply of and demand for each commodity covered. Current data are presented alongside historical data, with some historical series extending for more than 40 years.

In *Australian commodity statistics*, ABARE aims for continuity from year to year. This makes it possible for users to monitor industry developments over time. To ensure that the most relevant package of statistics is provided, the tables are scrutinised each year, with some changes made and new tables added.

Australian commodity statistics can be used in conjunction with ABARE's *Australian commodities*, in which the most important statistics, including forecasts, are updated throughout the year. Both of these publications provide background material for ABARE's National Outlook conference held in Canberra in March each year and at which medium-term outlook assessments are presented for the major agricultural and natural resource based industries.

Other ABARE publications that contain mainly statistical information on commodities and, as such, complement the data presented in *Australian commodity statistics* are *Australian crop report* (quarterly), *Australian mineral statistics* (quarterly), *Australian forest and wood products statistics* (biannual) and *Australian fisheries statistics* (annual).

Phillip Glyde
Executive Director
December 2009

Abbreviations and symbols

lb	pound	454 grams
kg	kilogram	2.20462 pounds
t	tonne	1000 kilograms
kt	kilotonne	1000 tonnes
Mt	megatonne	1 000 000 tonnes
L	litre	1.761 pints
kL	kilolitre	1000 litres
ML	megalitre	1 000 000 litres
GL	gigalitre	1 000 000 000 litres
ha	hectare	2.471 acres
m^3	cubic metre	1.307 cubic yards
c	cent (Australian)	
A$	dollar (Australian)	
$m	million dollars (Australian)	
DM	deutschmark	
ECU	European currency unit	
€	euro	
£	pound sterling	
USc	cent (United States)	
US$	dollar (United States)	
¥	yen	
ct	carat	
bbl	barrel	
mbd	million barrels a day	
cif	cost, insurance and freight	
fas	free alongside ship	
fob	free on board	
fot	free on truck	
nec	not elsewhere classified	

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
AGSO	Australian Geological Survey Organisation (now Geoscience Australia)
AWB Limited	Australian Wheat Board, Australian grain marketing company
BAE	Bureau of Agricultural Economics (now ABARE)
BMR	Bureau of Mineral Resources, Geology and Geophysics
DITR	Department of Industry, Tourism and Resources
DRET	Department of Resources, Energy and Tourism
FAO	Food and Agriculture Organisation of the United Nations

All values and prices are in nominal terms unless stated in table footnotes.
Small discrepancies in totals are generally caused by rounding.

0 is used to denote nil or a negligible amount.

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To assist users of *Australian commodity statistics*, a 'where to find' list of commonly used or difficult to find general items is included at the back of this report.

APEC – Asia Pacific Economic Cooperation

Founding members (1989)

Australia
Brunei Darussalam
Canada
Indonesia
Japan
Republic of Korea
Malaysia
New Zealand
Philippines
Singapore
Thailand
United States

First enlargement (1991)

Peoples Republic of China
Hong Kong, China
Chinese Taipei

Second enlargement (1993)

Mexico
Papua New Guinea

Third enlargement (1994)

Chile

Forth enlargement (1998)

Peru
Russian Federation
Viet Nam

ASEAN – Association of South East Asian Nations

Brunei Darussalam
Cambodia
Indonesia
Laos
Malaysia
Myanmar
Philippines
Singapore
Thailand
Viet Nam

European Union

Founding members (1957)

- Belgium
- France
- Germany
- Italy
- Luxembourg
- Netherlands

First enlargement (1973)

- Denmark
- Ireland
- United Kingdom

Second enlargement (1981)

- Greece

Third enlargement (1986)

- Portugal
- Spain

Fourth enlargement (1995)

- Austria
- Finland
- Sweden

Fifth enlargement (2004)

- Cyprus
- Czech Republic
- Estonia
- Hungary
- Latvia
- Lithuania
- Malta
- Poland
- Slovakia
- Slovenia

Sixth enlargement (2007)

- Bulgaria
- Romania

OPEC – Organisation of the Petroleum Exporting Countries

Algeria	1969
Indonesia	1962
Iran	1960
Iraq	1960
Kuwait	1960
Libya	1962
Nigeria	1971
Qatar	1961
Saudi Arabia	1960
United Arab Emirates	1967
Venezuela	1960

OECD – Organisation for Economic Cooperation and Development

	Deposited instruments of ratification
Canada	10 April 1961
United States	12 April 1961
United Kingdom	2 May 1961
Denmark	30 May 1961
Iceland	5 June 1961
Norway	4 July 1961
Turkey	2 August 1961
Spain	3 August 1961
Portugal	4 August 1961
France	7 August 1961
Ireland	17 August 1961
Belgium	13 September 1961
Germany	27 September 1961
Greece	27 September 1961
Sweden	28 September 1961
Switzerland	28 September 1961
Austria	29 September 1961
Netherlands	13 November 1961
Luxembourg	7 December 1961
Italy	29 March 1962
Japan	28 April 1964
Finland	28 January 1969
Australia	7 June 1971
New Zealand	29 May 1973
Mexico	18 May 1994
Czech Republic	21 December 1995
Hungary	7 May 1996
Poland	22 November 1996
Republic of Korea	12 December 1996
Slovak Republic	14 December 2000

Australian economy

2009

Overview

Macroeconomic indicators

Farm sector

Resource sector

1 Australian gross product, by sector

	Chain volume measures a						Nominal prices
	Rural		Mining				
	Farm	Total b	Mining (excl. services to mining)	Services to mining	Total	Gross domestic product	Gross domestic product
	$m	$m	$m	$m	$m	$m	$m
1974-75	12 641	13 040	22 033	na	25 175	379 421	69 727
1975-76	13 796	14 118	21 371	na	24 527	389 686	81 653
1976-77	14 135	14 495	22 758	na	26 120	403 178	94 131
1977-78	13 642	14 020	23 335	na	26 691	406 790	102 792
1978-79	16 952	17 063	23 936	na	27 271	423 842	116 283
1979-80	14 571	14 965	23 430	na	26 356	437 211	131 987
1980-81	12 465	13 121	23 870	na	26 609	451 903	149 463
1981-82	14 898	15 266	23 679	na	25 782	466 256	172 328
1982-83	11 359	11 928	24 580	na	27 014	455 204	185 442
1983-84	16 895	17 094	26 396	na	29 319	476 501	209 331
1984-85	16 953	17 128	29 818	na	33 406	501 814	231 125
1985-86	16 501	16 666	33 397	4 425	36 912	524 104	255 033
1986-87	16 618	16 768	31 788	3 022	34 606	536 807	279 411
1987-88	15 898	16 206	37 252	3 893	40 796	564 529	318 929
1988-89	16 396	16 750	39 128	4 050	42 826	585 413	361 997
1989-90	17 826	18 079	43 663	3 596	47 122	608 447	397 040
1990-91	18 720	19 010	46 751	3 075	49 800	604 531	408 506
1991-92	17 462	17 890	49 195	2 826	52 077	604 809	416 682
1992-93	18 700	19 030	49 280	3 249	52 596	627 185	437 738
1993-94	19 461	19 672	50 166	3 269	53 514	652 989	459 728
1994-95	15 674	16 351	53 471	3 949	57 349	681 003	486 607
1995-96	19 711	20 151	57 857	4 318	62 117	708 925	518 144
1996-97	21 102	21 659	58 606	4 390	62 946	736 573	545 698
1997-98	20 889	21 540	60 577	4 613	65 169	769 719	577 373
1998-99	23 186	23 734	61 103	4 124	64 952	809 745	607 759
1999-00	24 125	24 960	65 438	3 994	68 920	842 134	645 058
2000-01	25 097	25 971	69 844	4 616	74 172	858 134	689 262
2001-02	25 989	26 789	69 692	4 746	74 222	890 743	735 714
2002-03	19 312	20 496	68 961	5 061	73 997	919 247	781 675
2003-04	25 223	26 280	66 860	4 763	71 521	956 017	841 351
2004-05	26 328	27 362	69 622	5 152	74 793	982 786	897 642
2005-06	27 123	28 147	70 455	5 161	75 613	1012 269	967 454
2006-07	21 899	23 152	75 739	5 677	81 416	1045 674	1 045 674
2007-08	23 616	24 901	77 021	6 363	83 384	1 084 451	1 132 464
2008-09	26 874	28 178	78 953	6 137	85 090	1 095 370	1 201 959

a Reference year is 2006-07. Original series, based on ANZSIC codes. For more information on chain volume measures, see the ABS information paper *Australian National Accounts, Introduction of Chain Volume and Price Indexes,* cat. no. 5248.0, released 19 March 1998. **b** Includes farm, forestry, fishing and hunting. **na** Not available.

Sources: ABS, *Australian National Accounts, National Income, Expenditure and Product,* cat. nos. 5204.0 and 5206.0, Canberra.

2 Australian employment, by sector a

	Rural					Total
	Farm	Total b	Mining	Manufacturing	Other	employment
	'000	'000	'000	'000	'000	'000
1960-61	448	na	na	na	na	na
1961-62	453	na	na	na	na	na
1962-63	443	496	52	na	na	4 320
1963-64	420	486	52	na	na	4 435
1964-65	414	475	53	na	na	4 555
1965-66	409	470	55	na	na	4 705
1966-67	402	461	57	na	na	4 871
1967-68	401	458	60	na	na	4 989
1968-69	396	448	63	na	na	5 112
1969-70	392	452	69	na	na	5 285
1970-71	401	450	76	na	na	5 466
1971-72	393	447	77	na	na	5 540
1972-73	388	434	77	na	na	5 680
1973-74	377	427	78	na	na	5 863
1974-75	368	414	82	na	na	5 856
1975-76	365	401	81	na	na	5 929
1976-77	360	393	81	na	na	5 966
1977-78	351	390	80	na	na	6 018
1978-79	348	388	81	1 205	4 367	6 041
1979-80	364	404	81	1 242	4 460	6 187
1980-81	367	414	88	1 246	4 600	6 348
1981-82	363	409	99	1 249	4 668	6 425
1982-83	374	417	96	1 163	4 645	6 321
1983-84	367	407	98	1 139	4 724	6 368
1984-85	361	403	94	1 139	4 927	6 563
1985-86	386	425	106	1 082	5 227	6 841
1986-87	377	420	101	1 076	5 413	7 010
1987-88	375	416	98	1 108	5 586	7 209
1988-89	384	432	98	1 150	5 846	7 526
1989-90	381	426	104	1 152	6 129	7 811
1990-91	387	432	95	1 093	6 130	7 750
1991-92	367	406	90	1 042	6 073	7 611
1992-93	360	402	87	1 038	6 062	7 589
1993-94	363	406	89	1 046	6 201	7 742
1994-95	357	401	86	1 071	6 487	8 045
1995-96	370	416	85	1 066	6 710	8 277
1996-97	375	419	86	1 080	6 757	8 342
1997-98	378	428	83	1 074	6 878	8 463
1998-99	366	418	80	1 041	7 088	8 627
1999-00	385	436	78	1 057	7 249	8 820
2000-01	373	432	79	1 068	7 425	9 003
2001-02	383	438	81	1 042	7 564	9 124
2002-03	322	370	88	1 073	7 832	9 363
2003-04	317	367	96	1 033	8 015	9 510
2004-05	307	357	105	1 051	8 254	9 767
2005-06	300	348	129	1 025	8 568	10 070
2006-07	306	350	135	1 024	8 843	10 353
2007-08	301	353	145	1 056	9 067	10 621
2008-09	318	358	167	1 017	9 199	10 741

a Average employment over four quarters, based on ANZSIC and equivalent ASIC codes. **b** Includes farm, forestry, fishing and hunting. **na** Not available.
Sources: ABS, *The Labour Force, Australia*, cat. no. 6203.0, Canberra; ABS, *The Labour Force, Australia, 1979 to 1990*, cat. no. 6204.0, Canberra.

3 Contribution to Australian employment, by sector

	Rural				
	Farm	Total a	Mining	Manufacturing	Other
	%	%	%	%	%
1962-63	10.3	11.5	1.2	na	na
1963-64	9.5	11.0	1.2	na	na
1964-65	9.1	10.4	1.2	na	na
1965-66	8.7	10.0	1.2	na	na
1966-67	8.3	9.5	1.2	na	na
1967-68	8.0	9.2	1.2	na	na
1968-69	7.7	8.8	1.2	na	na
1969-70	7.4	8.6	1.3	na	na
1970-71	7.3	8.2	1.4	na	na
1971-72	7.1	8.1	1.4	na	na
1972-73	6.8	7.6	1.4	na	na
1973-74	6.4	7.3	1.3	na	na
1974-75	6.3	7.1	1.4	na	na
1975-76	6.2	6.8	1.4	na	na
1976-77	6.0	6.6	1.4	na	na
1977-78	5.8	6.5	1.3	na	na
1978-79	5.8	6.4	1.3	19.9	72.3
1979-80	5.9	6.5	1.3	20.1	72.1
1980-81	5.8	6.5	1.4	19.6	72.5
1981-82	5.6	6.4	1.5	19.4	72.7
1982-83	5.9	6.6	1.5	18.4	73.5
1983-84	5.8	6.4	1.5	17.9	74.2
1984-85	5.5	6.1	1.4	17.4	75.1
1985-86	5.6	6.2	1.5	15.8	76.4
1986-87	5.4	6.0	1.4	15.3	77.2
1987-88	5.2	5.8	1.4	15.4	77.5
1988-89	5.1	5.7	1.3	15.3	77.7
1989-90	4.9	5.4	1.3	14.8	78.5
1990-91	5.0	5.6	1.2	14.1	79.1
1991-92	4.8	5.3	1.2	13.7	79.8
1992-93	4.7	5.3	1.1	13.7	79.9
1993-94	4.7	5.2	1.2	13.5	80.1
1994-95	4.4	5.0	1.1	13.3	80.6
1995-96	4.5	5.0	1.0	12.9	81.1
1996-97	4.5	5.0	1.0	12.9	81.0
1997-98	4.5	5.1	1.0	12.7	81.3
1998-99	4.2	4.8	0.9	12.1	82.2
1999-00	4.4	4.9	0.9	12.0	82.2
2000-01	4.1	4.8	0.9	11.9	82.5
2001-02	4.2	4.8	0.9	11.4	82.9
2002-03	3.4	4.0	0.9	11.5	83.6
2003-04	3.3	3.9	1.0	10.9	84.3
2004-05	3.1	3.7	1.1	10.8	84.5
2005-06	3.0	3.5	1.3	10.2	85.1
2006-07	3.0	3.4	1.3	9.9	85.4
2007-08	2.8	3.3	1.4	9.9	85.4
2008-09	3.0	3.3	1.6	9.5	85.6

a Includes farm, forestry, fishing and hunting. **na** Not available.

Sources: ABS, *The Labour Force, Australia*, cat. no. 6203.0, Canberra; ABS, *The Labour Force, Australia, 1979 to 1990*, cat. no. 6204.0, Canberra.

4 Value of Australian exports, by sector Balance of payments basis

	Farm a	Forest b	Fisheries c	Resource sector d	Total commodities	Total merchandise	Total goods and services
	$m	$m	$m	$m	$m	$m	$m
1963-64	2 147	16	14	na	na	2 764	3 158
1964-65	1 927	16	18	na	na	2 605	3 050
1965-66	1 849	15	24	na	na	2 655	3 136
1966-67	2 006	23	25	na	na	2 954	3 484
1967-68	1 833	18	34	na	na	2 968	3 574
1968-69	1 868	18	39	na	na	3 242	3 897
1969-70	2 105	20	39	1 268	3 416	3 998	4 765
1970-71	2 103	25	56	1 430	3 594	4 244	5 086
1971-72	2 414	28	73	1 545	4 021	4 746	5 684
1972-73	3 316	55	72	1 809	5 208	6 086	7 016
1973-74	3 504	74	66	2 246	5 849	6 833	7 897
1974-75	3 816	87	69	3 420	7 360	8 620	10 124
1975-76	4 267	84	80	3 869	8 306	9 589	11 214
1976-77	5 189	116	135	4 813	10 154	11 572	13 423
1977-78	5 203	123	143	5 211	10 570	12 158	14 245
1978-79	6 022	142	192	5 928	12 285	14 234	16 910
1979-80	8 398	207	235	7 400	16 262	18 869	22 016
1980-81	8 179	238	230	7 480	16 177	19 018	22 605
1981-82	4 372	239	307	8 289	16 686	19 662	23 694
1982-83	4 573	261	354	10 058	17 962	21 226	25 622
1983-84	4 703	266	393	11 524	20 502	23 968	28 888
1984-85	5 470	311	399	14 952	26 146	30 102	35 741
1985-86	6 332	348	482	16 285	28 483	32 492	38 937
1986-87	7 935	429	593	17 399	30 593	36 487	44 312
1987-88	10 369	481	730	19 980	35 321	41 903	51 737
1988-89	15 097	613	674	21 195	37 264	44 187	55 322
1989-90	14 462	616	784	24 932	40 497	48 927	60 842
1990-91	13 076	706	831	28 030	42 371	52 568	66 249
1991-92	14 609	748	980	28 304	44 322	55 427	69 997
1992-93	15 980	826	1 090	29 759	47 352	60 634	77 042
1993-94	17 471	911	1 243	29 878	48 895	64 419	83 301
1994-95	18 022	1 067	1 367	30 366	50 023	67 101	88 103
1995-96	20 598	1 087	1 328	34 432	56 449	76 146	99 475
1996-97	22 318	1 198	1 305	36 041	59 723	80 934	106 091
1997-98	23 471	1 348	1 489	40 912	66 169	88 538	115 132
1998-99	23 009	1 347	1 511	39 213	63 890	85 783	114 095
1999-00	24 535	1 607	1 988	45 484	72 172	97 625	128 435
2000-01	30 076	1 846	2 169	57 721	90 357	120 231	156 163
2001-02	31 927	2 018	2 100	57 197	91 477	120 940	156 102
2002-03	27 862	2 091	1 844	57 002	86 866	115 803	151 790
2003-04	26 540	2 040	1 652	53 759	82 639	109 473	147 219
2004-05	27 902	2 119	1 542	68 561	98 866	127 867	167 562
2005-06	27 829	2 140	1 547	91 289	121 718	154 425	196 274
2006-07	27 900	2 355	1 494	106 680	137 068	169 514	215 695
2007-08	27 530	2 471	1 342	116 176	146 126	182 818	233 853
2008-09	32 027	2 343	1 529	159 677	193 434	231 728	285 701

a Includes exports of wine. **b** Includes paper and paperboard. **c** Tuna captured under joint venture agreements or transhipped at sea are not included. **d** Minerals and energy resources. Before 1990-91, includes ABARE estimates for items such as bauxite, manganese and diamonds which were excluded from ABS estimates for confidentiality reasons. From July 1990, ABS estimates contain details for such items. **na** Not available.

Sources: ABS, *Balance of Payments, Australia*, cat. nos. 5302.0 and 5303.0, Canberra; ABARE.

5 Contribution to Australian merchandise exports, by sector Balance of payments basis

	Farm a	Forest b	Fisheries c	Resource sector d	Total commodities
	%	%	%	%	%
1962-63	76.2	0.6	0.6	na	na
1963-64	77.7	0.6	0.5	na	na
1964-65	74.0	0.6	0.7	na	na
1965-66	69.7	0.5	0.9	na	na
1966-67	67.9	0.8	0.8	na	na
1967-68	61.7	0.6	1.1	na	na
1968-69	57.6	0.5	1.2	na	na
1969-70	52.7	0.5	1.0	31.7	85.4
1970-71	49.5	0.6	1.3	33.7	84.7
1971-72	50.9	0.6	1.5	32.6	84.7
1972-73	54.5	0.9	1.2	29.7	85.6
1973-74	51.3	1.1	1.0	32.9	85.6
1974-75	44.3	1.0	0.8	39.7	85.4
1975-76	44.5	0.9	0.8	40.3	86.6
1976-77	44.8	1.0	1.2	41.6	87.7
1977-78	42.8	1.0	1.2	42.9	86.9
1978-79	42.3	1.0	1.3	41.6	86.3
1979-80	44.5	1.1	1.2	39.2	86.2
1980-81	43.0	1.3	1.2	39.3	85.1
1981-82	22.2	1.2	1.6	42.2	84.9
1982-83	21.5	1.2	1.7	47.4	84.6
1983-84	19.6	1.1	1.6	48.1	85.5
1984-85	18.2	1.0	1.3	49.7	86.9
1985-86	19.5	1.1	1.5	50.1	87.7
1986-87	21.7	1.2	1.6	47.7	83.8
1987-88	24.7	1.1	1.7	47.7	84.3
1988-89	34.2	1.4	1.5	48.0	84.3
1989-90	29.6	1.3	1.6	51.0	82.8
1990-91	24.9	1.3	1.6	53.3	80.6
1991-92	26.4	1.3	1.8	51.1	80.0
1992-93	26.4	1.4	1.8	49.1	78.1
1993-94	27.1	1.4	1.9	46.4	75.9
1994-95	26.9	1.6	2.0	45.3	74.5
1995-96	27.1	1.4	1.7	45.2	74.1
1996-97	27.6	1.5	1.6	44.5	73.8
1997-98	26.5	1.5	1.7	46.2	74.7
1998-99	26.8	1.6	1.8	45.7	74.5
1999-00	25.1	1.6	2.0	46.6	73.9
2000-01	25.0	1.5	1.8	48.0	75.2
2001-02	26.4	1.7	1.7	47.3	75.6
2002-03	24.1	1.8	1.6	49.2	75.0
2003-04	24.2	1.9	1.5	49.1	75.5
2004-05	21.8	1.7	1.2	53.6	77.3
2005-06	18.0	1.4	1.0	59.1	78.8
2006-07	16.5	1.4	0.9	62.9	80.9
2007-08	15.1	1.4	0.7	63.5	79.9
2008-09	13.8	1.0	0.7	68.9	83.5

a Includes exports of wine. **b** Includes paper and paperboard. **c** Tuna captured under joint venture agreements or transhipped at sea are not included. **d** Minerals and energy resources. Before 1990-91, includes ABARE estimates for items such as bauxite, manganese and diamonds which were excluded from ABS estimates for confidentiality reasons. From July 1990, ABS estimates contain details for such items. **na** Not available.
Sources: ABS, *Balance of Payments, Australia,* cat. nos. 5302.0 and 5303.0, Canberra; ABARE.

6 Contribution to Australian total exports, by sector Balance of payments basis

	Farm a	Forest b	Fisheries c	Resource sector d	Total commodities	Total merchandise	Services
	%	%	%	%	%	%	%
1962-63	66.1	0.5	0.5	na	na	86.7	13.3
1963-64	68.0	0.5	0.4	na	na	87.5	12.5
1964-65	63.2	0.5	0.6	na	na	85.4	14.6
1965-66	59.0	0.5	0.8	na	na	84.7	15.3
1966-67	57.6	0.7	0.7	na	na	84.8	15.2
1967-68	51.3	0.5	1.0	na	na	83.0	17.0
1968-69	47.9	0.5	1.0	na	na	83.2	16.8
1969-70	44.2	0.4	0.8	26.6	71.7	83.9	16.1
1970-71	41.3	0.5	1.1	28.1	70.7	83.4	16.6
1971-72	42.5	0.5	1.3	27.2	70.7	83.5	16.5
1972-73	47.3	0.8	1.0	25.8	74.2	86.7	13.3
1973-74	44.4	0.9	0.8	28.4	74.1	86.5	13.5
1974-75	37.7	0.9	0.7	33.8	72.7	85.1	14.9
1975-76	38.1	0.7	0.7	34.5	74.1	85.5	14.5
1976-77	38.7	0.9	1.0	35.9	75.6	86.2	13.8
1977-78	36.5	0.9	1.0	36.6	74.2	85.3	14.7
1978-79	35.6	0.8	1.1	35.1	72.6	84.2	15.8
1979-80	38.1	0.9	1.1	33.6	73.9	85.7	14.3
1980-81	36.2	1.1	1.0	33.1	71.6	84.1	15.9
1981-82	18.5	1.0	1.3	35.0	70.4	83.0	17.0
1982-83	17.8	1.0	1.4	39.3	70.1	82.8	17.2
1983-84	16.3	0.9	1.4	39.9	71.0	83.0	17.0
1984-85	15.3	0.9	1.1	41.8	73.2	84.2	15.8
1985-86	16.3	0.9	1.2	41.8	73.2	83.4	16.6
1986-87	17.9	1.0	1.3	39.3	69.0	82.3	17.7
1987-88	20.0	0.9	1.4	38.6	68.3	81.0	19.0
1988-89	27.3	1.1	1.2	38.3	67.4	79.9	20.1
1989-90	23.8	1.0	1.3	41.0	66.6	80.4	19.6
1990-91	19.7	1.1	1.3	42.3	64.0	79.3	20.7
1991-92	20.9	1.1	1.4	40.4	63.3	79.2	20.8
1992-93	20.7	1.1	1.4	38.6	61.5	78.7	21.3
1993-94	21.0	1.1	1.5	35.9	58.7	77.3	22.7
1994-95	20.5	1.2	1.6	34.5	56.8	76.2	23.8
1995-96	20.7	1.1	1.3	34.6	56.7	76.5	23.5
1996-97	21.0	1.1	1.2	34.0	56.3	76.3	23.7
1997-98	20.4	1.2	1.3	35.5	57.5	76.9	23.1
1998-99	20.2	1.2	1.3	34.4	56.0	75.2	24.8
1999-00	19.1	1.3	1.5	35.4	56.2	76.0	24.0
2000-01	19.3	1.2	1.4	37.0	57.9	77.0	23.0
2001-02	20.5	1.3	1.3	36.6	58.6	77.5	22.5
2002-03	18.4	1.4	1.2	37.6	57.2	76.3	23.7
2003-04	18.0	1.4	1.1	36.5	56.1	74.4	25.6
2004-05	16.7	1.3	0.9	40.9	59.0	76.3	23.7
2005-06	14.2	1.1	0.8	46.5	62.0	78.7	21.3
2006-07	12.9	1.1	0.7	49.5	63.5	78.6	21.4
2007-08	11.8	1.1	0.6	49.7	62.5	78.2	21.8
2008-09	11.2	0.8	0.5	55.9	67.7	81.1	18.9

a Includes exports of wine. **b** Includes paper and paperboard. **c** Tuna captured under joint venture agreements or transhipped at sea are not included. **d** Minerals and energy resources. Before 1990-91, includes ABARE estimates for items such as bauxite, manganese and diamonds which were excluded from ABS estimates for confidentiality reasons. From July 1990, ABS estimates contain details for such items. **na** Not available.

Sources: ABS, *Balance of Payments, Australia,* cat. nos. 5302.0 and 5303.0, Canberra; ABARE.

7 Value of Australian exports, by sector a Chain volume measures

	Rural products b	Resource sector products c	Other merchandise	Total merchandise d	Services d	Total goods and services d
	$m	$m	$m	$m	$m	$m
1974-75	9 812	13 228	10 222	33 262	7 286	40 603
1975-76	11 928	13 068	10 153	35 149	6 935	42 191
1976-77	13 374	14 083	10 524	37 981	7 045	45 209
1977-78	13 396	14 696	10 632	38 724	7 361	46 223
1978-79	13 400	15 749	11 676	40 825	8 652	49 507
1979-80	14 902	15 658	13 450	44 010	8 865	53 002
1980-81	13 280	15 277	12 083	40 640	9 686	50 433
1981-82	13 556	16 143	11 897	41 596	9 931	51 627
1982-83	12 621	17 660	11 566	41 847	9 877	51 894
1983-84	12 705	20 171	12 428	45 304	10 387	55 885
1984-85	14 901	24 097	13 915	52 913	11 242	64 503
1985-86	15 850	24 852	14 096	54 798	11 775	66 933
1986-87	16 644	26 966	16 934	60 544	13 135	74 070
1987-88	16 296	29 958	18 426	64 680	15 684	80 774
1988-89	15 389	29 973	19 171	64 533	17 049	81 964
1989-90	15 572	33 809	18 891	68 272	17 299	85 996
1990-91	16 933	39 205	20 452	76 590	18 952	96 032
1991-92	18 347	43 065	22 972	84 383	19 821	104 697
1992-93	19 707	44 056	25 410	89 173	22 149	111 961
1993-94	21 834	44 516	30 825	97 175	25 251	123 206
1994-95	20 596	45 876	33 293	99 764	28 288	129 105
1995-96	22 726	50 200	37 320	110 247	30 705	142 020
1996-97	25 789	56 436	41 657	123 881	32 717	157 668
1997-98	27 030	61 939	40 064	129 033	34 121	164 232
1998-99	28 268	83 608	19 168	131 043	35 939	167 854
1999-00	30 921	89 043	24 904	144 868	38 257	182 189
2000-01	32 112	93 622	27 823	153 557	42 587	195 979
2001-02	33 395	95 750	24 964	154 109	40 717	194 109
2002-03	28 751	99 084	26 047	153 882	40 622	193 255
2003-04	29 953	97 274	28 394	155 622	41 720	197 382
2004-05	31 426	100 168	28 744	160 337	42 546	203 408
2005-06	31 015	101 839	31 454	164 308	43 326	207 887
2006-07	30 389	106 680	32 446	169 515	46 182	215 695
2007-08	27 870	111 956	35 266	175 092	49 408	224 500
2008-09	30 160	115 836	32 269	178 265	50 260	228 526

a Reference year 2006-07. **b** Before 1989-90, wine and paper and paperboard are excluded. **c** Minerals and energy resources. Before 1990-91, bauxite, diamonds and manganese are excluded. **d** Balance of payments basis.

Sources: ABS, *Balance of Payments, Australia,* cat. nos. 5302.0 and 5303.0, Canberra; ABS, *Balance of Payments,* Australia – Historical Series on Microfiche, cat. no. 5337.0, Canberra; ABARE.

8 Australian unit export returns

	Rural			Minerals			
	Farm	Forest and fisheries products	Total	Energy minerals	Metals and other minerals	Total	Total commodities
Annual indexes a							
1989-90	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990-91	84.5	101.2	85.9	111.5	96.6	102.0	96.3
1991-92	87.8	105.0	89.2	103.6	88.1	93.7	92.0
1992-93	89.9	109.6	91.6	109.7	92.1	98.5	96.0
1993-94	90.2	124.9	93.1	100.2	88.6	92.8	92.8
1994-95	100.7	127.2	102.9	94.3	92.3	93.0	96.3
1995-96	106.1	123.7	107.6	101.5	95.3	97.5	100.9
1996-97	95.3	123.5	97.5	103.2	86.9	92.9	94.4
1997-98	102.4	124.1	104.1	106.0	94.8	98.9	100.6
1998-99	93.4	120.7	95.6	96.8	92.4	94.0	94.5
1999-00	90.7	132.1	94.0	110.4	98.3	102.9	99.6
2000-01	108.9	144.5	111.7	141.0	115.1	125.1	120.2
2001-02	117.8	143.4	119.8	140.8	110.4	122.3	121.2
2002-03	115.0	137.7	116.8	135.2	106.4	117.7	117.1
2003-04	105.7	126.6	107.4	120.2	106.1	111.7	110.1
2004-05	105.0	128.4	106.9	166.1	125.5	141.2	129.8
2005-06	104.4	131.5	106.7	226.0	162.2	186.8	160.4
2006-07	109.7	136.0	111.8	206.6	203.5	205.6	174.8
2007-08	121.7	140.7	123.1	235.8	200.6	214.7	184.4
2008-09	122.5	148.3	124.5	398.2	225.9	290.6	238.2
Quarterly indexes b							
2006-07							
September	106.2	111.0	106.6	234.4	214.5	222.2	181.6
December	108.8	105.5	107.5	216.7	217.0	220.5	181.1
March	110.7	106.1	109.5	215.3	224.0	222.5	182.9
June	110.0	104.9	111.2	205.0	226.0	216.8	178.9
2007-08							
September	114.5	111.2	114.9	212.6	211.2	214.2	178.5
December	120.6	109.6	118.1	221.0	207.7	214.6	180.2
March	123.9	112.2	122.6	235.8	217.2	223.0	186.9
June	124.7	109.5	123.1	325.7	234.1	270.5	219.2
2008-09							
September	128.5	118.7	127.5	429.0	249.3	322.2	255.5
December	138.1	125.5	136.3	526.4	272.6	373.1	292.8
March	112.8	117.3	113.0	431.8	251.8	311.1	243.8
June	103.4	104.5	103.9	289.1	204.0	239.1	193.0

a In Australian dollars. Base: 1989-90 = 100. **b** In Australian dollars. Base 1994-95 = 100.
Source: ABARE.

9 Australian main macroeconomic indicators

	Growth of real gross domestic product	Interest rates			Consumer price index d
		Short term a	Long term b	Inflation c	
	%	%	%	%	
1965-66	1.7	na	na	3.7	15.3
1966-67	6.6	na	na	2.6	15.7
1967-68	4.5	na	na	3.5	16.3
1968-69	8.1	na	na	2.6	16.7
1969-70	6.0	6.7	6.1	3.1	17.2
1970-71	3.9	7.1	6.8	4.5	18.0
1971-72	3.8	6.0	6.2	6.9	19.3
1972-73	3.5	5.1	5.9	6.1	20.4
1973-74	5.1	11.3	8.2	12.9	23.1
1974-75	1.1	10.5	9.5	16.8	26.9
1975-76	2.7	8.6	10.0	12.9	30.4
1976-77	3.2	9.8	10.2	13.9	34.6
1977-78	0.8	10.4	9.6	9.5	37.9
1978-79	5.5	9.6	9.2	8.2	41.0
1979-80	2.4	11.2	10.7	10.2	45.2
1980-81	3.2	13.4	12.6	9.3	49.4
1981-82	3.1	17.0	15.1	10.5	54.6
1982-83	– 2.6	14.0	14.6	11.5	60.9
1983-84	5.3	11.9	13.8	6.7	65.0
1984-85	5.1	13.4	13.4	4.3	67.8
1985-86	4.2	16.8	13.7	8.4	73.5
1986-87	2.5	15.7	13.5	9.4	80.4
1987-88	5.4	11.8	12.5	7.3	86.3
1988-89	4.0	15.7	12.8	7.3	92.6
1989-90	3.7	16.9	13.3	8.0	100.0
1990-91	– 0.1	12.2	12.2	5.3	105.3
1991-92	0.3	8.1	10.0	1.9	107.3
1992-93	3.7	5.6	8.3	1.0	108.4
1993-94	3.9	4.9	7.4	1.8	110.4
1994-95	4.3	7.2	9.9	3.2	113.9
1995-96	4.2	7.5	8.7	4.2	118.7
1996-97	3.8	6.3	7.6	1.3	120.3
1997-98	4.5	5.0	6.0	0.0	120.3
1998-99	5.3	4.9	5.5	1.2	121.8
1999-00	3.8	5.6	6.5	2.4	124.7
2000-01	2.0	5.8	5.8	6.0	132.2
2001-02	3.9	4.6	5.9	2.9	136.0
2002-03	3.2	4.8	5.4	3.1	140.2
2003-04	4.1	5.3	5.7	2.4	143.5
2004-05	2.8	5.5	5.4	2.4	147.0
2005-06	3.0	5.7	5.4	3.2	151.7
2006-07	3.2	6.3	5.8	2.9	156.1
2007-08	3.7	7.3	6.2	3.4	161.4
2008-09	1.0	4.8	4.9	3.1	166.4

a 90 day bank bills, average of end-of-month data. **b** 10 year Treasury bonds, average of end-of-month data. **c** Percentage change in the consumer price index. **d** 1989-90 = 100. **na** Not available.

Sources: ABS, *Australian National Accounts, National Income, Expenditure and Product,* cat. no. 5206.0, Canberra; ABS, *Balance of Payments, Australia,* cat. no. 5302.0, Canberra; ABS, *Consumer Price Index,* cat. no. 6401.0, Canberra; ABS, *Quarterly Index of Industrial Production, Australia,* cat. no. 8125.0, Canberra; Reserve Bank of Australia, *Bulletin,* Sydney.

10 Australian trade balance and foreign debt

	Balance on goods and services		Current account balance a		Terms of trade b	Net foreign debt c	
	Imports	Exports	Level	Share of GDP		Level	Share of GDP
	$m	$m	$m	%		$m	%
1966-67	3 770	3 484	-659	-2.8	79.6	na	0.0
1967-68	4 224	3 574	-1 131	-4.3	76.4	na	0.0
1968-69	4 360	3 897	-980	-3.3	78.4	na	0.0
1969-70	4 871	4 765	-688	-2.2	79.9	na	0.0
1970-71	5 214	5 086	-749	-2.1	74.8	na	0.0
1971-72	5 351	5 684	-293	-0.8	70.1	na	0.0
1972-73	5 512	7 016	754	1.4	83.5	na	0.0
1973-74	7 996	7 897	-921	-1.6	89.7	na	0.0
1974-75	10 510	10 124	-1 195	-1.8	81.6	na	0.0
1975-76	11 163	11 214	-1 423	-1.8	77.9	3 133	4.0
1976-77	14 106	13 423	-2 451	-2.6	75.4	5 160	5.7
1977-78	15 342	14 245	-3 067	-3.0	68.6	7 434	7.5
1978-79	18 260	16 910	-3 708	-3.2	69.1	9 553	8.5
1979-80	21 444	22 016	-2 168	-1.6	71.6	7 923	6.2
1980-81	25 530	22 605	-5 763	-3.9	71.0	9 361	6.4
1981-82	29 660	23 694	-9 057	-5.3	69.9	18 378	11.0
1982-83	29 667	25 622	-6 864	-3.7	68.8	25 169	14.0
1983-84	32 162	28 888	-7 836	-3.7	70.5	31 850	15.7
1984-85	40 790	35 741	-11 281	-4.9	69.4	53 055	23.6
1985-86	47 199	38 937	-15 499	-6.1	62.8	78 396	31.5
1986-87	49 032	44 312	-12 547	-4.5	59.3	87 971	32.3
1987-88	54 080	51 737	-11 545	-3.6	63.9	98 767	30.3
1988-89	62 296	55 322	-19 017	-5.3	72.7	117 240	31.5
1989-90	68 771	60 842	-22 795	-5.7	72.8	130 620	32.9
1990-91	66 948	66 249	-17 470	-4.3	68.7	142 065	35.0
1991-92	69 175	69 997	-13 238	-3.2	66.7	162 466	39.0
1992-93	79 139	77 042	-15 002	-3.4	64.0	177 453	40.5
1993-94	85 504	83 301	-15 869	-3.5	62.0	171 313	37.3
1994-95	97 896	88 103	-28 233	-5.8	63.8	190 790	39.2
1995-96	101 407	99 475	-21 401	-4.1	65.7	193 872	37.4
1996-97	104 008	106 091	-17 089	-3.1	67.6	208 628	38.2
1997-98	119 246	115 132	-22 183	-3.8	67.5	227 782	39.5
1998-99	127 519	114 095	-32 603	-5.4	64.3	230 689	38.0
1999-00	141 389	128 435	-30 985	-4.8	67.6	272 639	42.3
2000-01	154 325	156 163	-16 867	-2.4	69.3	302 467	43.9
2001-02	155 078	156 102	-18 553	-2.5	70.6	324 147	44.1
2002-03	167 736	151 790	-38 186	-4.9	72.1	356 995	45.7
2003-04	168 714	147 219	-45 590	-5.4	76.9	389 487	46.3
2004-05	190 188	167 562	-56 325	-6.3	84.5	435 324	48.5
2005-06	210 794	196 274	-52 627	-5.4	93.7	506 355	52.3
2006-07	228 452	215 695	-58 529	-5.6	100.0	553 165	52.9
2007-08	257 414	233 853	-72 504	-6.4	105.2	616 650	54.5
2008-09	279 896	285 701	-38 447	-3.2	113.2	633 174	52.9

a Negative sign indicates current account deficit. **b** Ratio of implicit price deflator for exports of goods and services to implicit price deflator for imports of goods and services. Base: 2006-07 =100. **c** As at 30 June. **na** Not available.

Sources: ABS, *Australian National Accounts, National Income, Expenditure and Product,* cat. no. 5206.0, Canberra; ABS, *Balance of Payments, Australia,* cat. no. 5302.0, Canberra; ABS, *International Investment Position, Australia,* cat. no. 5306.0, Canberra; Reserve Bank of Australia, *Bulletin,* Sydney.

11 Average Australian exchange rates with selected countries a

	Japan	United States	New Zealand	Korea, Rep. of b	United Kingdom	Euro	Trade weighted index c
	¥/A$	US$/A$	NZ$/A$	won/A$	£/A$	€/A$	
1962-63	402.46	1.1185	0.805	na	0.399	na	na
1963-64	404.76	1.1168	0.805	na	0.399	na	na
1964-65	402.18	1.1137	0.805	287.6	0.399	na	na
1965-66	404.03	1.1163	0.805	303.4	0.399	na	na
1966-67	403.88	1.1144	0.805	301.6	0.399	na	na
1967-68	403.87	1.1155	0.912	304.4	0.466	na	na
1968-69	398.92	1.1124	1.000	312.5	0.466	na	na
1969-70	399.88	1.1160	1.000	335.1	0.466	na	na
1970-71	400.22	1.1185	1.000	357.6	0.466	na	99.6
1971-72	371.74	1.1710	1.000	443.9	0.462	na	98.8
1972-73	367.32	1.2835	1.032	513.9	0.524	na	104.4
1973-74	408.19	1.4743	1.034	587.0	0.617	na	115.5
1974-75	404.94	1.3700	1.016	611.2	0.584	na	107.7
1975-76	379.39	1.2613	1.193	610.3	0.633	na	105.3
1976-77	330.52	1.1531	1.193	557.4	0.674	na	96.3
1977-78	273.88	1.1276	1.127	545.9	0.618	na	89.3
1978-79	227.36	1.1365	1.079	550.0	0.568	na	83.2
1979-80	259.57	1.1143	1.132	594.3	0.499	na	83.8
1980-81	248.28	1.1612	1.233	759.7	0.508	na	87.6
1981-82	257.36	1.1048	1.374	776.6	0.601	na	91.0
1982-83	232.66	0.9383	1.333	705.5	0.581	na	81.8
1983-84	211.95	0.9057	1.382	718.7	0.623	na	81.5
1984-85	192.55	0.7741	1.611	643.2	0.634	na	75.5
1985-86	140.21	0.6979	1.291	625.7	0.485	na	62.3
1986-87	100.84	0.6609	1.231	567.4	0.433	na	53.8
1987-88	97.11	0.7262	1.122	565.9	0.415	na	54.8
1988-89	106.55	0.8139	1.302	560.8	0.474	na	61.6
1989-90	112.49	0.7667	1.302	529.4	0.470	na	60.0
1990-91	107.01	0.7824	1.304	564.4	0.422	na	58.9
1991-92	100.45	0.7664	1.380	584.6	0.436	na	55.4
1992-93	82.57	0.6968	1.306	552.9	0.447	na	52.3
1993-94	73.01	0.6889	1.224	568.4	0.460	na	51.4
1994-95	69.96	0.7390	1.169	584.8	0.468	na	52.8
1995-96	77.02	0.7553	1.130	589.5	0.488	na	54.8
1996-97	89.90	0.7801	1.118	666.7	0.483	na	58.7
1997-98	85.56	0.6797	1.142	850.8	0.412	na	58.3
1998-99	77.55	0.6257	1.181	784.1	0.381	na	56.0
1999-00	67.88	0.6295	1.248	726.1	0.395	0.628	55.2
2000-01	61.42	0.5391	1.266	653.2	0.371	0.604	50.3
2001-02	65.90	0.5238	1.215	677.2	0.363	0.585	50.6
2002-03	69.75	0.5838	1.121	705.2	0.368	0.558	53.4
2003-04	78.56	0.7113	1.130	841.0	0.409	0.597	61.4
2004-05	80.14	0.7513	1.077	807.4	0.404	0.590	62.7
2005-06	85.45	0.7457	1.113	753.7	0.418	0.610	63.3
2006-07	92.72	0.7840	1.144	749.2	0.405	0.599	64.8
2007-08	98.58	0.8958	1.165	858.6	0.447	0.608	69.7
2008-09	74.58	0.7494	1.228	945.4	0.462	0.541	60.4

a Period average. **b** Average of end-of-month data. **c** Base: May 1970=100. Period average. **na** Not available.
Sources: ABS, *Average Monthly Exchange Rates*, cat. no. 5654.0, Canberra; Reserve Bank of Australia, *Bulletin*, Sydney.

12 Exchange rates of selected countries a

					Real effective exchange rates b		
	Australia	Japan	Euro	United Kingdom	United States	Japan	Germany
	A$/US$	¥/US$	€/US$	£/US$			
1962	0.8923	360.00	na	0.3568	na	na	na
1963	0.8948	360.00	na	0.3576	na	na	na
1964	0.8973	360.00	na	0.3584	na	na	na
1965	0.8961	360.00	na	0.3568	na	na	na
1966	0.8971	360.00	na	0.3584	na	na	na
1967	0.8972	360.00	na	0.4156	na	na	na
1968	0.8971	360.00	na	0.4194	na	na	na
1969	0.8986	360.00	na	0.4165	na	na	na
1970	0.8965	360.00	na	0.4178	na	na	na
1971	0.8789	350.68	na	0.3918	na	na	na
1972	0.8389	303.17	na	0.4259	na	na	na
1973	0.7027	271.70	na	0.4304	na	na	na
1974	0.6938	292.08	na	0.4258	na	na	na
1975	0.7636	296.79	na	0.4942	117.6	88.0	80.1
1976	0.8163	296.55	na	0.5874	120.6	87.1	81.1
1977	0.9016	268.51	na	0.5247	118.6	93.3	85.3
1978	0.8736	210.44	na	0.4915	103.8	76.8	76.5
1979	0.8945	219.14	na	0.4496	102.5	67.7	77.8
1980	0.8772	226.74	na	0.4193	104.3	60.6	76.5
1981	0.8702	220.54	na	0.5241	115.2	65.2	69.4
1982	0.9842	249.08	na	0.6194	127.6	57.6	70.5
1983	1.1094	237.51	na	0.6894	129.3	61.4	72.9
1984	1.1384	237.52	na	0.8647	136.4	62.8	71.8
1985	1.4298	238.54	na	0.6923	141.5	62.3	72.8
1986	1.4972	168.52	na	0.6782	117.0	78.4	81.5
1987	1.4316	144.64	na	0.5343	102.3	82.3	88.4
1988	1.2799	128.15	na	0.5526	96.4	87.5	89.5
1989	1.2663	137.96	na	0.6229	97.4	83.7	89.3
1990	1.2842	144.79	na	0.5187	89.7	75.4	96.3
1991	1.2884	134.71	na	0.5346	87.1	80.9	95.5
1992	1.4189	126.65	na	0.6614	85.3	83.4	100.3
1993	1.4739	111.20	na	0.6751	88.4	99.4	106.6
1994	1.3729	102.21	na	0.6400	86.7	105.5	110.3
1995	1.3555	94.06	na	0.6452	80.0	110.6	119.7
1996	1.2828	108.78	na	0.5889	81.8	94.2	118.6
1997	1.3485	120.99	na	0.6047	86.3	89.7	111.2
1998	1.5935	130.91	na	0.6011	91.6	83.6	108.8
1999	1.5507	113.91	0.939	0.6187	90.6	94.4	106.4
2000	1.7178	107.77	1.085	0.6702	100.0	100.0	100.0
2001	1.9285	121.53	1.118	0.6895	103.6	89.3	100.0
2002	1.8388	125.39	1.063	0.6204	105.2	79.8	99.1
2003	1.5347	115.00	0.880	0.5603	94.8	76.9	101.9
2004	1.3607	108.00	0.800	0.5178	85.4	77.4	100.2
2005	1.3138	110.00	0.800	0.5808	83.8	74.8	98.2
2006	1.3309	116.00	0.790	0.5094	82.1	69.3	97.1
2007	1.1934	118.00	0.730	0.4992	78.6	63.7	97.2
2008	1.1737	104.00	0.680	0.5397	74.3	na	na

a Period average. **b** The nominal exchange rate, trade weighted against 44 world currencies, adjusted for relative wholesale prices. Base: 2000 = 100.
na Not available.
Sources: ABS, *Average Monthly Exchange Rates*, cat. no. 5654.0, Canberra; International Monetary Fund, *International Financial Statistics*

13 Growth of real gross domestic product in selected countries

	Australia	United States	European Union	Japan	OECD a	China b	Korea, Rep. of
	%	%	%	%	%	%	%
1962	6.2	6.1	4.9	8.9	5.1	- 6.5	2.1
1963	6.2	4.4	4.7	8.4	4.8	10.7	9.1
1964	6.8	5.8	5.7	11.4	6.1	16.5	9.7
1965	5.2	6.4	4.2	- 5.1	5.3	16.9	5.7
1966	2.8	6.5	4.1	10.4	5.5	17.0	12.2
1967	6.8	2.5	3.4	10.4	3.7	- 7.2	5.9
1968	5.8	4.8	5.2	12.5	5.4	- 6.5	11.3
1969	6.0	3.1	6.0	12.1	5.1	19.3	13.8
1970	6.5	0.2	5.1	9.4	3.5	23.3	8.8
1971	4.7	3.4	3.3	4.3	3.3	7.0	9.2
1972	2.5	5.3	4.5	8.4	5.2	2.9	5.9
1973	5.5	5.8	5.8	7.9	5.8	8.3	14.4
1974	2.6	- 0.5	2.1	- 1.2	0.8	1.1	7.9
1975	2.7	- 0.2	- 0.5	2.6	- 0.1	8.3	7.1
1976	3.9	5.3	4.5	4.8	4.7	- 2.7	12.8
1977	1.3	4.6	2.7	5.3	3.8	7.8	10.1
1978	3.0	5.6	3.0	5.1	3.9	12.3	9.7
1979	5.2	3.2	3.4	5.2	3.7	7.6	7.6
1980	2.6	- 0.2	1.3	3.6	1.2	7.8	- 2.2
1981	4.2	2.5	0.3	3.0	2.0	4.5	6.7
1982	- 0.0	- 1.9	0.9	2.8	- 0.1	8.3	7.3
1983	- 0.5	4.5	1.8	1.6	3.0	10.4	11.5
1984	6.4	7.2	2.5	3.1	4.9	14.6	8.7
1985	5.7	4.1	2.5	5.1	3.6	16.2	6.5
1986	2.1	3.5	2.7	3.0	3.1	8.9	11.6
1987	4.4	3.4	2.8	3.7	3.6	11.6	11.5
1988	4.0	4.1	4.2	6.8	4.6	11.3	11.3
1989	4.6	3.5	3.6	5.3	3.8	4.1	6.4
1990	1.6	1.9	3.1	5.6	3.1	3.8	9.2
1991	- 1.3	- 0.2	1.8	3.3	1.3	9.2	9.4
1992	2.1	3.4	1.2	0.8	2.1	14.2	5.9
1993	3.9	2.9	- 0.3	0.2	1.5	14.0	6.1
1994	5.0	4.1	2.8	0.9	3.4	13.1	8.5
1995	3.5	2.5	2.5	1.9	2.9	10.9	9.2
1996	4.3	3.7	1.7	2.6	3.0	10.0	7.0
1997	4.0	4.5	2.6	1.6	3.4	9.3	4.7
1998	5.1	4.4	2.9	- 2.0	2.6	7.8	- 6.9
1999	4.4	4.8	2.6	- 0.1	3.6	7.6	9.5
2000	3.4	4.1	3.6	2.9	4.1	8.4	8.5
2001	2.1	1.1	3.3	0.2	1.4	8.3	4.0
2002	4.2	1.8	0.8	0.3	1.7	9.1	7.2
2003	3.0	2.5	0.6	1.4	1.9	10.0	2.8
2004	3.8	3.6	1.7	2.7	3.2	10.1	4.6
2005	2.8	3.1	1.6	1.9	2.6	10.4	4.0
2006	2.8	2.7	2.9	2.0	3.0	11.6	5.2
2007	4.0	2.1	3.0	2.3	2.7	13.0	5.1
2008	2.4	0.4	1.0	- 0.7	0.6	9.0	2.2

a Regarded as 19 countries for all years. **b** Gross national product. Excludes Hong Kong.

Sources: ABS, *Australian National Accounts, National Income, Expenditure and Product*, cat. no. 5206.0, Canberra; Asian Development Bank, *Key Indicators of Developing Asian and Pacific Countries*, Manila; OECD, *Main Economic Indicators*, Paris; International Monetary Fund, *International Financial Statistics Yearbook*, Washington DC.

14 Growth of industrial production in selected countries

	Australia	United States	Japan	Germany a	United Kingdom	OECD	China	Korea, Rep. of
	%	%	%	%	%	%	%	%
1961	- 6.0	0.7	19.5	6.3	0.5	na	- 41.6	5.0
1962	12.2	8.3	8.3	4.2	1.0	6.5	- 15.4	16.7
1963	5.7	5.9	11.3	3.4	3.9	6.2	12.6	14.3
1964	11.2	6.7	15.9	8.3	7.2	7.7	24.6	7.1
1965	4.7	10.0	3.8	5.5	3.0	6.6	27.8	8.3
1966	1.7	8.8	13.2	1.7	1.2	7.1	24.9	23.1
1967	5.6	2.1	19.4	- 2.1	- 0.7	3.7	- 15.7	26.2
1968	5.7	5.6	15.4	12.3	5.1	6.8	- 9.0	31.7
1969	6.6	4.6	16.0	13.1	3.4	8.1	35.9	19.5
1970	4.6	- 3.3	13.8	6.5	0.5	3.1	38.5	11.9
1971	3.9	1.4	2.6	0.9	- 0.6	2.0	13.4	15.2
1972	1.2	7.3	7.2	3.7	1.8	7.1	6.5	14.6
1973	10.2	8.2	15.0	6.4	9.0	9.2	8.7	33.6
1974	3.1	- 0.4	- 4.0	- 1.7	- 2.0	- 0.3	- 0.4	27.4
1975	- 7.6	- 8.9	- 11.0	- 6.2	- 5.4	- 8.1	15.0	19.0
1976	5.1	7.8	11.1	6.7	3.2	8.3	- 3.8	29.8
1977	- 1.6	7.7	4.1	2.6	5.2	4.7	14.8	19.9
1978	1.5	5.5	6.3	- 1.9	2.8	4.1	17.1	22.9
1979	5.2	3.0	7.4	5.0	2.1	4.8	8.1	11.7
1980	0.6	- 2.6	4.7	- 0.0	- 6.9	0.2	10.9	- 1.8
1981	3.0	1.3	1.0	- 1.8	- 4.1	0.5	1.7	12.7
1982	- 0.5	- 5.1	0.3	- 3.3	0.3	- 2.5	6.0	5.0
1983	- 2.9	2.6	3.0	0.7	2.6	1.8	9.9	15.8
1984	6.9	9.1	9.5	3.0	0.6	6.5	14.9	15.0
1985	8.0	1.3	3.7	4.8	5.1	3.0	19.6	4.4
1986	- 0.2	1.0	- 0.2	1.8	2.2	0.9	9.6	20.9
1987	4.8	5.0	3.4	0.4	4.1	3.7	13.0	19.2
1988	5.5	5.0	9.6	3.6	5.2	5.4	17.4	13.3
1989	4.6	0.9	5.9	4.9	2.1	3.3	6.0	3.2
1990	2.4	0.9	4.0	5.2	0.0	1.6	5.5	8.9
1991	- 3.6	- 1.5	1.7	3.5	- 3.3	- 0.4	12.8	9.6
1992	- 0.0	2.8	- 6.1	- 2.4	0.4	- 0.3	21.2	5.9
1993	2.9	3.3	- 3.9	- 7.9	2.2	- 0.5	21.9	4.4
1994	5.0	5.4	1.0	3.2	5.3	4.6	21.4	11.1
1995	1.2	4.9	2.2	0.8	1.8	3.4	16.1	11.9
1996	3.7	4.3	2.3	0.2	1.4	2.5	15.1	8.6
1997	2.0	7.2	3.5	3.1	1.4	4.8	13.2	4.9
1998	3.0	5.8	- 6.5	3.7	0.2	1.8	9.6	- 6.4
1999	3.3	4.3	0.3	1.2	2.2	3.0	9.8	24.5
2000	5.4	4.2	5.4	5.6	1.9	4.9	11.2	16.9
2001	0.1	- 3.4	- 6.3	0.1	- 1.5	- 2.6	9.9	0.6
2002	2.9	- 0.1	- 1.1	- 1.0	- 2.0	- 0.4	12.7	8.0
2003	0.5	1.2	3.3	0.4	- 0.3	0.7	16.7	5.5
2004	0.0	2.5	4.7	3.0	0.8	3.6	16.3	10.4
2005	1.1	3.3	1.4	3.3	- 1.8	2.4	15.9	6.3
2006	- 0.4	2.2	4.3	5.9	- 0.6	3.1	15.4	8.4
2007	3.2	1.7	2.8	6.2	0.3	2.4	18.5	6.8
2008	2.8	- 2.2	- 3.4	0.0	3.1	- 2.5	12.9	3.0

a West Germany until 1990; unified Germany from 1991. **na** Not available.

Sources: ABS, *Quarterly Index of Industrial Production*, cat. no. 8125.0, Canberra; International Monetary Fund, *International Financial Statistics Yearbook*, Washington DC; OECD, *Main Economic Indicators*, Paris.

15 Inflation and interest rates in selected countries

	Inflation rates a			Interest rates b			
				United States		Japan	
	United States	Japan	Total Euro Area c	Short term	Long term	Short term	Long term
	%	%	%	%	%	%	%
1965	1.7	6.6	3.3	3.9	4.3	na	na
1966	3.0	5.1	3.2	4.9	4.9	na	6.9
1967	2.8	4.0	3.1	4.3	5.1	na	6.9
1968	4.2	5.4	4.2	5.3	5.6	na	7.0
1969	5.4	5.2	4.7	6.7	6.7	na	7.1
1970	5.9	7.7	5.6	6.4	7.3	na	7.2
1971	4.3	6.4	5.3	4.3	6.2	na	7.3
1972	3.3	4.8	5.0	4.1	6.2	na	6.7
1973	6.2	11.6	7.8	7.0	6.8	na	7.3
1974	11.0	23.2	13.9	7.9	7.6	na	9.3
1975	9.1	11.8	11.4	5.8	8.0	na	9.2
1976	5.7	9.3	9.0	5.0	7.6	na	8.7
1977	6.5	8.2	10.1	5.3	7.4	na	7.3
1978	7.6	4.2	8.7	7.2	8.4	na	6.1
1979	11.3	3.7	11.1	10.0	9.4	8.1	7.7
1980	13.5	7.8	14.5	11.6	11.5	10.9	9.2
1981	10.4	4.9	11.3	14.1	13.9	7.6	8.7
1982	6.2	2.7	9.6	10.7	13.0	7.0	8.1
1983	3.2	1.9	8.7	8.6	11.1	6.7	7.4
1984	4.4	2.3	7.8	9.6	12.4	6.5	6.8
1985	3.5	2.0	4.9	7.5	10.6	6.6	6.3
1986	1.9	0.6	2.4	6.0	7.7	5.1	4.9
1987	3.6	0.1	2.4	5.8	8.4	4.2	4.2
1988	4.1	0.6	2.7	6.7	8.8	4.5	4.3
1989	4.8	2.2	4.0	8.1	8.5	5.4	5.1
1990	5.4	3.1	4.6	7.5	8.6	7.7	7.4
1991	4.2	3.4	5.0	5.4	7.9	7.4	6.5
1992	3.0	1.6	3.6	3.5	7.0	4.4	4.9
1993	3.0	1.3	3.3	3.0	5.9	2.4	3.7
1994	2.6	0.6	2.7	4.3	7.1	2.2	3.7
1995	2.8	- 0.1	2.4	5.5	6.6	1.2	2.5
1996	2.9	0.1	2.2	5.0	6.4	0.6	2.2
1997	2.3	1.9	1.6	5.1	6.4	0.6	1.7
1998	1.5	0.6	1.1	4.8	5.3	0.7	1.1
1999	2.2	- 0.3	1.1	4.7	5.6	0.2	1.8
2000	3.4	- 0.8	2.2	5.8	6.0	0.2	1.7
2001	2.8	- 0.7	2.4	3.5	5.0	0.0	1.3
2002	1.6	- 0.9	2.3	1.6	4.6	0.0	1.3
2003	2.3	- 0.3	2.1	1.0	4.0	0.0	1.0
2004	2.7	0.0	2.2	1.4	4.3	0.0	1.5
2005	3.4	- 0.3	2.2	3.2	4.3	0.0	1.4
2006	3.2	0.3	2.2	4.7	4.8	0.4	1.7
2007	2.9	0.0	2.1	4.4	4.6	0.7	1.7
2008	3.8	1.4	3.3	1.4	3.7	0.6	na

a Percentage change in consumer price indexes. **b** Period average: United States – 3 month Treasury bill rate and 10 year government bond yield; Japan – 3 month certificate of deposit rate and average government bond yield. **c** Prior to 1985 based on total OECD statistical definition. Post 1985 based on Euro area statistical definition. **na** Not available.

Sources: International Monetary Fund, *International Financial Statistics Yearbook,* Washington DC; OECD, *Main Economic Indicators,* Paris.

16 Population in selected countries and regions a

	Australia	United States	European Union	Japan	China	Other East Asia c	India	World
	million	million	million	million	million	million	million	million
1963	11.0	194.4	384.0	96.9	696.6	200.4	473.8	3 164.0
1964	11.3	197.0	387.3	97.9	712.1	205.6	483.7	3 227.0
1965	11.5	199.4	390.4	98.9	729.2	211.0	493.9	3 292.0
1966	11.8	201.7	393.3	99.9	747.8	216.4	504.3	3 358.8
1967	12.0	203.9	395.9	100.9	767.7	222.0	515.1	3 427.3
1968	12.3	206.0	398.3	101.9	788.5	227.6	526.1	3 497.4
1969	12.5	208.1	400.6	103.1	809.7	233.3	537.6	3 568.7
1970	12.7	210.1	402.9	104.3	830.7	239.2	549.3	3 641.0
1971	12.9	212.1	405.2	105.7	851.4	245.1	561.4	3 714.2
1972	13.1	214.1	407.5	107.2	871.8	251.1	573.9	3 788.3
1973	13.3	216.1	409.7	108.7	891.6	257.2	586.8	3 862.7
1974	13.4	218.1	411.8	110.2	910.3	263.3	600.0	3 937.1
1975	13.6	220.2	413.8	111.5	927.8	269.4	613.8	4 011.0
1976	13.8	222.2	415.7	112.8	943.9	275.5	627.9	4 084.3
1977	14.0	224.3	417.5	113.9	958.6	281.7	642.6	4 157.1
1978	14.2	226.5	419.2	114.9	972.4	287.9	657.6	4 229.9
1979	14.4	228.7	420.7	115.9	985.7	294.1	672.9	4 303.8
1980	14.6	230.9	422.1	116.8	998.9	300.3	688.6	4 379.1
1981	15.1	233.2	423.3	117.7	1 012.0	306.6	704.5	4 456.1
1982	15.3	235.6	424.3	118.6	1 025.0	312.9	720.7	4 534.5
1983	15.5	238.1	425.2	119.4	1 038.2	319.2	737.3	4 614.5
1984	15.7	240.6	426.2	120.1	1 052.1	325.4	754.1	4 696.2
1985	15.9	243.1	427.3	120.8	1 066.9	331.7	771.1	4 779.7
1986	16.1	245.6	428.4	121.5	1 082.8	337.9	788.4	4 865.0
1987	16.4	248.2	429.7	122.1	1 099.5	344.0	806.0	4 952.0
1988	16.7	250.8	431.0	122.6	1 116.7	350.2	823.8	5 039.7
1989	16.9	253.4	432.5	123.1	1 133.4	356.3	841.9	5 127.1
1990	17.2	256.1	434.0	123.5	1 149.1	362.4	860.2	5 213.5
1991	17.4	258.9	435.6	124.0	1 163.6	368.4	878.8	5 289.1
1992	17.6	261.7	437.3	124.4	1 177.0	374.5	897.6	5 379.9
1993	17.8	264.5	439.0	124.8	1 189.6	380.5	916.5	5 464.2
1994	18.0	267.4	440.5	125.1	1 201.7	386.6	935.5	5 545.8
1995	18.2	270.2	441.8	125.5	1 213.7	392.6	954.3	5 627.1
1996	18.4	273.1	442.9	125.8	1 225.7	398.6	973.0	5 707.9
1997	18.6	276.0	443.7	126.2	1 237.4	404.7	991.5	5 788.2
1998	18.8	279.0	444.5	126.5	1 248.9	410.7	1 009.9	5 867.9
1999	19.0	281.9	445.4	126.8	1 259.7	416.7	1 028.2	5 946.9
2000	19.3	282.2	465.9	126.9	1 267.4	441.7	1 016.0	6 113.8
2001	19.5	285.0	469.2	127.3	1 276.3	447.6	1 035.0	6 193.2
2002	19.8	287.7	471.9	127.4	1 284.5	453.5	1 051.0	6 272.6
2003	20.0	290.2	473.4	127.6	1 292.3	459.4	1 068.0	6 351.9
2004	20.3	292.9	475.1	127.7	1 299.9	465.3	1 085.0	6 431.2
2005	20.5	295.6	478.1	127.8	1 307.6	471.2	1 101.0	6 510.4
2006	20.7	298.4	484.1	127.8	1 314.5	477.1	1 118.0	6 589.7
2007	21.0	301.3	486.1 b	127.8	1 321.3	483.1	1 134.0	6 669.0
2008	21.3	304.1	488.3 b	127.7	1 328.0	489.4	1 150.0	6 748.4

a Midyear. **b** Regarded as 27 countries. **c** Chinese Taipei, Indonesia, Malaysia, the Philippines, Republic of Korea, Singapore, Thailand.

Sources: ABS, *Estimated Resident Population by Sex and Age: States and Territories of Australia,* cat. no. 3201.0, Canberra; Asian Development Bank, *Key Indicators of Developing Asian and Pacific Countries,* Manila; International Monetary Fund, *International Financial Statistics Yearbook,* Washington DC; OECD, *Main Economic Indicators,* Paris; United Nations, *World Population Prospects,* New York.

17 Australian farm returns, costs and prices

	Gross value of farm production $m	Farm costs $m	Net value of farm production $m	Index of real net value of farm production a	Index of prices received c	Index of prices paid c	Farmers' terms of trade cd	Consumer price index b
1968-69	3 947	2 673	1 274	157.1	26.0	13.5	193.4	9.9
1969-70	3 732	2 668	1 064	127.2	25.4	13.5	188.4	10.2
1970-71	3 569	2 713	856	97.9	23.9	13.9	171.6	10.6
1971-72	3 971	2 793	1 178	126.0	26.0	14.9	175.3	11.4
1972-73	4 962	3 103	1 859	187.4	35.6	16.2	219.9	12.1
1973-74	6 412	3 594	2 818	251.7	43.1	18.4	234.3	13.6
1974-75	5 874	4 196	1 678	128.3	36.9	23.4	158.0	15.9
1975-76	6 170	4 832	1 338	90.6	39.0	27.0	144.3	18.0
1976-77	6 755	5 278	1 477	87.8	42.5	30.1	141.1	20.4
1977-78	6 984	5 742	1 242	67.4	44.5	33.3	133.8	22.4
1978-79	10 204	6 629	3 575	179.5	54.0	35.5	152.1	24.2
1979-80	11 764	7 761	4 003	182.4	64.3	39.5	162.7	26.7
1980-81	11 580	8 739	2 841	118.4	68.4	44.9	152.2	29.2
1981-82	12 704	10 205	2 499	94.3	67.7	49.9	135.7	32.2
1982-83	11 714	11 403	311	10.5	71.1	55.3	128.6	35.9
1983-84	15 425	12 255	3 170	100.4	74.6	59.8	124.8	38.4
1984-85	15 443	12 896	2 547	77.4	76.6	63.4	121.0	40.0
1985-86	15 407	14 051	1 356	38.0	76.6	68.3	112.2	43.4
1986-87	16 928	15 386	1 542	39.5	82.8	74.2	111.5	47.4
1987-88	19 962	16 727	3 235	77.2	99.5	77.4	128.5	50.9
1988-89	22 863	18 330	4 533	100.8	112.4	84.4	133.2	54.7
1989-90	23 585	20 008	3 577	73.7	109.3	90.1	121.3	59.1
1990-91	21 214	20 168	1 046	20.5	93.6	90.9	102.9	62.2
1991-92	21 168	19 392	1 776	34.1	94.5	90.8	104.1	63.3
1992-93	22 709	19 340	3 370	64.0	93.7	89.5	104.7	64.0
1993-94	24 516	20 187	4 329	80.8	97.4	91.1	106.8	65.2
1994-95	24 035	21 708	2 327	42.1	112.0	95.0	118.0	67.3
1995-96	27 785	22 913	4 872	84.5	111.2	99.5	111.8	70.1
1996-97	28 718	23 910	4 808	82.3	101.6	99.4	102.2	71.0
1997-98	28 820	23 885	4 935	84.5	100.0	100.0	100.0	71.0
1998-99	29 159	24 511	4 648	78.6	96.1	100.6	95.6	71.9
1999-00	30 775	25 223	5 552	91.7	96.3	104.7	92.0	73.7
2000-01	34 779	26 657	8 123	126.5	108.5	110.1	98.5	78.1
2001-02	39 906	27 258	12 648	191.6	122.6	112.9	108.6	80.3
2002-03	33 235	27 766	5 469	80.3	122.8	121.5	101.1	82.8
2003-04	37 371	28 991	8 380	120.3	117.0	123.0	95.2	84.7
2004-05	36 537	29 243	7 294	102.2	115.9	126.3	91.7	86.8
2005-06	38 695	31 276	7 418	100.7	117.7	129.4	91.0	89.6
2006-07	36 247	31 413	4 833	63.8	127.8	135.8	94.1	92.2
2007-08	43 689	37 072	6 617	84.4	141.3	155.2	91.1	95.3
2008-09	45 126	36 938	8 188	101.8	138.5	149.6	92.6	98.3

a Obtained by deflating the net value of farm production by the consumer price index. **b** Base year 2009-10 = 100. **c** ABARE revised the method for calculating farm, price and production indexes in October 1999. The indexes for the different groups of farm commodities are now calculated on a chained weight basis using Fishers' ideal index with a reference year of 1997-98 = 100. **d** Ratio of index of prices received by farmers to index of prices paid by farmers. **na** Not available.

Sources: ABS, *Australian National Accounts, National Income and Expenditure,* cat. no. 5206.0, Canberra; ABS, *Consumer Price Index,* cat. no. 6401.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Value of Agricultural Commodities Produced, Australia,* cat. no. 7503.0, Canberra; ABARE.

18 Volume of Australian farm production

	Crops			Livestock			
	Grains and oilseeds	Other crops	Total crops	Livestock slaughterings	Livestock products	Total livestock	Total farm
	index	index	index	index	index	index	index
1965-66	25.8	29.7	27.1	45.1	84.2	61.0	41.9
1966-67	44.9	35.0	38.2	43.7	88.5	62.8	49.3
1967-68	26.2	31.6	28.4	45.8	88.1	64.2	43.6
1968-69	50.4	40.7	42.2	48.0	93.1	69.1	52.5
1969-70	38.8	36.7	36.4	51.9	98.0	74.0	51.2
1970-71	35.9	37.1	35.2	55.0	95.7	75.1	50.8
1971-72	39.7	39.8	38.4	60.1	94.8	78.0	53.9
1972-73	28.9	39.1	33.1	66.8	83.8	76.9	50.6
1973-74	46.0	34.8	39.5	65.5	80.4	74.5	53.2
1974-75	44.3	35.8	39.1	61.4	86.0	75.3	53.3
1975-76	48.4	34.9	40.6	74.0	82.6	79.4	55.8
1976-77	46.6	37.4	41.1	79.2	76.3	78.4	56.0
1977-78	39.2	40.8	39.4	86.8	74.5	81.0	55.8
1978-79	71.2	41.1	54.9	82.9	76.5	79.9	64.8
1979-80	63.6	41.9	51.6	72.5	76.8	73.9	60.1
1980-81	46.7	44.0	44.4	70.3	73.7	71.3	55.2
1981-82	66.2	48.6	56.1	73.6	75.0	73.7	62.9
1982-83	37.2	48.8	41.6	74.3	75.4	74.2	54.8
1983-84	88.6	53.7	69.6	69.0	79.5	73.4	70.3
1984-85	80.5	55.7	66.6	68.9	85.5	76.1	69.8
1985-86	71.7	59.4	64.0	72.4	87.0	78.6	69.5
1986-87	70.3	58.8	63.0	77.1	92.3	83.5	71.3
1987-88	60.5	63.8	61.2	79.7	94.0	85.6	71.4
1988-89	65.0	62.1	62.4	76.2	97.4	85.9	72.3
1989-90	65.3	65.1	64.2	82.5	108.1	94.3	77.2
1990-91	67.9	73.4	70.0	84.7	106.5	94.7	80.3
1991-92	61.7	78.1	69.9	87.7	95.5	91.2	78.6
1992-93	77.1	78.9	77.3	89.4	98.6	93.6	83.7
1993-94	85.4	80.4	81.7	91.3	99.9	95.2	87.0
1994-95	51.1	73.6	62.8	92.1	94.2	93.1	75.7
1995-96	89.7	82.0	85.2	91.4	94.5	92.9	88.6
1996-97	115.0	88.4	100.1	94.9	98.3	96.5	98.7
1997-98	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1998-99	115.6	102.9	108.2	102.9	104.3	103.5	106.1
1999-00	126.8	109.2	116.5	104.9	107.1	105.9	111.7
2000-01	118.0	104.0	109.8	110.7	104.5	108.3	109.2
2001-02	130.1	104.5	115.5	108.0	104.4	106.6	111.4
2002-03	59.2	96.6	78.0	109.8	94.7	103.8	90.6
2003-04	138.6	102.6	116.7	104.4	92.4	99.6	108.6
2004-05	113.2	111.7	111.3	109.3	93.3	103.1	107.8
2005-06	133.1	112.1	119.7	108.5	94.6	103.0	111.7
2006-07	58.2	106.0	84.8	115.5	89.3	105.4	95.4
2007-08	86.6	116.2	104.5	113.8	85.2	102.7	104.4
2008-09	111.6	116.0	118.0	112.8	82.0	100.7	110.5

Note: ABARE revised the method for calculating farm production indexes in October 1999. The indexes for the different groups of farm commodities are now calculated on a chained weight basis using Fishers' ideal index with a reference year of 1997-98 = 100.

Sources: ABS, *Australian National Accounts, National Income and Expenditure*, cat. no. 5206.0, Canberra; ABS, *Agriculture, Australia*, cat. no. 7113.0, Canberra; ABS, *Value of Agricultural Commodities Produced, Australia*, cat. no. 7503.0, Canberra; ABARE.

19 Gross value of Australian farm production

	Crops			Livestock			
	Grains and oilseeds	Other crops	Total crops	Livestock slaughterings	Livestock products	Total livestock	Total farm
	$m	$m	$m	$m	$m	$m	$m
1962-63	580	557	1 136	634	1 242	1 876	3 013
1963-64	603	625	1 228	702	1 495	2 196	3 424
1964-65	662	656	1 319	806	1 324	2 131	3 450
1965-66	525	657	1 181	834	1 301	2 135	3 316
1966-67	897	742	1 639	858	1 327	2 185	3 825
1967-68	557	712	1 269	883	1 190	2 073	3 342
1968-69	906	811	1 717	894	1 336	2 230	3 947
1969-70	703	750	1 454	1 010	1 269	2 279	3 732
1970-71	682	795	1 477	1 013	1 079	2 092	3 569
1971-72	746	852	1 598	1 137	1 236	2 373	3 971
1972-73	614	968	1 582	1 547	1 832	3 380	4 962
1973-74	1 770	1 089	2 859	1 696	1 857	3 553	6 412
1974-75	1 772	1 432	3 204	1 019	1 651	2 670	5 874
1975-76	1 859	1 389	3 247	1 246	1 676	2 923	6 170
1976-77	1 651	1 538	3 189	1 685	1 881	3 566	6 755
1977-78	1 455	1 592	3 047	1 967	1 970	3 937	6 984
1978-79	3 093	1 815	4 908	3 082	2 215	5 296	10 204
1979-80	3 366	2 175	5 541	3 659	2 565	6 223	11 764
1980-81	2 666	2 641	5 307	3 474	2 799	6 274	11 580
1981-82	3 652	2 660	6 312	3 296	3 096	6 392	12 704
1982-83	2 334	2 682	5 017	3 452	3 246	6 698	11 714
1983-84	5 188	3 239	8 426	3 509	3 490	6 998	15 425
1984-85	4 785	3 083	7 867	3 783	3 793	7 576	15 443
1985-86	4 074	3 278	7 352	3 929	4 125	8 054	15 407
1986-87	3 697	3 683	7 379	4 633	4 916	9 548	16 928
1987-88	3 520	4 119	7 639	5 077	7 247	12 324	19 962
1988-89	4 685	4 959	9 643	5 308	7 911	13 219	22 863
1989-90	4 462	5 414	9 876	5 902	7 807	13 709	23 585
1990-91	3 467	5 654	9 121	5 739	6 354	12 093	21 214
1991-92	4 021	6 143	10 164	5 751	5 253	11 004	21 168
1992-93	4 621	6 836	11 457	6 046	5 207	11 252	22 709
1993-94	5 157	7 317	12 474	6 874	5 167	12 041	24 516
1994-95	3 997	7 362	11 359	6 680	5 995	12 676	24 035
1995-96	7 470	8 177	15 647	6 431	5 707	12 138	27 785
1996-97	8 133	8 455	16 588	6 376	5 754	12 130	28 718
1997-98	6 715	9 155	15 870	6 992	5 958	12 950	28 820
1998-99	7 134	9 357	16 491	7 256	5 412	12 667	29 159
1999-00	8 082	9 269	17 351	7 944	5 481	13 425	30 775
2000-01	8 701	10 358	19 059	9 738	5 983	15 721	34 779
2001-02	10 875	10 738	21 613	11 434	6 859	18 293	39 906
2002-03	5 449	10 605	16 054	10 676	6 505	17 181	33 235
2003-04	9 837	11 001	20 838	10 896	5 637	16 533	37 371
2004-05	7 364	11 353	18 717	12 033	5 788	17 820	36 537
2005-06	8 823	12 076	20 899	11 960	5 836	17 796	38 695
2006-07	5 080	12 915	17 995	12 335	5 917	18 252	36 247
2007-08	10 754	13 414	24 168	12 109	7 412	19 521	43 689
2008-09	11 710	13 670	25 380	13 255	6 490	19 745	45 126

Sources: ABS, *Australian National Accounts, National Income and Expenditure*, cat. no. 5206.0, Canberra; ABS, *Agriculture, Australia*, cat. no. 7113.0, Canberra; ABS, *Value of Agricultural Commodities Produced, Australia*, cat. no. 7503.0, Canberra; ABARE.

20 Value of Australian agricultural exports (fob)

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m	$m
Grains and oilseeds								
Wheat (including flour)	4 612	3 109	3 475	3 488	3 296	2 765	2 990	5 028
Barley (including malt)	1 278	955	1 239	1 275	1 108	833	1 496	1 321
Oats	37	44	38	36	47	20	37	64
Sorghum	109	17	61	96	33	13	76	405
Rice	354	371	145	173	171	347	71	31
Lupins	109	57	148	89	99	38	31	40
Peas **a**	157	43	56	33	43	80	61	63
Chickpeas	167	52	71	65	106	168	139	275
Canola	572	289	453	397	331	108	303	595
Cottonseed	148	82	62	55	53	31	8	19
Other oilseeds **b**	20	21	26	33	21	22	27	27
Total	7 564	5 040	5 773	5 739	5 308	4 426	5 240	7 868
Industrial crops								
Raw cotton **c**	1 547	1 153	982	771	1 137	823	466	500
Sugar	1 430	1 220	982	1 098	1 454	1 510	1 006	1 335
Wine	1 970	2 386	2 545	2 748	2 799	2 990	2 683	2 428
Total	4 948	4 759	4 509	4 617	5 391	5 323	4 155	4 264
Other crops	3 575	3 499	3 213	3 322	3 298	3 337	3 632	4 730
Total crops	16 087	13 299	13 496	13 679	13 996	13 086	13 027	16 862
Meat and live animals for slaughter								
Beef and veal	4 189	3 756	3 793	4 584	4 272	4 634	4 190	4 857
Live cattle	526	569	318	374	358	437	451	559
Mutton	492	442	380	398	432	458	443	482
Lamb	577	533	602	673	767	748	803	925
Live sheep	392	408	266	207	291	289	286	339
Pig meat	265	256	181	150	143	142	128	124
Poultry meat	26	22	20	20	21	26	32	43
Canned meat	76	49	12	12	12	12	7	8
Total	6 467	5 987	5 560	6 405	6 284	6 734	6 333	7 329
Wool								
Greasy **d**	2 270	2 265	1 850	1 994	1 868	2 316	2 115	1 728
Semiprocessed	1 119	991	632	505	389	393	362	281
Skins	297	288	296	339	287	356	319	312
Total **d**	3 687	3 545	2 778	2 838	2 544	3 065	2 796	2 321
Dairy products								
Butter	297	224	183	188	225	179	195	232
Cheese	1 035	800	739	877	837	824	968	796
Casein	123	128	123	116	89	113	125	107
Skim milk powder	698	408	388	420	529	505	533	553
Wholemilk powder	571	380	322	324	334	275	392	475
Other dairy products	553	555	534	559	556	542	550	515
Total	3 277	2 496	2 288	2 485	2 569	2 438	2 763	2 679
Other livestock exports	2 409	2 535	2 419	2 496	2 436	2 577	2 611	2 836
Total livestock exports	15 840	14 563	13 045	14 223	13 833	14 815	14 503	15 165
Total farm exports	31 927	27 862	26 540	27 902	27 829	27 900	27 530	32 027

Continued

20 Value of Australian agricultural exports (fob) continued

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m	$m
Africa								
Egypt	726	337	653	226	473	151	176	310
South Africa	139	134	128	116	118	130	116	158
Other	693	447	396	399	436	343	355	625
Total	1 559	918	1 176	741	1 027	624	647	1 093
Americas								
United States	3 421	3 030	3 049	3 162	2 964	2 981	2 503	2 999
Canada	652	603	412	451	431	423	397	377
Other	426	367	269	249	279	231	267	277
Total	4 499	4 000	3 730	3 862	3 674	3 636	3 166	3 652
North Asia								
China	2 420	2 280	2 282	2 771	2 857	3 064	2 932	3 216
Chinese Taipei	834	809	690	722	782	664	577	651
Japan	4 693	4 315	4 487	5 337	4 796	4 675	4 302	5 225
Korea, Rep. of	1 662	1 620	1 383	1 633	1 830	2 059	1 743	1 815
Other	572	471	380	364	402	361	406	559
Total	10 180	9 495	9 220	10 827	10 667	10 823	9 960	11 465
South East Asia								
Indonesia	1 630	1 532	1 435	1 491	1 694	1 773	1 835	2 630
Malaysia	1 121	864	895	939	795	811	793	1 017
Phillipines	647	542	398	358	290	243	315	491
Singapore	659	584	491	526	595	607	672	715
Thailand	601	555	500	503	598	477	514	632
Other	292	245	234	258	297	278	368	608
Total	4 950	4 321	3 953	4 076	4 268	4 190	4 496	6 093
South Asia	1 228	653	789	833	725	1 059	686	1 039
Middle East	2 848	1 962	1 394	1 765	1 876	1 549	2 187	3 557
Europe								
European Union **e**	3 088	2 910	2 678	2 696	2 560	2 423	2 512	2 627
Russian Federation	88	64	76	116	189	207	367	321
Other	85	92	79	75	76	60	66	76
Total	3 260	3 066	2 833	2 886	2 825	2 691	2 945	3 023
Oceania	1 359	1 438	1 335	1 427	1 446	1 605	1 753	1 882
New Zealand	985	1 056	998	1 078	1 101	1 227	1 306	1 401
Other **f**	2 045	2 009	2 110	1 485	1 322	1 724	1 689	223
Total	31 927	27 862	26 540	27 902	27 829	27 900	27 530	32 027

a Field peas and cowpeas. **b** Includes soybeans, linseed, sunflowerseed, safflowerseed and peanuts. Excludes meals and oils. **c** Excludes cotton waste and linters. **d** On a balance of payments basis. ABS recorded trade data adjusted for changes in stock levels held overseas by Wool International. **e** 27 countries. **f** Includes commodities such as rice and lupins for which export data are not available by destination.

Note: For some agricultural commodities (namely, wheat, sugar and barley), data are only available by volume to specific export destinations. The country export values for these commodities are calculated using an average export unit return to all destinations.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Agriculture, Fisheries and Forestry; ABARE.

21 Value of Australian agricultural imports

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m	$m
Grains and oilseeds								
Wheat	0.0	51.5	0.1	0.1	0.0	0.0	0.1	0.1
Rice	41.7	49.4	55.6	62.7	71.3	79.6	134.9	210.8
Canola	8.3	7.1	12.1	12.7	14.7	40.7	20.2	23.7
Cottonseed	0.8	0.9	6.9	3.1	2.6	11.4	10.4	36.7
Other grains and oilseeds	8.5	50.6	36.3	11.9	8.4	38.9	29.7	28.4
Total	59.3	159.6	110.9	90.3	97.1	170.6	195.3	299.7
Horticulture								
Fruit	505.6	565.5	587.3	704.0	740.6	845.8	927.8	991.4
Vegetables	450.5	497.4	526.6	512.2	528.3	621.3	731.5	841.7
Total	956.1	1 062.9	1 113.9	1 216.2	1 268.9	1 467.1	1 659.2	1 833.1
Industrial crops								
Cotton	1.0	1.0	0.5	0.7	0.0	0.1	0.0	0.3
Sugar	5.2	5.8	4.7	5.4	4.6	6.4	6.7	26.1
Wine	115.7	139.3	158.4	200.5	248.4	334.1	453.6	501.7
Total	121.9	146.2	163.5	206.6	253.0	340.5	460.4	528.2
Meat and live animals for slaughter								
Beef and veal	5.0	5.3	8.8	21.8	21.2	14.0	9.9	14.2
Sheep meat	0.8	1.6	2.2	1.3	2.2	1.4	1.9	4.7
Pig meat	199.1	163.7	210.2	313.7	257.6	421.3	362.3	499.5
Total	204.9	170.5	221.2	336.9	281.1	436.7	374.1	518.4
Wool								
Greasy	5.4	9.2	7.7	0.8	0.3	0.2	0.6	0.2
Dairy products								
Butter	21.5	21.0	25.7	30.5	30.7	35.7	81.9	53.6
Cheese	4.8	4.3	4.3	4.9	4.8	4.7	5.4	6.2
Casein	11.1	9.5	10.9	11.8	10.1	15.0	21.7	14.9
Wholemilk powder	11.6	9.6	16.1	18.6	17.6	18.4	35.0	35.2
Other dairy products	272.4	286.8	272.7	318.2	368.5	406.5	512.4	520.9
Total	321.4	331.2	329.8	384.1	431.8	480.4	656.4	630.7
Other farm imports a	3 857.9	4 439.7	4 216.7	4 583.4	4 937.9	5 678.6	6 152.2	7 157.2
Total farm Imports	5 526.9	6 319.4	6 163.7	6 818.3	7 269.9	8 574.1	9 498.3	10 967.6

a Consists largely of substantially and elaborately transformed foods. For more information see *Australian Food Statistics* report, Department of Agriculture, Fisheries and Forestry.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Agriculture, Fisheries and Forestry; ABARE.

22 Indexes of prices received by farmers in Australia

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
Crops sector									
Grains and oilseeds									
Wheat	69.0	103.8	93.4	88.3	124.9	136.3	107.5	100.0	94.5
Barley	75.3	86.2	92.8	79.0	135.1	143.7	116.6	100.0	87.7
Sorghum	80.3	83.7	94.1	85.9	112.3	119.0	106.7	100.0	88.1
Oats	72.1	78.8	78.9	65.6	131.3	112.9	100.3	100.0	63.7
Lupins	115.0	88.8	106.1	96.2	95.3	106.7	111.8	100.0	72.9
Canola	62.3	61.8	69.7	77.3	80.0	81.4	75.6	100.0	98.7
Total	75.7	95.3	94.2	89.9	120.9	126.1	105.1	100.0	92.0
Cotton	104.6	88.3	91.8	98.6	123.5	121.3	103.1	100.0	88.4
Sugar	102.6	90.4	89.6	102.8	112.7	110.2	100.0	100.0	93.2
Hay	95.1	95.6	77.3	78.3	108.8	102.3	93.6	100.0	98.4
Fruit	90.6	95.1	85.4	87.0	101.1	103.0	109.6	100.0	108.7
Wine grapes	46.7	53.8	52.5	58.0	72.8	82.4	88.5	100.0	109.7
Vegetables	86.5	89.8	94.3	100.6	115.1	115.2	100.9	100.0	108.2
Total crops sectors	84.9	93.4	91.9	92.5	115.2	118.2	104.1	100.0	96.9
Livestock sector									
Livestock for slaughter									
Cattle	123.2	117.9	117.0	134.1	126.1	104.9	93.0	100.0	105.6
Lambs	52.8	58.4	85.2	97.6	89.9	116.9	121.4	100.0	101.9
Sheep	8.8	21.4	39.0	48.4	58.3	85.9	85.0	100.0	83.7
Live sheep for export	34.7	47.8	55.7	66.8	82.8	98.5	92.7	100.0	94.0
Pigs	114.0	101.0	98.4	95.3	96.4	122.4	123.2	100.0	94.2
Poultry	100.7	93.6	97.7	101.7	98.2	99.6	107.2	100.0	94.1
Total	102.9	99.1	102.4	113.9	109.9	106.5	101.0	100.0	100.9
Livestock products									
Wool	99.7	86.7	75.1	75.2	115.4	93.3	91.9	100.0	79.2
Milk	90.7	93.2	102.3	99.2	96.5	108.2	103.4	100.0	95.5
Eggs	96.4	92.0	95.3	91.4	88.6	101.7	105.2	100.0	85.3
Honey	71.1	80.8	82.3	76.8	81.7	90.2	101.6	100.0	101.1
Total	98.1	90.6	87.4	86.1	105.8	100.8	98.1	100.0	87.5
Store and breeding stock	82.0	79.7	78.8	95.0	96.7	96.1	89.4	100.0	100.9
Total livestock sector	99.1	93.7	93.6	99.9	107.0	103.2	98.8	100.0	95.2
Total prices received	93.6	94.5	93.7	97.4	112.0	111.2	101.6	100.0	96.1

Continued

22 Indexes of prices received by farmers in Australia continued

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Crops sector									
Grains and oilseeds									
Wheat	117.4	132.3	134.4	109.1	99.6	102.5	122.4	197.2	167.9
Barley	125.1	130.8	159.9	105.9	100.1	93.9	153.3	196.9	152.7
Sorghum	85.1	102.2	120.9	93.8	79.4	84.6	126.1	188.0	207.2
Oats	96.5	128.2	160.3	101.1	98.1	107.8	176.6	205.7	152.0
Lupins	104.9	127.7	149.0	120.4	105.2	99.8	135.8	171.0	140.2
Canola	79.6	99.7	100.9	104.4	84.5	86.5	102.8	140.7	119.6
Total	108.7	123.7	134.0	105.2	95.8	97.2	126.9	183.6	155.8
Cotton	106.1	92.7	100.1	88.2	87.0	85.0	86.2	87.3	95.5
Sugar	70.4	88.5	83.2	76.3	84.1	90.9	105.0	80.6	94.0
Hay	110.7	104.2	155.0	125.0	128.0	143.7	151.8	165.1	169.2
Fruit	102.0	117.8	108.9	123.9	114.3	127.6	169.8	136.9	140.3
Wine grapes	108.7	110.2	100.5	100.8	88.2	76.5	79.8	97.7	85.6
Vegetables	107.5	104.3	123.8	124.6	122.2	137.3	145.0	157.7	161.7
Total crops sectors	104.7	113.6	118.8	106.9	99.9	103.3	123.2	138.0	128.5
Livestock sector									
Livestock for slaughter									
Cattle	144.2	167.7	145.0	160.4	177.2	181.3	174.3	164.6	170.1
Lambs	104.1	167.2	176.7	190.1	184.5	177.7	165.7	165.9	213.0
Sheep	117.9	204.7	185.4	230.3	196.1	202.7	156.4	178.5	225.8
Live sheep for export	111.4	156.1	179.3	178.0	164.1	176.1	179.1	180.7	214.2
Pigs	113.7	123.6	109.7	109.4	117.8	115.6	124.8	120.7	180.8
Poultry	90.1	93.0	98.5	97.7	91.9	83.5	84.5	109.4	111.5
Total	126.0	151.5	139.1	149.2	157.4	157.5	152.6	152.1	168.1
Livestock products									
Wool	98.3	113.9	153.2	116.5	107.4	97.7	115.5	127.9	126.9
Milk	97.0	110.5	90.7	93.4	105.7	111.0	111.1	166.1	142.1
Eggs	79.1	82.8	92.4	89.2	85.4	86.3	95.2	100.3	105.3
Honey	94.3	115.0	130.5	131.3	129.4	134.5	139.9	145.5	151.3
Total	95.8	109.3	114.3	101.6	104.6	104.0	111.5	146.4	133.3
Store and breeding stock	126.0	151.5	139.1	149.3	157.4	157.6	152.6	152.1	168.1
Total livestock sector	113.1	133.5	128.2	129.3	135.4	135.2	135.1	147.4	152.7
Total prices received	108.5	122.6	122.8	117.0	115.9	117.7	127.8	141.3	138.5

Note: ABARE revised the method for calculating these indexes in October 1999. The indexes for commodity groups are now calculated on a chained weight basis using Fishers' ideal index with a reference year of 1997-98 = 100. Indexes for most individual commodities are based on annual gross unit value of production.
Source: ABARE.

23 Farm land use and livestock numbers in Australia

	Area used for a		Total	Livestock numbers b		
	Wheat	Other crops c	area of farms	Beef cattle	Dairy cattle	Sheep
	million ha	million ha	million ha	million	million	million
1969-70	9.5	3.7	494.7	17.54	4.01	174.26
1970-71	6.5	4.7	497.2	19.83	3.90	171.74
1971-72	7.1	5.3	499.5	22.89	3.82	155.39
1972-73	7.6	4.6	499.8	24.65	3.79	134.10
1973-74	8.9	4.3	500.3	26.59	3.57	139.45
1974-75	8.3	4.2	499.9	28.52	3.53	145.83
1975-76	8.6	4.7	500.7	29.26	3.41	144.11
1976-77	9.0	4.7	491.5	27.83	3.12	131.32
1977-78	10.0	5.3	489.4	25.73	2.90	127.46
1978-79	10.2	5.6	493.2	23.68	2.73	130.50
1979-80	11.2	5.2	495.6	22.82	2.70	132.71
1980-81	11.3	5.2	495.4	22.37	2.80	131.44
1981-82	11.9	5.9	490.8	21.77	2.78	135.02
1982-83	11.5	5.7	483.8	19.72	2.76	130.51
1983-84	12.8	7.3	488.6	19.36	2.81	135.14
1984-85	12.0	7.3	489.2	19.98	2.81	145.67
1985-86	11.7	6.5	468.3	20.68	2.76	150.40
1986-87	11.1	5.4	471.0	20.96	2.70	153.18
1987-88	9.0	7.3	472.0	20.88	2.64	156.54
1988-89	8.8	6.8	466.9	21.42	2.61	164.91
1989-90	9.0	6.2	464.3	22.27	2.58	173.78
1990-91	9.2	6.6	462.8	22.88	2.49	166.57
1991-92	7.2	7.5	466.0	22.83	2.50	151.00
1992-93	9.1	7.5	460.1	22.65	2.53	140.54
1993-94	8.4	8.1	469.1	23.08	2.68	132.57
1994-95	7.9	7.8	463.3	22.99	2.74	120.86
1995-96	9.2	8.8	465.2	23.57	2.81	121.12
1996-97	10.9	9.1	462.2	23.74	2.96	120.23
1997-98	10.4	9.7	463.8	23.78	3.08	117.49
1998-99	11.5	10.3	453.7	23.36	3.22	115.46
1999-00	12.2	9.8	455.5	23.36	3.22	118.55
2000-01	12.1	10.4	455.7	24.45	3.14	110.93
2001-02	11.5	10.5	447.0	24.50	3.22	106.17
2002-03	11.2	10.2	439.5	24.74	3.13	99.25
2003-04	13.1	10.7	440.1	23.62	3.05	101.29
2004-05	13.4	11.0	445.1	24.41	3.06	100.60
2005-06	12.4	10.3	434.9	25.32	2.86	91.03
2006-07	11.8	9.8	425.4	25.61	2.79	85.71
2007-08	12.6	11.1	417.3	24.78	2.66	76.94
2008-09	13.2	10.8	na	24.78	2.55	71.56

a Year ended 31 March. From 1999-00, year ended 30 June. Details for establishments with estimated value of agricultural operations (EVAO) of $2 500 or more until 1985-86; EVAO of $5 000 or more from 1986-87 to 1988-89; EVAO of $20 000 or more from 1989-90 to 1990-91; EVAO of $22 500 or more from 1991-92 to 1992-93; and EVAO of $5 000 or more from 1993-94. **b** Year ended 31 March. From 1999-00, year ended 30 June. Before 1987, includes livestock holdings on establishments with an EVAO of $2 500 or more. From 1987, the EVAO has been raised to $5 000. **c** Includes barley, canola, chickpeas, field peas, lupins, oats, triticale, maize, rice, sorghum, soybeans, sunflowerseed, linseed, safflowerseed, sugar cane and winegrapes. Excludes winegrapes before 1974-75. **na** Not available.

Sources: ABS, *Selected Agricultural Commodities, Australia (Preliminary)*, cat. no. 7112.0, Canberra; ABS, Agriculture, Australia, cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities*, cat. no. 7121.0, Canberra; ABS, Livestock and Livestock Products, Australia, cat. no. 7221.0, Canberra; ABS, Crops and Pastures, Australia, cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia*, cat. no. 7330.0, Canberra; ABS, *Agricultural Land Use and Selected Inputs, Australia*, cat. no. 7411.0, Canberra; ABARE.

24 Number of agricultural estalishments and rural employment in Australia

	Agricultural establishments a	Rural employment b			
		Employers and self-employed	Wage and salary earners	Contributing family workers	Total
	no.	'000	'000	'000	'000
1966-67	198 400	na	na	na	na
1967-68	197 050	na	na	na	na
1968-69	195 700	na	na	na	na
1969-70	192 550	na	na	na	na
1970-71	189 400	na	na	na	na
1971-72	187 650	na	na	na	na
1972-73	185 900	na	na	na	na
1973-74	184 150	na	na	na	na
1974-75	182 250	na	na	na	na
1975-76	180 411	na	na	na	na
1976-77	173 625	na	na	na	na
1977-78	176 155	na	na	na	na
1978-79	177 218	na	na	na	na
1979-80	179 084	na	na	na	na
1980-81	175 756	na	na	na	na
1981-82	174 466	na	na	na	na
1982-83	178 025	na	na	na	na
1983-84	175 412	na	na	na	na
1984-85	173 061	na	na	na	na
1985-86	171 180	na	na	na	na
1986-87	169 568	na	na	na	na
1987-88	168 339	na	na	na	na
1988-89	167 934	na	na	na	na
1989-90	163 416	na	na	na	na
1990-91	158 898	na	na	na	na
1991-92	154 380	na	na	na	na
1992-93	151 966	na	na	na	na
1993-94	150 389	na	na	na	na
1994-95	147 115	227.5	146.5	26.8	400.8
1995-96	146 612	226.8	162.3	26.8	415.8
1996-97	145 083	225.3	168.3	24.8	418.3
1997-98	144 836	232.3	176.8	19.3	428.3
1998-99	145 226	213.3	186.3	18.5	418.0
1999-00	146 371	220.5	192.8	23.3	436.5
2000-01	140 516	211.0	198.5	22.0	431.5
2001-02	135 377	211.8	213.0	13.0	437.8
2002-03	132 983	178.8	181.3	10.5	370.5
2003-04	130 526	172.0	185.3	9.5	366.8
2004-05	129 934	166.5	181.3	9.8	357.5
2005-06	154 472	161.8	176.3	10.0	348.0
2006-07	150 403	166.8	176.5	7.0	350.3
2007-08	140 704	171.0	173.8	7.3	352.0
2008-09	na	176.5	173.5	7.8	357.8

a Represents total establishments engaged in agricultural activities. **b** Based on ANZSIC 2006. Average employment over four quarters. Data represents agriculture, forestry, fishing and hunting, and services to these industries. **na** Not available.

Sources: ABS, *Labour Statistics, Australia,* cat. no. 6101.0, Canberra; ABS, *The Labour Force, Australia,* cat. no. 6203.0, Canberra; ABS, *Labour Force, Australia,Detailed - Electronic Delivery,* cat. no. 6291.0.55.003, Canberra; ABS, *Characteristics of Australian Farms,* cat. no. 7102.0, Canberra; ABS, *Agriculture,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities,* cat. no. 7121.0, Canberra; Lette, G. 1979, *Number of Farms and Farm Workforce in Australia,* BAE, Quarterly Review of the Rural Economy, vol. 1, no. 2, May 1979, pp. 147-150; ABARE.

25 Summary of farm sector and other rural exports a

	Cereal grains and products $m	Sugar products and honey $m	Meat and meat preparations $m	Wool and sheepskins $m	Other rural b $m	Total $m
At current prices						
1970-71	596	160	428	594	386	2 164
1971-72	623	223	558	631	441	2 476
1972-73	421	259	857	1 270	592	3 399
1973-74	748	230	795	1 242	588	3 603
1974-75	1 460	661	444	770	605	3 940
1975-76	1 397	599	668	1 043	730	4 437
1976-77	1 317	645	886	1 558	935	5 341
1977-78	1 330	544	1 118	1 292	1 075	5 359
1978-79	1 182	466	1 711	1 608	1 390	6 357
1979-80	2 957	719	1 729	1 790	1 667	8 862
1980-81	2 339	1 198	1 592	1 920	1 648	8 697
1981-82	2 494	794	1 417	1 893	1 799	8 397
1982-83	1 837	596	1 632	1 819	2 020	7 904
1983-84	2 861	665	1 357	1 960	2 135	8 978
1984-85	4 000	625	1 409	2 651	2 509	11 194
1985-86	3 848	652	1 698	3 028	2 972	12 198
1986-87	2 759	698	2 247	3 920	3 570	13 194
1987-88	2 298	701	2 557	5 806	3 979	15 341
1988-89	2 828	934	2 270	5 984	4 053	16 069
1989-90	3 288	1 104	2 936	3 753	4 484	15 565
1990-91	2 436	948	3 173	2 887	4 897	14 341
1991-92	2 352	747	3 434	3 829	5 657	16 019
1992-93	2 954	1 072	3 750	3 367	6 450	17 593
1993-94	3 205	1 315	4 042	3 369	7 087	19 018
1994-95	2 521	1 730	3 661	4 216	7 529	19 657
1995-96	4 921	1 712	3 292	3 664	8 428	22 017
1996-97	5 950	1 694	2 955	3 744	9 339	23 682
1997-98	5 096	1 939	3 730	4 020	10 472	25 257
1998-99	5 042	1 472	4 008	2 583	11 572	24 677
1999-00	4 942	1 229	4 470	2 963	13 084	26 688
2000-01	5 937	1 330	5 795	3 897	15 677	32 636
2001-02	6 482	1 610	6 248	3 687	16 254	34 281
2002-03	4 487	1 363	5 656	3 545	14 813	29 864
2003-04	5 093	1 123	5 758	2 778	14 128	28 880
2004-05	5 160	1 292	6 933	2 838	14 082	30 305
2005-06	4 852	1 763	6 709	2 544	14 561	30 429
2006-07	4 171	1 674	7 078	3 065	14 400	30 388
2007-08	4 976	1 153	6 540	2 796	14 485	29 950
2008-09	6 882	1 380	7 458	2 321	15 716	33 757

a On a balance of payments basis. **b** Includes other farm, forest and fisheries products. Also includes wine, paper and paperboard, and tuna transhipped at sea or captured under joint venture agreements, which are not included in rural exports by the ABS.

Sources: ABS, *Balance of Payments, Australia,* cat. no. 5302.0, Canberra; ABARE.

26 Australian winter and summer crop area and production

	Winter crops a		Summer crops b	
	Area	Production	Area	Production
	'000 ha	kt	'000 ha	kt
1989-90	13 875	21 518	932	2 754
1990-91	14 349	22 326	1 053	2 672
1991-92	13 058	18 962	1 225	3 793
1992-93	15 112	25 934	1 032	2 377
1993-94	14 907	27 783	1 172	3 096
1994-95	13 974	14 713	1 317	3 307
1995-96	16 128	27 785	1 448	3 623
1996-97	18 102	35 071	1 431	4 374
1997-98	18 260	31 116	1 335	3 823
1998-99	19 582	34 159	1 741	5 097
1999-00	19 763	36 981	1 591	5 025
2000-01	20 280	34 696	1 761	5 286
2001-02	19 817	39 240	1 633	4 933
2002-03	19 623	17 402	1 097	2 868
2003-04	21 982	43 395	1 211	3 679
2004-05	22 444	34 710	1 340	3 889
2005-06	20 728	40 985	1 442	4 387
2006-07	20 117	17 613	912	2 181
2007-08	21 954	25 433	1 205	4 584
2008-09	22 244	33 691	1 155	3 837

a Includes lentils, lupins, chickpeas, faba beans, field peas, canola, linseed, safflower, wheat, barley, oats and triticale. **b** Includes sorghum, cottonseed, maize, sunflower, rice, soybean, peanuts, mung beans and navy beans.
Sources: Australian Oilseeds Federation, Sydney; Pulse Australia, Sydney; ABS, Canberra; ABARE.

27 Australian winter and summer crop area and production, by state

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia
Winter a								
Area								
1999-00	'000 ha	4 955	2 670	1 337	7 464	3 342	25	19 763
2000-01	'000 ha	5 398	2 706	1 126	7 390	3 667	27	20 280
2001-02	'000 ha	5 309	2 684	788	7 173	3 866	23	19 817
2002-03	'000 ha	4 782	2 928	774	7 174	3 965	25	19 623
2003-04	'000 ha	6 070	3 126	1 039	7 689	4 034	25	21 982
2004-05	'000 ha	6 456	3 130	878	7 936	4 018	23	22 444
2005-06	'000 ha	5 554	2 908	967	7 390	3 882	24	20 728
2006-07	'000 ha	5 616	3 054	792	6 474	4 152	21	20 117
2007-08	'000 ha	6 315	3 397	879	7 262	4 142	22	21 954
2008-09	'000 ha	6 197	3 325	1 077	7 660	3 960	27	22 244
Production								
1999-00	Kt	11 495	5 139	2 222	13 311	4 751	61	36 981
2000-01	Kt	10 834	6 232	1 340	8 726	7 486	75	34 696
2001-02	Kt	11 171	5 873	1 142	12 050	8 927	75	39 240
2002-03	Kt	3 505	1 955	836	6 812	4 227	65	17 402
2003-04	Kt	10 768	6 945	1 473	16 683	7 450	70	43 395
2004-05	Kt	10 724	4 203	1 383	12 472	5 849	77	34 710
2005-06	Kt	11 867	6 170	1 426	13 922	7 518	82	40 985
2006-07	Kt	3 837	1 787	907	8 253	2 792	40	17 613
2007-08	Kt	4 000	4 711	1 195	10 750	4 713	63	25 433
2008-09	Kt	9 381	3 869	2 064	13 440	4 860	77	33 691
Summer b								
Area								
1999-00	'000 ha	742	3	771	3	0	0	1 591
2000-01	'000 ha	825	4	816	3	0	0	1 761
2001-02	'000 ha	777	3	794	1	1	0	1 633
2002-03	'000 ha	509	1	521	1	0	0	1 097
2003-04	'000 ha	436	4	708	2	0	0	1 211
2004-05	'000 ha	493	2	773	0	0	0	1 340
2005-06	'000 ha	760	2	615	4	0	0	1 442
2006-07	'000 ha	332	2	520	1	0	0	912
2007-08	'000 ha	378	1	756	3	0	0	1 205
2008-09	'000 ha	389	2	691	2	0	0	1 155
Production								
1999-00	Kt	2 882	8	2 031	2	0	0	5 025
2000-01	Kt	3 366	14	1 786	4	0	0	5 286
2001-02	Kt	3 146	14	1 772	0	0	0	4 933
2002-03	Kt	1 582	8	1 199	0	0	0	2 868
2003-04	Kt	1 766	10	1 806	1	0	0	3 679
2004-05	Kt	1 984	3	1 788	1	0	0	3 889
2005-06	Kt	2 765	8	1 512	9	1	0	4 387
2006-07	Kt	1 036	3	1 079	1	0	0	2 181
2007-08	Kt	1 650	7	2 826	8	0	0	4 584
2008-09	Kt	1 513	8	2 217	5	0	0	3 837

a Includes lentils, lupins, chickpeas, faba beans, field peas, canola, linseed, safflower, wheat, barley, oats and triticale. **b** Includes sorghum, cottonseed, maize, sunflower, rice, soybean. Australia also includes peanuts, mung beans and navy beans.

Sources: Australian Oilseeds Federation, Sydney; Pulse Australia, Sydney; ABS, Canberra; ABARE.

28 Summary of operations of mineral resource establishments a

	Number of establishments at 30 June	Employment at 30 June b	Wages and salaries c	Turnover	Stocks Opening	Stocks Closing	Purchases, transfers in and selected expenses	Value added
	no.	no.	$m	$m	$m	$m	$m	$m
Mining d								
1975-76	1 271	67 609	783	4 257	346	479	1 340	3 050
1976-77	1 277	67 888	928	5 062	473	548	1 589	3 548
1977-78	1 352	66 312	1 018	5 777	579	639	1 962	3 875
1978-79	1 368	66 563	1 096	6 561	643	654	2 166	4 407
1979-80	1 448	73 805	1 286	8 042	651	795	2 702	5 484
1980-81	1 514	80 033	1 594	9 329	806	1 064	3 364	6 224
1981-82	1 490	79 745	1 882	10 199	1 075	1 350	3 776	6 698
1982-83	1 542	77 755	2 063	11 901	1 333	1 710	4 169	8 109
1983-84	1 630	77 926	2 129	13 524	1 699	1 700	4 700	8 825
1984-85	1 649	78 063	2 307	16 291	1 786	1 716	5 611	10 610
1985-86	1 528	78 945	2 573	19 618	1 656	1 818	6 824	12 956
1986-87	1 451	78 233	2 772	19 257	1 829	2 285	6 798	12 914
1987-88	1 475	76 753	2 883	20 912	2 246	2 166	7 226	13 606
1988-89	375	64 746	2 690	20 830	2 052	2 017	6 640	14 155
1989-90	na	78 373	3 504	26 573	2 205	2 581	8 789	18 160
1990-91	527	65 776	3 550	28 899	2 435	2 606	8 907	20 164
1991-92	499	61 348	3 567	28 371	2 496	2 580	9 313	19 143
1992-93	493	66 462	3 820	31 507	2 903	2 870	10 381	21 093
1993-94	516	56 465	3 627	29 018	2 614	2 517	9 989	18 933
1994-95	499	55 014	3 594	28 882	2 508	2 517	10 219	18 654
1995-96	511	56 529	3 882	31 014	2 761	2 501	11 392	19 882
1996-97	503	56 168	4 077	34 234	2 786	3 354	12 380	22 422
1997-98	528	51 048	4 157	37 558	3 353	3 318	13 540	23 770
1998-99	527	45 703	3 910	37 524	3 471	3 296	13 230	24 120
1999-00	529	53 169	4 169	42 632	3 897	4 146	12 705	24 412
2000-01	na	52 854	5 620	55 954	4 008	3 496	na	32 674
2001-02	na	57 706	6 094	59 604	3 603	4 309	na	35 364
2002-03	na	61 034	6 607	62 794	4 171	4 264	na	37 021
2003-04	na	64 259	7 031	61 099	4 170	4 358	na	34 759
2004-05	na	69 126	7 826	71 510	4 094	4 805	na	41 746
2005-06	na	77 810	9 712	96 063	5 153	6 073	na	58 872
2006-07	na	83 072 s	11 769	127 529	6 004	6 979	na	71 770
2007-08	na	na	na	na	na	na	na	na
2008-09	na	na	na	na	na	na	na	na

a From 1992-93, the classification of census units is based on the 1993 edition of the Australian and New Zealand Standard Industrial Classification (ANZSIC). Before 1992-93, classification of census units was based on the Australian Standard Industrial Classification (ASIC); ANZSIC has replaced the following editions of ASIC: the 1983 edition (used since the 1982-83 census), the 1978 edition (used since the 1977-78 census) and the 1969 edition (used since the 1968-69 census). **b** Includes working proprietors. **c** Excludes amounts drawn by working proprietors. **d** Data for 1974-75 to 1987-88 and 1989-90 cover ASIC subdivisions 11–15; data for 1988-89, 1990-91 and 1991-92 cover ASIC subdivisions 11–14; data for 1992-93 cover ANZSIC subdivisions 11–14 (equivalent to ASIC subdivisions 11–15); and data for 1993-94 and 1994-95 cover ANZSIC subdivisions 11–13 (equivalent to ASIC subdivisions 11–14). Data from 1996-97 to 2000-01 based on ABS mining collection, equivalent to ANZSIC subdivisions 11–13. Data from 2001-02 based on ANZSIC subdivisions 11-15. **s** ABARE estimate. **na** Not available.

Sources: ABS, *Manufacturing Industry, Australia,* cat. no. 8201.0, Canberra; ABS, *Manufacturing Establishments, Summary of Operations, Australia,* cat. no. 8202.0, Canberra; ABS, *Manufacturing Industry, Details of Operations, Australia,* cat. no. 8203.0, Canberra; ABS, *Mining, Electricity and Gas Operations, Australia, Preliminary,* cat. no. 8401.0, Canberra; ABS, *Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Industry, Australia,* cat. nos. 8402.0, Canberra; ABS, *Mining Operations,* Australia, cat. no. 8415.0, Canberra.

29 Value of Australian mineral production, exploration expenditure and royalties paid

	Gross value of minerals produced ab						
	Metallics	Coal and petroleum	Construction materials c	Non-metallics	Total	Exploration expenditure de	Mineral royalties f
	$m	$m	$m	$m	$m	$m	$m
1975-76	1 858	2 223	276	179	4 536	156	177
1976-77	2 162	2 647	269	187	5 265	202	209
1977-78	2 088	3 001	313	216	5 618	262	223
1978-79	2 968	4 793	365	237	8 363	345	263
1979-80	3 540	6 226	448	273	10 487	581	371
1980-81	3 238	8 022	532	279	12 071	838	402
1981-82	3 820	8 635	605	288	13 348	1 380	433
1982-83	3 748	9 819	590	325 i	14 482	1 365	554
1983-84	4 389 g	11 717	706 h	327 i	17 457 j	1 249	586
1984-85	5 479 k	15 193	826 h	361 l	22 108 j	1 230	735
1985-86	5 963 k	11 961	894 h	596 m	19 720 j	1 208	942
1986-87	7 146 g	12 147 n	856 h	637 o	21 207 j	862	800
1987-88	8 310	10 221	973 h	777	20 281	1 295	821
1988-89	8 760 p	10 440 p	1 018 h	845 q	21 063 q	1 330	2 113
1989-90	11 110	12 700	1 399 h	924	26 133	1 190	2 156
1990-91	10 910 p	15 361 p	na	na	26 293	1 184	2 413
1991-92	10 957 p	15 010 p	na	na	25 985	1 078	2 167
1992-93	10 920 p	15 801 p	1 405 h	1 065	26 721	1 244	2 327
1993-94	10 861 p	14 841 p	na	na	25 702	1 299	2 033
1994-95	11 715 p	15 023 p	na	na	26 723	1 566	1 745
1995-96	12 793	15 986	na	na	28 779	1 649	1 867
1996-97	13 617	17 912	na	na	31 358	1 957	2 268
1997-98	14 696	19 517	na	na	34 213	1 985	2 423
1998-99	15 228	18 955	na	na	34 182	1 690	2 059
1999-00	14 234	20 065	na	na	34 299	1 377	2 788
2000-01	18 748	26 245	871	1 488	52 270	1 708	3 967
2001-02	19 531	31 126	1 221	2 905	54 782	1 523	4 141
2002-03	19 352	29 321	1 317	3 191	53 181	1 728	4 073
2003-04	20 424	26 340	1 396	2 615	50 773	1 731	3 943
2004-05	25 678	37 332	1 486	2 893	67 386	2 073	4 525
2005-06	36 124	50 175	1 629	3 218	91 146	2 503	6 020
2006-07	48 673	49 955	1 854	4 006	104 487	3 334	na
2007-08	na	na	na	na	na	4 694	na
2008-09	na	na	na	na	na	4 875	na

a Before 1988-89, data compiled by the former Bureau of Mineral Resources on a calendar year basis; for 1988-89 and 1989-90, data compiled by ABARE on a fiscal year basis; from 1990-91 to 1999-2000, data compiled by ABS from annual Mining Census data; and from 2001-02 ABS now applies a market price to the metallic content of production to obtain a valuation. **b** From 1965 to 1989-90, data cover ASIC subdivisions 11–15; data for 1990-91 and 1991-92 cover ASIC subdivisions 11–14; data for 1992-93 cover ANZSIC subdivisions 11–14 (equivalent to ASIC subdivisions 11–15); and data for 1993-94 and 1994-95 cover ANZSIC subdivisions 11–13 (equivalent to ASIC subdivisions 11–14). Data from 1996-97 based on ABS mining collection, equivalent to ANZSIC subdivisions 11–13. **c** Coverage is inconsistent between years. **d** Year ended 30 June. **e** Private expenditure; includes energy exploration. **f** Defined as total natural resource royalty expenses. Includes oil and gas extraction from 1988-89. **g** Excludes bauxite for Western Australia. **h** Excludes Australian Capital Territory. **i** Excludes talc and limestone for Western Australia. **j** Includes confidential items not separately included in the listed categories. **k** Excludes bauxite for Western Australia and iron oxide, molybdenum and tin–copper concentrate for Tasmania. **l** Excludes limestone and salt for Queensland. **m** Excludes salt for Victoria and limestone and talc for Western Australia. **n** Excludes coal for Western Australia. **o** Excludes salt for Victoria and limestone, silica and talc for Western Australia. **p** Tasmanian coal production included in metallics. **q** Excludes salt and silica for Victoria and clay, dolomite, limestone, peat and silica for Tasmania. **na** Not available.

Sources: ABS, *Mining Industry, Australia,* cat. no. 8402.0, Canberra; ABS, *Mineral Exploration, Australia,* cat. no. 8407.0, Canberra; ABS, Mineral and Petroleum Exploration, Australia, cat. no. 8412.0, Canberra; ABS, *Australian Mining Industry,* cat. no. 8414.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; state mines departments and their equivalents; ABARE.

30 Australian private mineral exploration expenditure, by type of mineral sought

	Energy minerals			Metallic minerals					
	Petroleum	Other a	Total	Gold	Base metals b	Other metallics	Total	Other	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m
1970-71	79	na	na	na	na	na	na	na	na
1971-72	104	na	na	na	na	na	na	na	na
1972-73	93	na	na	na	na	na	na	na	na
1973-74	90	na	na	na	na	na	na	na	na
1974-75	60	14	74	na	na	na	90	6	170
1975-76	56	15	71	na	na	na	78	7	156
1976-77	68	30	98	na	na	na	95	9	202
1977-78	103	48	151	na	na	na	101	10	262
1978-79	163	56	219	na	na	na	105	21	345
1979-80	295	85	380	30	92	41	163	38	581
1980-81	368	123	491	69	153	69	291	56	838
1981-82	804	165	969	95	167	79	341	70	1 380
1982-83	927	98	1 025	96	130	55	281	59	1 365
1983-84	824	60	884	152	138	40	330	35	1 249
1984-85	793	48	841	177	135	40	352	37	1 230
1985-86	766	82	848	215	79	32	326	34	1 208
1986-87	305	59	364	357	77	22	456	42	862
1987-88	495	48	543	581	84	40	705	47	1 295
1988-89	633	57	690	449	100	36	584	56	1 330
1989-90	583	52	635	341	118	39	498	57	1 190
1990-91	582	36	618	306	172	45	523	48	1 184
1991-92	474	40	514	305	145	66	515	48	1 078
1992-93	612	33	645	320	183	45	548	50	1 244
1993-94	507	35	542	454	192	43	688	69	1 299
1994-95	673	46	719	555	201	37	792	55	1 566
1995-96	689	60	749	547	252	40	839	61	1 649
1996-97	809	84	892	728	207	59	994	71	1 957
1997-98	918	87	1 005	648	227	55	930	50	1 985
1998-99	852	55	907	486	177	70	733	49	1 690
1999-00	701	47	748	375	157	64	596	33	1 377
2000-01	1 025	50	1 074	370	165	69	604	na	1 708
2001-02	883	59	942	331	133	87	551	na	1 523
2002-03	995	85	1 080	378	142	na	na	na	1 728
2003-04	944	92	1 036	397	152	na	na	na	1 731
2004-05	1 045	148	1 192	392	261	na	na	na	2 073
2005-06	1 262	223	1 484	400	357	na	na	na	2 503
2006-07	1 619	307	1 927	456	555	na	na	na	3 334
2007-08	2 233	466	2 699	593	783	na	na	na	4 694
2008-09	2 652	483	3 134	438	519	na	na	na	4 875

a Coal and uranium. **b** Includes copper, lead, zinc, silver, nickel and cobalt. **na** Not available.

Sources: ABS, *Mineral Exploration, Australia*, cat. no. 8407.0, Canberra; ABS, *Mineral and Petroleum Exploration, Australia*, cat. no. 8412.0, Canberra.

31 Private new capital expenditure

	Mining a $m	Manufacturing $m	Other selected industries $m	All industries $m
1966-67	243	na	na	1 661
1967-68	325	na	na	1 813
1968-69	435	na	na	2 027
1969-70	533	na	na	2 360
1970-71	781	na	na	2 940
1971-72	874	na	na	3 120
1972-73	455	na	na	2 660
1973-74 b	541	na	na	3 776
1974-75	707	na	na	4 565
1975-76	654	na	na	5 316
1976-77	490	na	na	5 952
1977-78	804	na	na	7 091
1978-79	1 034	na	na	8 699
1979-80 c	1 117	na	na	8 298
1980-81	1 910	na	na	10 962
1981-82	2 868	na	na	13 999
1982-83	3 488	na	na	14 185
1983-84	2 386	na	na	13 021
1984-85	2 100	na	na	14 525
1985-86	2 799	na	na	18 070
1986-87	3 639	na	na	21 327
1987-88	4 036	476	24 622	29 134
1988-89	4 028	569	28 835	33 432
1989-90	4 105	757	29 704	34 566
1990-91	4 623	689	27 020	32 332
1991-92	4 267	551	22 153	26 971
1992-93	5 548	591	22 943	29 082
1993-94	5 651	602	25 693	31 946
1994-95	6 438	911	30 521	37 870
1995-96	7 666	721	35 006	43 393
1996-97	8 986	992	37 621	47 599
1997-98	11 360	781	38 018	50 159
1998-99	9 065	437	40 335	49 837
1999-00	5 672	407	42 857	48 936
2000-01	5 729	441	41 201	47 371
2001-02	7 596	436	40 990	49 022
2002-03	9 215	737	46 497	56 449
2003-04	9 795	432	47 136	57 363
2004-05	10 843	502	53 024	64 369
2005-06	19 659	571	60 381	80 611
2006-07	23 621	467	63 387	87 475
2007-08	29 201	474	67 098	96 773
2008-09	37 977	609	74 535	113 121

a Includes expenditure on petroleum and gas. **b** Break in continuity as a result of change in scope and the introduction of the integrated capital expenditure survey. **c** Break in continuity as a result of the changed definition in accounting for finance leases. **na** Not available.

Sources: ABS, *Private New Capital Expenditure and Expected Expenditure, Australia,* cat. no. 5625.0, Canberra; ABS, *Private New Capital Expenditure, Australia, Actual and Expected Expenditure,* cat. no. 5626.0, Canberra; ABARE.

32 Australian production of mineral commodities

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bauxite	Mt	54	56	58	61	63	63	63
Coal								
Black								
Salable	Mt	275	284	305	307	325	327	334
Raw	Mt	349	360	393	399	414	421	438
Brown	Mt	67	66	67	68	66	72	73
Copper in mine products s	kt	883	811	895	936	859	863	889
Diamonds	'000 ct	32 006	24 310	32 471	25 354	24 632	16 528	15 430
Gold in mine products s	t	276	267	265	249	251	230	218
Iron ore and concentrate	Mt	199	223	252	264	288	325	353
Lead in mine products s	kt	695	677	682	762	642	641	596
Manganese ore and concentrate s	kt	2 472	3 094	3 563	4 082	5 046	5 412	3 730
Nickel in mine products s	kt	183	185	192	186	191	190	185
Petroleum								
Crude oil and condensate s	ML	35 023	30 713	27 311	24 316	28 809	25 789	27 788
LPG (naturally occurring)	ML	4 681	4 639	4 628	4 722	4 550	3 971	3 930
Natural gas and ethane	Mm^3	33 568	33 659	37 674	38 473	39 771	39 737	40 504
Salt s	kt	10 438	10 618	12 254	11 467	10 857	11 243	11 202
Silver in mine products s	t	1 892	2 056	2 303	2 218	1 674	1 867	1 785
Tin in mine products s	t	6 328	1 512	2 055	1 805	2 061	1 631	3 879
Titanium minerals								
Ilmenite	kt	2 072	1 911	1 993	2 185	2 383	2 205	2 070
Rutile	kt	204	152	173	184	279	333	308
Synthetic rutile s	kt	673	696	751	711	729	672	716
Titanium dioxide pigment s	kt	189	196	204	208	207	201	221
Uranium	t	9 172	9 569	10 964	9 974	9 594	10 114	10 311
Zinc in mine products s	kt	1 529	1 355	1 352	1 380	1 375	1 571	1 411
Zircon concentrate	kt	459	448	432	442	557	580	534

s ABARE estimate.

Sources: ABS; state mines departments and their equivalents; ABARE.

33 Gross value of Australian mineral production, by commodity a

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
	$m	$m	$m	$m	$m	$m
Coal						
Black	12 724	11 566	17 720	26 317	24 368	na
Brown	534	531	843	851	1 016	na
Construction materials	1 317	1 396	1 486	1 629	1 854	na
Copper ore and concentrate **b**	2 260	2 543	3 777	6 290	7 525	na
Diamonds	788	520	468	na	na	na
Gemstones						
Opals	71	60	64	57	46	na
Sapphires	3	1	0	2	0	na
Gold bullion **b**	5 046	4 731	4 635	5 609	6 284	na
Iron ore and concentrate **b**	5 298	5 359	8 330	12 897	15 975	na
Lead ore and concentrate **b**	502	654	830	1 015	1 271	na
Manganese ore and concentrate **b**	275	282	479	478	1 117	na
Nickel ore and concentrate **b**	2 528	3 139	3 613	3 816	8 402	na
Petroleum						
Crude oil and condensate, LPG (naturally occurring), Natural gas and ethane	16 063	14 243	18 769	23 007	24 570	na
Salt	260	211	222	237	234	na
Tin ore and concentrate **b**	45	14	13	15	34	na
Titanium minerals						
Ilmenite	145	93	80	66	112	na
Rutile	106	99	na	na	54	na
Uranium	308	382	463	530	664	na
Zinc ore and concentrate **b**	1 927	1 846	2 059	3 851	6 350	na
Zircon concentrate	329	256	298	400	453	na
Total **c**	53 181	50 773	67 386	91 146	104 487	na

a Gross value is ex mine. Data in this table are not on the same basis as data shown in the previous table. **b** From 2001-02 gross value is no longer valued ex mine. ABS now applies a market price to the metallic content of production to obtain a valuation. **c** Includes components shown as not available. Data based on ABS mining collection (equivalent to ANZSIC subdivisions 11–13). **na** Not available.

Sources: ABS, *Mining Production, Australia,* cat. no. 8405.0, Canberra; ABS, *Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations Australia,* cat. no. 8415.0, Canberra; state mines departments and their equivalents; ABARE.

34 Gross value of Australian mineral production, by state a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Northern Territory	Australia
	$m	$m	$m	$m	$m	$m	$m	$m
1969-70	382	176	288	401	91	80	32	1 450
1970-71	382	282	301	476	88	80	38	1 648
1971-72	445	310	357	514	104	88	48	1 867
1972-73	475	413	470	602	122	85	72	2 242
1973-74	600	434	600	740	109	120	105	2 710
1974-75	839	618	832	976	116	113	103	3 601
1975-76	1 033	888	1 102	1 064	144	151	151	4 536
1976-77	1 193	1 055	1 226	1 309	147	178	152	5 265
1977-78	1 267	1 398	1 176	1 256	166	211	141	5 618
1978-79	1 578	2 888	1 646	1 593	209	249	196	8 363
1979-80	1 625	4 046	1 937	2 042	225	282	326	10 487
1980-81	2 237	4 903	1 894	2 119	254	284	378	12 071
1981-82	2 381	5 036	2 228	2 614	305	277	506	13 348
1982-83	2 375	5 792	2 368	2 575	542	277	551	14 482 b
1983-84	2 707	6 652	2 892	3 170 c	782	237	697	17 457 b
1984-85	2 959	8 514	4 020 d	4 310 c	1 165	269 e	620	22 108 b
1985-86	3 151	5 131	4 185	5 096 c	1 016	336	805	19 720 b
1986-87	3 249	5 471	4 277	5 834	991	300	1 085	21 207 b
1987-88	3 392	3 979	4 164	6 296	1 049	356	1 047	20 281
1988-89	3 705	3 715	4 689	6 259	1 131	382 f	1 182	21 063 g
1989-90	4 524	4 019 h	5 381	8 819	1 231	496	1 663	26 133 h
1990-91	3 751	na i	4 961	9 761	na i	355	1 866	26 293
1991-92	3 721	na i	4 981	9 994	na i	361	1 493	25 985
1992-93	3 817	na i	5 519	10 286	na i	310	1 350	26 721
1993-94	3 863	na i	5 134	10 231	na i	327	1 028	25 702
1994-95	3 867	na i	5 283	11 835	na i	327	1 074	26 723
1995-96	4 027	na i	5 922	12 847	1 117	na	na	28 779
1996-97	4 688	3 265	6 425	14 231	1 029	387	1 306	31 358
1997-98	5 019	3 379	7 318	15 672	1 124	356	1 345	34 213
1998-99	5 291	2 471	8 217	15 438	1 053	446	1 266	34 182
1999-00	4 979	3 532	7 984	14 758	1 206	550	1 290	34 299
2000-01	7 031	4 050	10 910	26 272	2 130	504	1 374	52 270
2001-02	7 869	4 193	13 675	23 962	1 722	577	2 784	54 782
2002-03	6 797	4 006	12 388	25 301	1 683	536	2 470	53 181
2003-04	6 706	3 933	11 740	24 046	1 756	630	1 962	50 773
2004-05	9 197	4 642	16 907	30 626	2 425	706	2 883	67 386
2005-06	11 783	5 332	26 465	39 251	3 270	1 002	4 042	91 146
2006-07	12 268	5 473	27 183	49 736	3 411	1 173	5 244	104 487
2007-08	na	na	na	na	na	na	na	na

a Gross value is ex mine. Before 1988-89, data compiled by the former Bureau of Mineral Resources on a calendar year basis; for 1988-89 and 1989-90, data compiled by ABARE on a financial year basis; and from 1990-91, data compiled by ABS from annual Mining Census data. Data to 1989-90 cover ASIC subdivisions 11–15; data for 1990-91 and 1991-92 cover ASIC subdivisions 11–14; data for 1992-93 cover ANZSIC subdivisions 11–14 (equivalent to ASIC subdivisions 11–15); and data for 1993-94 and 1994-95 cover ANZSIC subdivisons 11–13 (equivalent to ASIC subdivisions 11–14). Data from 1996-97 based on ABS mining collection, (equivalent to ANZSIC subdivisions 11–13). From 2001-02 ABS now applies a market price to the metallic content of production to obtain a valuation. **b** Includes items excluded from state totals for confidentiality reasons. **c** Excludes bauxite, limestone and talc. **d** Excludes limestone and salt. **e** Excludes iron oxide, molybdenum, and tin–copper concentrate. **f** Excludes clay, dolomite, limestone, peat and silica. **g** Excludes salt and silica for Victoria and clay, dolomite, limestone, peat and silica for Tasmania. **h** Excludes salt and silica for Victoria. **i** ABS confidentiality provisions apply; data not available for publication. **na** Not available.

Sources: ABS, *Mining Production, Australia,* cat. no. 8405.0, Canberra; ABS, *Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; state mines departments and their equivalents; ABARE.

35 Australian smelter and refinery production of mineral commodities

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Alumina	kt	16 417	16 413	16 690	17 161	17 826	18 506	19 359	19 597
Aluminium	kt	1 809	1 855	1 877	1 890	1 912	1 954	1 964	1 974
Blister copper **a**	kt	456	469	389	434	404	389	395	459
Copper	kt	561	537	458	486	461	435	444	499
Gold **e**									
Australian origin	t	271	251	246	227	209	208	190	179
Overseas origin	t	20	65	80	76	66	55	58	74
Lead bullion **a**	kt	201	181	143	153	141	114	152	155
Lead **b**	kt	275	267	247	234	234	191	203	213
Nickel matte	kt	30	39	49	48	47	57	45	21
Nickel **c**	kt	128	128	124	127	115	118	121	111
Petroleum									
Automotive diesel oil	ML	13 064	13 335	12 544	12 822	10 154	11 055	12 177	12 231
Automotive gasoline	ML	17 999	17 984	17 375	17 913	16 528	17 732	17 079	17 159
Aviation turbine fuel	ML	5 390	5 149	4 964	5 325	5 216	5 332	5 182	5 494
Fuel oil	ML	1 684	1 441	1 105	1 092	1 048	942	979	872
Raw steel **d**	kt	8 611	9 399	9 430	7 395	7 866	8 010	8 151	5 568
Silver	t	616	672	619	722	655	618	605	750
Tin	t	829	708	553	445	736	321	na	na
Zinc	kt	572	571	499	464	446	496	507	506

a Metallic content. **b** Includes lead content of lead alloys from primary sources. **c** Includes nickel contained in metal and nickel oxide. **d** Includes recovery from scrap. **e** Includes refined gold from primary sources only. **na** Not available.
Sources: DRET; ABARE.

36 Prices of mineral commodities

	Alumina av. export unit value	Aluminium (high grade) LME cash	Gold London AM fix	Iron ore a av. export unit value	Thermal coal av. export unit value	Metallurgical coal av. export unit value	Crude oil b world trade weighted average	Uranium c Nuexco exch. value
	A$/t	US$/t	US$/oz	A$/t	A$/t	A$/t	US$/bbl	US$/lb
1990-91	307.56	1 581.25	373.70	24.63	49.18	61.82	21.95	9.73
1991-92	241.73	1 232.00	351.93	26.74	48.48	61.55	17.76	8.08
1992-93	242.11	1 198.85	343.69	26.91	50.00	65.38	17.74	9.68
1993-94	224.36	1 204.25	378.93	24.28	47.84	61.97	14.45	9.74
1994-95	216.31	1 763.59	384.37	21.53	44.12	55.88	16.83	10.17
1995-96	247.36	1 662.53	389.89	22.70	49.29	61.30	17.44	13.73
1996-97	236.49	1 513.46	363.82	22.94	46.49	61.18	20.30	14.12
1997-98	274.06	1 511.29	306.07	26.66	48.25	68.30	15.03	11.29
1998-99	263.13	1 276.42	285.90	28.44	44.76	64.18	12.31	10.10
1999-00	297.80	1 515.73	281.60	25.54	39.43	53.54	24.05	9.42
2000-01	354.29	1 539.00	269.45	31.16	47.78	62.51	26.82	7.88
2001-02	314.25	1 358.75	289.08	33.05	57.51	75.95	21.59	9.59
2002-03	277.97	1 360.23	334.19	29.44	44.50	69.09	26.26	10.22
2003-04	278.60	1 569.05	389.28	27.09	40.98	58.26	29.33	14.90
2004-05	311.47	1 806.85	422.49	35.54	59.55	86.12	41.18	22.20
2005-06	362.90	2 244.69	526.95	53.70	65.02	141.13	57.25	36.79
2006-07	414.63	2 692.18	638.56	60.27	60.54	113.96	59.45	81.17
2007-08	369.08	2 665.02	823.35	69.70	72.70	117.14	91.97	80.75
2008-09	366.90	1 781.42	873.99	105.84	131.28	293.57	66.05	51.25

	Copper (high grade) LME cash	Lead LME cash	Zinc (high grade) LME cash	Silver d London fix	Nickel LME cash	Ilmenite e av. export unit value	Rutile f av. export unit value	Zircon g av. export unit value
	US$/t	US$/t	US$/t	USc/troy oz	US$/t	A$/t	A$/t	A$/t
1990-91	2 641.00	682.00	1 578.00	428.00	9 081.00	82.38	775.61	515.75
1991-92	2 253.00	527.00	1 308.00	407.25	7 578.00	82.94	629.07	317.90
1992-93	2 193.80	487.00	1 164.00	387.69	6 127.63	79.72	545.46	193.28
1993-94	1 893.00	439.00	1 114.00	498.94	5 260.56	83.36	536.07	206.43
1994-95	2 765.59	613.00	937.00	516.48	7 445.99	86.16	568.94	295.34
1995-96	2 739.51	721.00	1 045.00	537.13	8 212.34	92.56	672.57	495.70
1996-97	2 264.68	707.00	1 022.00	492.74	7 223.57	99.42	733.81	601.80
1997-98	1 903.38	568.26	1 124.00	543.87	5 812.46	106.87	773.46	582.65
1998-99	1 514.50	513.47	1 227.00	516.15	4 507.14	116.97	789.31	513.74
1999-00	1 737.81	464.94	998.18	520.45	8 257.38	133.39	732.15	481.89
2000-01	1 786.51	476.14	1 143.59	466.71	7 244.08	152.06	849.08	607.62
2001-02	1 516.15	473.60	1 049.66	441.55	5 922.50	150.76	882.09	702.47
2002-03	1 595.11	445.04	791.40	461.00	7 665.37	132.51	767.87	633.61
2003-04	2 267.35	700.06	774.77	579.25	12 256.83	104.56	647.39	585.76
2004-05	3 151.00	964.08	961.97	694.94	14 960.64	99.29	717.20	746.27
2005-06	5 062.00	1 061.35	1 170.95	927.82	15 510.32	105.92	816.59	908.63
2006-07	7 086.78	1 694.20	2 117.81	1 274.16	37 908.78	112.89 s	845.61	861.55
2007-08	7 791.00	2 892.53	3 672.41	1 544.29	28 564.32	116.32 s	693.21	660.98
2008-09	4 935.58	1 454.07	2 598.83	1 289.13	13 322.04	111.12 s	609.23	788.70

a Lump and fines. **b** US Department of Energy, *Energy Information Administration*. **c** Nuexco exchange value to 1997-98; Ux Consulting Industry spot price from 1998-99. **d** London fix rate from May 2001; Handy and Harman, commercial bar, minimum 99.9 per cent prior to May 2001. **e** All grades, bulk and bagged, before January 1992; bulk only thereafter. **f** All grades before August 1999; bagged only thereafter. **g** All grades, bulk and bagged, to 31 December 1991; standard grade only from 1 January 1992 to 30 June 1993; all grades to September 1999; bagged only thereafter. **s** ABARE estimate.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; London Metal Exchange; London Bullion Market Association; US Energy Information Administration; The UX Consulting Company; ABARE.

37 Exports and imports of Australian mineral resources a

	Exports a						
	Coal, coke and briquettes	Other mineral fuels	Metalliferous ores and other minerals b	Gold	Other metals	Total	Imports c
	$m	$m	$m	$m	$m	$m	$m
1970-71	206	41	789	20	374	1 430	208
1971-72	240	60	810	20	415	1 545	187
1972-73	294	46	931	25	513	1 809	223
1973-74	352	105	1 116	35	638	2 246	590
1974-75	733	162	1 595	46	884	3 420	661
1975-76	1 066	161	1 831	50	761	3 869	723
1976-77	1 292	206	2 243	34	1 038	4 813	922
1977-78	1 489	234	2 400	48	1 040	5 211	1 021
1978-79	1 531	316	2 616	80	1 385	5 928	1 305
1979-80	1 686	427	3 306	113	1 868	7 400	2 157
1980-81	1 981	517	3 409	56	1 517	7 480	2 372
1981-82	2 367	903	3 456	94	1 469	8 289	3 144
1982-83	3 049	1 099	3 852	290	1 768	10 058	2 121
1983-84	3 477	1 502	4 229	400	1 916	11 524	2 066
1984-85	4 591	2 294	4 974	601	2 492	14 952	2 029
1985-86	5 204	2 214	5 309	1 137	2 421	16 285	1 537
1986-87	5 361	1 564	5 494	2 047	2 933	17 399	1 910
1987-88	4 866	1 786	6 358	3 107	3 863	19 980	2 772
1988-89	4 805	1 258	7 187	3 021	4 924	21 195	3 666
1989-90	5 932	2 068	8 348	3 764	4 820	24 932	4 319
1990-91	6 480	3 595	8 932	4 136	4 887	28 030	4 969
1991-92	6 949	3 402	8 477	4 605	4 871	28 304	4 908
1992-93	7 620	3 913	8 312	4 580	5 334	29 759	6 237
1993-94	7 255	3 351	8 233	5 521	5 517	29 878	5 786
1994-95	6 937	3 794	8 448	4 906	6 281	30 366	6 114
1995-96	7 840	4 156	9 614	5 850	6 972	34 432	6 701
1996-97	8 005	5 149	9 803	6 876	6 208	36 041	7 356
1997-98	9 588	5 308	11 373	7 226	7 417	40 912	8 554
1998-99	9 289	4 460	11 635	6 720	7 109	39 213	8 969
1999-00	8 335	9 080	12 361	6 599	9 110	45 484	12 063
2000-01	10 843	13 463	15 839	6 222	11 354	57 721	14 278
2001-02	13 423	10 938	15 286	6 646	10 904	57 197	13 552
2002-03	11 990	11 043	15 361	7 648	10 960	57 002	16 087
2003-04	11 000	8 786	15 439	7 031	11 502	53 759	15 391
2004-05	17 240	11 154	20 535	6 472	13 159	68 561	20 877
2005-06	24 352	13 218	29 770	9 087	14 862	91 289	29 922
2006-07	21 928	15 642	36 041	10 740	22 329	106 680	31 698
2007-08	24 599	18 889	41 964	12 272	18 452	116 176	42 479
2008-09	54 802	20 658	52 421	17 509	14 287	159 677	47 096

a Balance of payments basis. **b** Includes ABARE estimates for bauxite, manganese and other ABS confidential minerals from 1984-85 until 1989-90. From 1990-91, ABS data include actual details for these items. ABARE estimates for items not classified as mineral resources by ABS are included for all years since 1984-85. **c** Pre 1987-88 reported on a calendar year basis. (example, 1987-88 = 1988). Post 1987-88 reported on a fiscal year basis.
Sources: ABS, *Balance of Payments, Australia,* cat. nos 5302.0 and 5303.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; ABARE.

38 Volume of Australian exports of mineral commodities

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Alumina	kt	13 168	13 572	14 073	14 499	15 056	15 739	16 395
Aluminium (ingot metal)	kt	1 551	1 546	1 512	1 617	1 638	1 650	1 748
Coal, black								
Metallurgical	Mt	108	112	125	120	132	137	125
Thermal	Mt	100	107	106	111	112	115	136
Copper **s**	kt	687	652	701	790	699	732	816
Diamonds **s**	'000 ct	32 274	24 326	32 471	25 354	24 632	16 528	16 279
Gold, refined	t	282	315	309	315	400	382	437
Iron and steel								
Iron ore and pellets	Mt	181	195	228	239	257	294	323
Iron and steel	kt	3 589	3 818	2 338	2 428	2 648	2 131	1 741
Ferroalloys	kt	9	8	0	2	5	1	3
Lead **s**	kt	735	688	782	756	635	588	645
Magnesia	t	143 372	154 620	162 763	157 342	139 787	161 531	108 806
Manganese ore and concentrate **s**	kt	2 014	2 603	3 128	3 215	4 667	5 105	3 227
Petroleum								
Crude oil and other refinery feedstock	ML	20 950	17 526	15 731	13 026	15 965	15 975	16 588
LNG **s**	Mt	8	8	11	12	14	14	15
LPG	ML	3 194	2 916	2 844	2 800	2 824	2 589	2 500
Refinery products	ML	3 140	2 474	1 846	2 082	1 752	1 807	1 162
Salt	kt	10 172	10 285	12 128	10 776	10 749	10 686	10 978
Silver, refined bullion	t	511	415	517	482	431	335	423
Tin **s**	t	5 963	143	1 529	1 556	1 867	3 079	4 159
Titanium minerals								
Ilmenite concentrate **a**	kt	1 020	783	633	722	999	894	1 538
Leucoxene	kt	41	125	93	86	123	56	20
Rutile concentrate	kt	195	146	158	169	307	399	550
Synthetic rutile **s**	kt	456	470	517	472	508	513	512
Titanium dioxide pigment	kt	147	165	175	177	171	175	141
Uranium oxide (U_3O_8)	t	9 593	9 099	11 249	10 253	9 519	10 139	10 114
Zinc **s**	kt	1 548	1 369	1 427	1 328	1 321	1 507	1 471
Zircon concentrate **b**	kt	445	443	428	438	555	637	685

a Bulk only. **b** All grades. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

39 Value of Australian exports of mineral commodities

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m
Bauxite **s**	159	125	123	127	153	206	192
Alumina **a**	3 660	3 781	4 383	5 262	6 243	5 809	6 015
Aluminium (ingot metal)	3 696	3 441	3 726	4 788	5 650	4 967	4 724
Coal, black							
Metallurgical	7 448	6 510	10 758	17 003	15 039	16 038	36 770
Thermal	4 448	4 372	6 336	7 206	6 758	8 365	17 901
Copper **b**	2 005	2 166	3 082	5 653	6 526	6 730	5 835
Diamonds **cs**	838	597	683	836	726	625	676
Gems, other than diamonds	74	64	61	59	49	52	43
Gold, refined	5 133	5 510	5 523	7 089	10 320	10 903	16 146
Iron and steel							
Iron ore and pellets	5 342	5 277	8 120	12 854	15 512	20 511	34 234
Iron and steel	1 855	2 004	2 031	1 674	1 743	1 562	1 363
Lead **b**	657	728	1 041	1 296	1 579	2 027	1 609
Magnesia	52	51	54	75	66	72	82
Manganese ore and concentrate **s**	312	371	473	424	482	1 532	1 406
Nickel **s**	2 347	3 277	3 749	3 642	8 469	5 655	2 656
Petroleum							
Crude oil and other refinery feedstock	6 402	5 055	6 330	6 638	8 317	10 484	8 755
LNG	2 607	2 174	3 199	4 416	5 222	5 854	10 086
LPG	855	647	804	1 002	1 038	1 182	1 044
Refinery products	1 198	918	844	1 195	1 098	1 323	787
Salt	233	186	226	229	239	232	237
Silver **d**	136	118	161	197	221	187	245
Tin **b**	38	1	8	12	25	42	70
Titanium minerals							
Ilmenite concentrate **e**	135	82	63	76	113	104	171
Leucoxene concentrate	16	33	25	25	35	15	12
Rutile concentrate	149	94	114	138	259	277	335
Synthetic rutile **s**	293	253	306	321	361	305	258
Titanium doxide pigment	428	399	422	441	408	375	396
Uranium oxide (U_3O_8)	427	364	475	546	660	887	990
Zinc **b**	1 427	1 234	1 466	2 540	4 298	3 350	1 857
Zircon concentrate **f**	282	260	319	398	478	421	540
Other mineral resources	4 399	3 717	3 707	5 200	4 654	6 147	4 319
Total mineral resources **g**	57 002	53 759	68 561	91 289	106 680	116 176	159 677

a Includes aluminium hydroxide. **b** Value of all ores, concentrates, intermediate products (where applicable) and refined metal. **c** Unsorted and sorted. **d** Includes refined bullion, powder, unwrought silver and semimanufactured forms. **e** Bulk ilmenite. **f** All grades. **g** Total mineral resources exports on an ABARE balance of payments basis. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

40 Value of Australian exports of minerals, by destination [a]

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
	$m	$m	$m	$m	$m	$m	$m	$m
Africa	113	113	119	164	231	180	153	263
Americas								
United States	569	641	485	742	1 931	1 227	1 798	2 109
Other	408	364	388	404	544	582	564	676
Asia								
China	575	739	1 046	1 213	1 498	1 626	2 036	2 769
Chinese Taipei	1 494	1 617	1 897	1 953	2 566	2 599	2 956	4 039
Hong Kong, China	1 200	801	844	1 021	1 668	1 088	996	1 256
India	569	669	816	785	921	1 195	949	1 305
Japan	9 307	9 355	9 176	9 077	10 545	10 008	11 337	15 034
Korea, Rep. of	2 952	3 306	4 708	5 241	4 520	4 420	4 647	5 958
Singapore	1 875	2 161	1 815	1 595	1 918	1 693	3 259	4 060
Other	2 130	2 438	2 627	2 610	2 106	1 821	2 287	2 786
Europe								
France	263	262	260	265	294	380	309	443
Germany	336	370	398	406	478	416	383	421
Netherlands	354	368	178	156	279	347	463	795
United Kingdom	1 243	498	791	581	1 097	2 456	1 537	1 469
Other European Union	741	803	894	908	1 173	1 306	1 172	1 452
Other Europe	225	209	478	237	1 000	332	185	155
Oceania								
New Zealand	492	520	700	818	739	719	858	989
Other	382	398	495	549	511	407	550	860
Other	4 160	4 205	5 615	4 868	5 448	5 560	6 815	8 201
Total	29 389	29 838	33 728	33 594	39 465	38 360	43 253	55 040

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m	$m
Africa	364	415	440	409	631	574	416	768
Americas								
United States	1 585	1 435	1 141	1 167	1 198	1 239	2 007	1 858
Other	827	900	592	660	1 814	1 588	1 332	2 578
Asia								
China	2 990	3 569	4 550	6 789	10 970	13 201	19 567	33 056
Chinese Taipei	3 159	2 653	2 162	3 165	4 100	4 716	4 906	5 954
Hong Kong, China	1 365	980	746	768	908	1 064	710	696
India	1 732	1 981	4 091	5 156	6 421	8 843	8 444	13 872
Japan	14 855	14 355	12 533	16 963	23 853	24 930	27 194	43 832
Korea, Rep. of	6 162	5 743	5 175	6 211	8 344	9 552	10 902	16 919
Singapore	2 802	2 790	1 540	1 629	2 391	2 932	3 040	3 059
Other	2 807	2 637	3 082	5 064	5 814	7 822	8 263	7 346
Europe								
France	521	427	348	479	683	701	583	841
Germany	381	325	297	334	492	540	479	1 250
Netherlands	766	644	626	913	1 555	1 627	1 391	1 669
United Kingdom	2 009	2 852	1 857	1 780	3 543	2 822	5 254	8 669
Other European Union	1 743	1 402	1 365	1 714	3 033	4 053	3 861	3 374
Other Europe	91	186	124	179	106	1 034	863	400
Oceania								
New Zealand	1 207	1 102	941	1 528	1 154	1 689	1 667	1 075
Other	525	516	369	469	740	610	612	511
Other	8 261	7 214	6 477	7 563	8 772	10 492	10 898	11 714
Total	54 151	52 125	48 456	62 941	86 523	100 026	112 388	159 440

a Not on a balance of payments basis; totals differ from earlier tables.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

41 Volume of Australian imports of mineral commodities

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Clays	kt	50	61	47	68	63	70	55
Diamonds **a**	'000 ct	3 218	2 229	2 168	4 098	3 430	2 964	767
Iron and steel								
Iron ore and pellets **b**	kt	4 667	5 417	4 648	5 026	4 722	4 401	3 599
Iron and steel	kt	1 306	1 583	2 116	2 191	2 318	1 848	2 082
Ferroalloys	kt	51	57	60	57	87	97	54
Limestone	kt	582	547	473	475	567	693	438
Magnesium	kt	6	9	7	8	8	9	7
Petroleum								
Crude oil and other refinery feedstock	ML	27 959	23 499	26 056	24 418	25 345	26 223	24 303
Natural gas **s**	kt	0	0	0	953	4 268	4 032	4 752
Other refinery products **s**	ML	5 497	10 542	11 188	14 172	14 018	17 982	19 697
Phosphate rock	kt	711	723	797	655	472	707	540
Platinum and platinum group metals	kg	2 319	2 984	2 391	2 097	4 571	2 518	1 203
Potassium fertiliser	kt	433	447	497	404	306	465	331
Sulphur	kt	56	25	55	33	37	206	77

a Includes sorted and unsorted, gem and industrial diamonds, and diamond dust and powder. **b** Includes limonite ore used for the production of refined nickel products. **c** Includes automotive diesel oil and industrial marine diesel fuel. **s** ABARE estimate.
Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

42 Value of Australian imports of mineral commodities

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m
Clays	14	19	16	17	16	18	18
Diamonds **a**	302	309	347	403	397	444	417
Gold **b**	2 957	2 559	2 462	4 800	5 309	7 311	11 250
Iron and steel							
Iron ore and pellets **c**	114	140	145	222	338	311	269
Iron and steel	1 226	1 353	2 041	2 075	2 479	2 225	3 192
Ferroalloys	59	71	137	123	116	154	181
Limestone	9	9	7	7	8	8	8
Magnesium	15	21	17	16	20	30	35
Petroleum							
Crude oil and other refinery feedstock	8 611	6 595	9 996	12 822	13 360	17 149	14 721
Natural gas **s**	0	0	0	152	800	724	2 166
Other refinery products **s**	2 050	3 594	5 121	8 608	7 784	12 730	13 133
Phosphate rock	50	41	49	42	32	80	193
Platinum and platinum group metals	64	86	59	70	186	111	29
Potassium fertiliser	108	94	106	112	85	165	355
Silver	35	70	30	33	98	80	223
Sulphur	45	59	47	45	34	101	152
Total	18 054	18 816	25 852	38 335	39 221	54 774	59 848

a Includes sorted and unsorted, gem and industrial diamonds, and diamond dust and powder. **b** Refined and unrefined bullion. **c** Includes value of limonite ore used for the production of refined nickel products. **d** Includes automotive diesel oil and industrial and marine diesel fuel. **s** ABARE estimate.
Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

Rural commodities

2009

43 Summary of Australian statistics for coarse grains a

			Production		Exports b	
	Area	Yield	Volume	Value	Volume	Value
	'000 ha	t/ha	kt	$m	kt	$m
1963-64	2 423	1.08	2 608	117	706	31
1964-65	2 476	1.11	2 760	125	735	34
1965-66	2 710	0.87	2 371	120	478	24
1966-67	3 019	1.28	3 850	180	872	41
1967-68	2 693	0.75	2 023	97	330	16
1968-69	3 185	1.19	3 799	152	853	34
1969-70	3 334	1.10	3 684	134	905	33
1970-71	4 191	1.31	5 474	233	2 218	100
1971-72	4 492	1.29	5 782	223	3 177	137
1972-73	3 891	0.93	3 620	190	1 663	79
1973-74	3 664	1.27	4 671	347	1 742	137
1974-75	3 285	1.35	4 424	404	2 884	280
1975-76	3 868	1.44	5 575	500	3 148	307
1976-77	3 901	1.29	5 019	464	3 327	335
1977-78	4 318	0.98	4 218	347	1 939	179
1978-79	4 663	1.51	7 063	555	2 850	246
1979-80	4 199	1.48	6 215	667	4 467	512
1980-81	4 284	1.22	5 209	701	2 764	430
1981-82	4 847	1.38	6 687	799	3 459	519
1982-83	4 527	0.88	3 966	562	1 805	294
1983-84	5 794	1.64	9 497	1 239	4 548	738
1984-85	5 523	1.59	8 769	1 156	6 466	981
1985-86	5 306	1.53	8 113	974	5 838	826
1986-87	4 436	1.58	6 989	801	3 693	476
1987-88	4 576	1.57	7 162	906	2 505	377
1988-89	4 292	1.57	6 734	1 041	2 466	448
1989-90	3 919	1.79	7 005	1 086	3 336	667
1990-91	4 127	1.64	6 766	870	3 310	576
1991-92	4 624	1.75	8 109	1 151	2 728	487
1992-93	4 690	1.78	8 361	1 176	3 324	611
1993-94	5 042	1.96	9 864	1 241	2 320	445
1994-95	4 258	1.30	5 534	1 125	2 642	452
1995-96	5 294	1.90	10 070	2 050	4 099	1 025
1996-97	5 376	2.02	10 846	1 978	4 814	1 104
1997-98	5 388	1.88	10 102	1 601	3 398	810
1998-99	5 113	2.10	10 721	1 419	5 067	935
1999-00	4 244	2.22	9 435	1 401	4 062	866
2000-01	5 326	2.05	10 914	1 952	4 629	1 199
2001-02	5 806	2.25	13 049	2 583	5 752	1 438
2002-03	5 900	1.17	6 924	1 650	3 766	1 029
2003-04	6 815	2.29	15 630	2 562	5 784	1 345
2004-05	6 755	1.79	12 064	1 849	7 188	1 412
2005-06	6 526	2.17	14 155	2 131	5 684	1 193
2006-07	6 216	1.08	6 727	1 597	3 255	875
2007-08	7 510	1.77	13 289	3 847	4 429	1 620
2008-09	6 825	1.82	12 416	2 900	5 563	1 820

a Barley, oats, sorghum and maize. Includes triticale from 1979-80. **b** Including grains and the grain equivalent of malt exported.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABS, *Value of Agricultural Commodities produced, Australia,* cat. no. 7503.0, Canberra; ABARE.

44 Australian coarse grains area, yield and production, by state a

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia b
Barley								
Area								
2002-03	'000 ha	636	778	108	1 140	1 194	8	3 864
2003-04	'000 ha	951	872	151	1 278	1 216	9	4 477
2004-05	'000 ha	1 023	924	97	1 313	1 280	8	4 645
2005-06	'000 ha	1 102	866	129	1 129	1 170	9	4 406
2006-07	'000 ha	902	913	81	1 083	1 193	7	4 182
2007-08	'000 ha	1 049	1 107	113	1 381	1 244	8	4 902
2008-09	'000 ha	964	1 083	83	1 440	1 210	10	4 790
Yield								
2002-03	t/ha	0.67	0.61	1.37	1.18	1.21	2.63	1.00
2003-04	t/ha	2.06	2.61	1.74	2.48	2.21	3.11	2.32
2004-05	t/ha	1.72	1.41	1.84	1.51	1.94	3.50	1.67
2005-06	t/ha	2.12	2.31	1.29	2.13	2.18	3.11	2.15
2006-07	t/ha	0.83	0.66	0.98	1.67	0.83	2.29	1.02
2007-08	t/ha	0.78	1.62	1.27	1.97	1.34	2.75	1.46
2008-09	t/ha	1.49	1.28	1.87	1.95	1.53	2.80	1.60
Production								
2002-03	kt	428	478	148	1 349	1 440	21	3 865
2003-04	kt	1 955	2 275	263	3 170	2 691	28	10 382
2004-05	kt	1 761	1 305	178	1 979	2 489	28	7 740
2005-06	kt	2 336	2 003	166	2 400	2 549	28	9 482
2006-07	kt	753	605	79	1 808	996	16	4 257
2007-08	kt	814	1 789	143	2 719	1 672	22	7 159
2008-09	kt	1 435	1 387	155	2 808	1 855	28	7 669
Oats								
Area								
2002-03	'000 ha	308	188	9	314	88	4	911
2003-04	'000 ha	449	194	9	344	89	4	1 089
2004-05	'000 ha	400	150	21	243	76	4	894
2005-06	'000 ha	417	152	16	271	72	4	931
2006-07	'000 ha	390	176	24	299	106	4	1 003
2007-08	'000 ha	464	211	20	397	142	4	1 238
2008-09	'000 ha	274	185	7	302	84	4	856
Yield								
2002-03	t/ha	0.48	1.33	0.44	1.52	0.80	1.75	1.05
2003-04	t/ha	1.36	2.61	0.56	2.19	1.54	1.75	1.85
2004-05	t/ha	1.07	1.89	0.48	1.89	1.18	2.25	1.43
2005-06	t/ha	1.52	2.16	0.44	2.18	1.67	2.00	1.81
2006-07	t/ha	0.29	0.76	0.17	1.47	0.49	0.75	0.75
2007-08	t/ha	0.42	1.59	0.60	2.12	0.81	2.00	1.21
2008-09	t/ha	0.94	1.29	1.00	2.07	0.86	1.43	1.41
Production								
2002-03	kt	149	250	4	477	70	7	957
2003-04	kt	610	507	5	752	137	7	2 018
2004-05	kt	429	284	10	460	90	9	1 282
2005-06	kt	634	329	7	592	120	8	1 688
2006-07	kt	115	134	4	441	52	3	748
2007-08	kt	193	335	12	840	115	8	1 503
2008-09	kt	258	238	7	625	72	6	1 205

Continued

44 Australian coarse grains area, yield and production, by state a continued

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia b
Sorghum								
Area								
2002-03	'000 ha	255	0	405	0	0	0	667
2003-04	'000 ha	212	2	519	1	0	0	734
2004-05	'000 ha	211	0	544	0	0	0	755
2005-06	'000 ha	328	0	435	2	0	0	766
2006-07	'000 ha	162	1	449	0	0	0	613
2007-08	'000 ha	279	0	661	1	0	0	942
2008-09	'000 ha	233	1	519	1	0	0	754
Yield								
2002-03	t/ha	2.08	0.00	2.30	0.00	0.00	0.00	2.20
2003-04	t/ha	3.34	1.00	2.50	1.00	0.00	0.00	2.74
2004-05	t/ha	4.01	0.00	2.14	0.00	0.00	0.00	2.66
2005-06	t/ha	2.70	2.50	2.38	1.50	na	0.00	2.52
2006-07	t/ha	2.38	0.04	2.00	0.00	0.00	0.00	2.09
2007-08	t/ha	4.55	na	3.81	2.00	na	na	4.02
2008-09	t/ha	4.08	0.89	3.31	0.89	na	na	3.54
Production								
2002-03	kt	531	0	930	0	0	0	1 465
2003-04	kt	709	2	1 296	1	0	0	2 009
2004-05	kt	847	0	1 164	0	0	0	2 011
2005-06	kt	886	1	1 036	3	1	0	1 929
2006-07	kt	385	0	896	0	0	0	1 283
2007-08	kt	1 270	0	2 519	2	0	0	3 790
2008-09	kt	950	1	1 719	1	0	0	2 671
Maize								
Area								
2002-03	'000 ha	21	1	28	1	0	0	50
2003-04	'000 ha	22	1	48	1	0	0	70
2004-05	'000 ha	25	1	46	0	0	0	72
2005-06	'000 ha	26	1	47	2	0	0	76
2006-07	'000 ha	20	1	27	1	0	0	49
2007-08	'000 ha	20	1	45	2	0	0	68
2008-09	'000 ha	21	1	47	1	0	0	70
Yield								
2002-03	t/ha	7.76	7.50	4.68	0.00	0.00	0.00	6.20
2003-04	t/ha	8.09	7.00	4.40	0.00	0.00	0.00	5.64
2004-05	t/ha	9.68	2.00	3.76	na	na	na	5.83
2005-06	t/ha	7.18	7.00	3.90	3.00	0.00	0.00	5.03
2006-07	t/ha	7.15	3.00	3.41	1.00	0.00	0.00	4.90
2007-08	t/ha	8.80	7.00	4.40	3.00	na	na	5.69
2008-09	t/ha	8.00	6.14	4.03	4.05	na	na	5.25
Production								
2002-03	kt	163	8	131	0	0	0	310
2003-04	kt	178	7	211	0	0	0	395
2004-05	kt	242	2	173	1	0	0	420
2005-06	kt	184	7	183	6	0	0	380
2006-07	kt	143	3	92	1	0	0	240
2007-08	kt	176	7	198	6	0	0	387
2008-09	kt	168	6	189	4	0	0	368

Continued

44 Australian coarse grains area, yield and production, by state a continued

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia b
Triticale								
Area								
2002-03	'000 ha	129	136	1	29	109	4	408
2003-04	'000 ha	135	141	3	42	122	2	445
2004-05	'000 ha	126	125	1	42	93	2	389
2005-06	'000 ha	111	112	1	29	92	2	347
2006-07	'000 ha	118	119	1	31	97	2	369
2007-08	'000 ha	115	116	1	30	95	2	360
2008-09	'000 ha	114	115	1	30	94	2	355
Yield								
2002-03	t/ha	0.94	0.77	0.00	0.79	0.62	2.50	0.80
2003-04	t/ha	2.18	2.09	0.67	1.74	1.25	4.00	1.86
2004-05	t/ha	2.25	1.60	1.40	1.12	0.78	3.00	1.57
2005-06	t/ha	2.39	2.11	0.72	1.44	1.34	4.01	1.95
2006-07	t/ha	0.66	0.58	0.20	0.40	0.37	1.11	0.54
2007-08	t/ha	1.53	1.35	0.46	0.92	0.86	2.58	1.25
2008-09	t/ha	1.74	1.53	0.52	1.05	0.98	2.92	1.42
Production								
2002-03	kt	121	105	0	23	68	10	327
2003-04	kt	294	295	2	73	153	8	826
2004-05	kt	284	200	1	47	73	6	611
2005-06	kt	266	237	1	42	123	8	676
2006-07	kt	78	70	0	12	36	2	199
2007-08	kt	177	158	1	28	82	5	450
2008-09	kt	198	176	1	31	91	6	503
Total coarse grains								
Area								
2002-03	'000 ha	1 349	1 103	551	1 484	1 391	16	5 900
2003-04	'000 ha	1 769	1 210	730	1 666	1 427	15	6 815
2004-05	'000 ha	1 785	1 200	709	1 598	1 449	14	6 755
2005-06	'000 ha	1 984	1 131	628	1 433	1 334	15	6 526
2006-07	'000 ha	1 592	1 210	582	1 414	1 396	13	6 216
2007-08	'000 ha	1 927	1 435	840	1 811	1 481	14	7 510
2008-09	'000 ha	1 606	1 385	657	1 774	1 388	16	6 825
Yield								
2002-03	t/ha	1.03	0.76	2.20	1.25	1.13	2.37	1.17
2003-04	t/ha	2.12	2.55	2.43	2.40	2.09	2.87	2.29
2004-05	t/ha	2.00	1.49	2.15	1.56	1.83	3.07	1.79
2005-06	t/ha	2.17	2.28	2.22	2.12	2.09	2.94	2.17
2006-07	t/ha	0.93	0.67	1.84	1.60	0.78	1.63	1.08
2007-08	t/ha	1.36	1.59	3.42	1.98	1.26	2.51	1.77
2008-09	t/ha	1.87	1.31	3.15	1.96	1.45	2.47	1.82
Production								
2002-03	kt	1 392	841	1 213	1 849	1 578	38	6 924
2003-04	kt	3 746	3 086	1 777	3 996	2 981	43	15 630
2004-05	kt	3 563	1 791	1 526	2 487	2 652	43	12 064
2005-06	kt	4 305	2 576	1 393	3 043	2 793	44	14 155
2006-07	kt	1 474	812	1 071	2 262	1 084	21	6 727
2007-08	kt	2 630	2 289	2 873	3 595	1 869	35	13 289
2008-09	kt	3 009	1 808	2 071	3 469	2 019	40	12 416

a Crops sown for grain. **b** State and Australian totals may not be equal as a result of rounding and the inclusion of data for the Australian Capital Territory.

Sources: ABARE, *Australian Crop Report,* Canberra; ABS, *Selected Agricultural Commodities, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra.

45 Summary of Australian statistics for barley

			Production		Exports a	
	Area	Yield	Volume	Value	Volume	Value
	'000 ha	t/ha	kt	$m	kt	$m
1962-63	821	1.09	898	43	234	11
1963-64	815	1.21	984	47	403	18
1964-65	835	1.34	1 119	56	369	18
1965-66	930	1.02	949	48	227	12
1966-67	1 011	1.38	1 397	74	425	22
1967-68	1 057	0.79	835	42	129	7
1968-69	1 341	1.23	1 646	71	451	18
1969-70	1 521	1.12	1 698	66	631	23
1970-71	2 000	1.18	2 351	111	1 123	51
1971-72	2 535	1.21	3 065	124	1 817	74
1972-73	2 140	0.81	1 727	91	804	39
1973-74	1 894	1.27	2 397	190	808	69
1974-75	1 826	1.38	2 515	257	1 760	187
1975-76	2 329	1.36	3 179	314	1 963	201
1976-77	2 321	1.23	2 847	295	2 100	223
1977-78	2 803	0.85	2 383	205	1 325	122
1978-79	2 785	1.44	4 006	339	2 028	174
1979-80	2 481	1.49	3 703	450	3 406	407
1980-81	2 451	1.09	2 682	381	2 076	341
1981-82	2 685	1.29	3 450	463	2 021	340
1982-83	2 452	0.79	1 939	288	1 262	225
1983-84	3 109	1.57	4 890	733	3 468	583
1984-85	3 518	1.58	5 554	759	4 341	665
1985-86	3 284	1.48	4 868	587	4 490	610
1986-87	2 274	1.56	3 548	423	2 637	351
1987-88	2 346	1.46	3 417	455	1 863	293
1988-89	2 190	1.48	3 242	558	1 910	355
1989-90	2 310	1.75	4 044	709	2 917	603
1990-91	2 555	1.61	4 108	568	2 914	512
1991-92	2 744	1.65	4 530	693	2 393	435
1992-93	2 947	1.83	5 397	802	2 825	532
1993-94	3 424	1.95	6 668	845	1 903	375
1994-95	2 470	1.18	2 913	622	2 429	413
1995-96	3 111	1.87	5 823	1 276	3 451	876
1996-97	3 367	1.99	6 696	1 308	4 370	999
1997-98	3 521	1.84	6 482	1 032	2 982	726
1998-99	3 167	1.89	5 987	836	4 715	877
1999-00	2 596	1.94	5 032	865	3 834	822
2000-01	3 454	1.95	6 743	1 344	4 146	1 101
2001-02	3 707	2.23	8 280	1 725	4 990	1 278
2002-03	3 864	1.00	3 865	984	3 464	955
2003-04	4 477	2.32	10 382	1 750	5 310	1 239
2004-05	4 645	1.67	7 740	1 233	6 500	1 275
2005-06	4 406	2.15	9 482	1 417	5 316	1 108
2006-07	4 182	1.02	4 257	1 039	3 136	833
2007-08	4 902	1.46	7 159	2 244	4 051	1 496
2008-09	4 790	1.60	7 669	1 658	3 900	1 321

a Including grains and the grain equivalent of malt exported.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABS, *Value of Agricultural Commodities produced, Australia,* cat. no. 7503.0, Canberra; ABARE.

46 Summary of Australian statistics for oats

			Production		Exports	
	Area	Yield	Volume	Value	Volume	Value
	'000 ha	t/ha	kt	$m	kt	$m
1962-63	1 332	0.94	1 248	51	322	14
1963-64	1 373	0.90	1 238	50	303	13
1964-65	1 415	0.90	1 271	51	366	16
1965-66	1 525	0.72	1 102	53	251	12
1966-67	1 723	1.13	1 943	83	402	18
1967-68	1 368	0.53	719	34	182	8
1968-69	1 567	1.09	1 710	59	333	13
1969-70	1 374	0.91	1 247	33	219	8
1970-71	1 484	1.09	1 614	54	556	24
1971-72	1 237	1.03	1 275	37	329	12
1972-73	995	0.74	736	32	115	5
1973-74	1 182	0.94	1 107	67	184	14
1974-75	897	0.98	874	60	267	20
1975-76	988	1.16	1 141	78	359	33
1976-77	995	1.08	1 072	74	364	33
1977-78	1 076	0.92	991	69	218	20
1978-79	1 359	1.30	1 763	100	290	25
1979-80	1 123	1.26	1 411	99	472	44
1980-81	1 093	1.03	1 128	140	196	28
1981-82	1 388	1.16	1 617	156	153	24
1982-83	1 212	0.70	848	116	83	13
1983-84	1 772	1.30	2 296	204	289	41
1984-85	1 041	1.31	1 367	130	391	49
1985-86	1 068	1.24	1 330	138	185	25
1986-87	1 140	1.39	1 584	161	192	27
1987-88	1 275	1.33	1 698	191	215	31
1988-89	1 309	1.40	1 838	233	253	46
1989-90	1 089	1.51	1 640	178	232	35
1990-91	1 043	1.47	1 530	147	214	34
1991-92	1 160	1.46	1 690	182	141	21
1992-93	1 150	1.68	1 937	209	266	40
1993-94	947	1.74	1 647	148	223	33
1994-95	897	1.03	924	166	96	18
1995-96	1 136	1.65	1 875	289	233	50
1996-97	1 052	1.57	1 653	227	124	26
1997-98	937	1.74	1 634	223	155	30
1998-99	909	1.98	1 798	157	257	38
1999-00	584	1.91	1 118	118	160	27
2000-01	651	1.61	1 050	138	97	22
2001-02	784	1.83	1 434	251	130	37
2002-03	911	1.05	957	210	178	44
2003-04	1 089	1.85	2 018	279	172	38
2004-05	894	1.43	1 282	172	165	36
2005-06	931	1.81	1 688	249	190	47
2006-07	1 003	0.75	748	181	62	20
2007-08	1 238	1.21	1 503	423	115	37
2008-09	856	1.41	1 205	263	196	64

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABS, *Value of Agricultural Commodities produced, Australia,* cat. no. 7503.0, Canberra; ABARE.

47 Summary of Australian statistics for sorghum

			Production		Exports	
	Area	Yield	Volume	Value	Volume	Value
	'000 ha	t/ha	kt	$m	kt	$m
1962-63	158	1.76	279	10	44	2
1963-64	148	1.45	215	9	0	0
1964-65	140	1.39	195	8	0	0
1965-66	175	1.11	195	9	0	0
1966-67	203	1.57	319	13	46	2
1967-68	187	1.54	288	12	19	1
1968-69	236	1.25	294	14	69	3
1969-70	359	1.53	547	24	54	2
1970-71	552	2.35	1 298	57	517	24
1971-72	638	1.92	1 228	51	992	48
1972-73	697	1.46	1 018	59	736	35
1973-74	540	1.97	1 061	80	748	54
1974-75	511	1.76	901	76	856	73
1975-76	504	2.23	1 123	96	815	72
1976-77	532	1.80	956	80	829	76
1977-78	394	1.81	714	59	385	36
1978-79	469	2.40	1 125	97	516	46
1979-80	519	1.78	922	96	580	60
1980-81	658	1.83	1 203	152	463	58
1981-82	648	2.03	1 316	140	1 271	153
1982-83	708	1.35	958	124	442	54
1983-84	730	2.58	1 886	246	772	111
1984-85	723	1.89	1 369	197	1 594	242
1985-86	733	1.93	1 416	181	1 082	178
1986-87	818	1.74	1 419	160	818	91
1987-88	765	2.13	1 633	203	415	51
1988-89	625	1.99	1 244	188	290	43
1989-90	376	2.50	939	136	158	23
1990-91	376	1.99	747	99	166	25
1991-92	567	2.54	1 443	204	183	29
1992-93	426	1.28	546	87	211	34
1993-94	498	2.17	1 082	173	173	32
1994-95	687	1.85	1 272	242	111	19
1995-96	770	2.07	1 592	320	411	97
1996-97	544	2.62	1 425	257	299	70
1997-98	507	2.13	1 081	183	251	50
1998-99	587	3.22	1 891	282	76	14
1999-00	622	3.40	2 116	260	26	4
2000-01	758	2.55	1 935	279	330	59
2001-02	823	2.46	2 021	349	586	109
2002-03	667	2.20	1 465	300	70	17
2003-04	734	2.74	2 009	319	289	61
2004-05	755	2.66	2 011	270	513	96
2005-06	766	2.52	1 929	276	173	33
2006-07	613	2.09	1 283	274	46	13
2007-08	942	4.02	3 790	977	251	76
2008-09	754	3.54	2 671	813	1 368	405

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABS, *Value of Agricultural Commodities produced, Australia,* cat. no. 7503.0, Canberra; ABARE.

48 Summary of Australian statistics for maize

			Production		Exports	
	Area	Yield	Volume	Value	Volume	Value
	'000 ha	t/ha	kt	$m	kt	$m
1962-63	85	2.23	189	10	1	0
1963-64	87	1.96	171	10	0	0
1964-65	86	2.03	175	10	0	0
1965-66	80	1.57	125	10	0	0
1966-67	82	2.33	190	10	0	0
1967-68	81	2.23	181	9	0	0
1968-69	67	2.24	149	9	0	0
1969-70	80	2.41	192	11	1	0
1970-71	86	2.47	212	10	22	1
1971-72	78	2.74	214	10	38	2
1972-73	59	2.34	139	9	9	0
1973-74	46	2.32	106	9	3	0
1974-75	51	2.60	134	12	1	0
1975-76	47	2.82	132	12	11	1
1976-77	53	2.72	144	13	33	3
1977-78	45	2.86	130	12	11	2
1978-79	50	3.37	168	16	17	1
1979-80	54	2.79	151	20	8	1
1980-81	56	3.05	172	26	29	3
1981-82	61	3.49	212	30	14	2
1982-83	64	2.18	138	23	18	2
1983-84	67	3.53	237	36	19	3
1984-85	102	2.84	288	46	140	25
1985-86	83	3.33	277	40	81	13
1986-87	57	3.62	205	31	46	7
1987-88	54	3.85	207	30	12	2
1988-89	51	4.23	216	34	13	4
1989-90	52	4.21	218	39	30	5
1990-91	48	3.99	193	32	16	5
1991-92	52	5.20	268	48	12	3
1992-93	45	4.43	198	42	21	5
1993-94	44	4.64	204	41	23	6
1994-95	50	4.83	242	59	6	3
1995-96	56	5.59	311	69	4	2
1996-97	67	5.94	398	80	22	8
1997-98	57	4.77	272	55	11	3
1998-99	64	5.28	338	61	19	6
1999-00	82	4.95	406	62	43	12
2000-01	74	4.66	345	65	56	16
2001-02	83	5.47	454	90	46	14
2002-03	50	6.20	310	72	54	13
2003-04	70	5.64	395	88	13	6
2004-05	72	5.83	420	81	9	6
2005-06	76	5.03	380	71	5	6
2006-07	49	4.90	240	60	12	9
2007-08	68	5.69	387	90	12	11
2008-09	70	5.25	368	78	97	30

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABS, *Value of Agricultural Commodities Produced, Australia,* cat. no. 7503.0, Canberra; ABARE.

49 Summary of Australian statistics for triticale

			Production		Exports	
	Area	Yield	Volume	Value	Volume	Value
	'000 ha	t/ha	kt	$m	kt	$m
1980-81	26	0.90	24	3	0	0
1981-82	64	1.42	91	10	0	0
1982-83	92	0.89	82	11	0	0
1983-84	116	1.62	188	21	0	0
1984-85	140	1.36	190	24	0	0
1985-86	137	1.62	222	28	0	0
1986-87	148	1.57	233	26	0	0
1987-88	136	1.53	208	27	0	0
1988-89	116	1.68	195	28	0	0
1989-90	91	1.80	164	25	0	0
1990-91	104	1.81	189	24	0	0
1991-92	101	1.76	177	25	0	0
1992-93	122	2.32	282	37	0	0
1993-94	129	2.04	263	35	0	0
1994-95	153	1.19	182	35	0	0
1995-96	221	2.12	469	95	0	0
1996-97	346	1.95	674	107	1	0
1997-98	366	1.73	633	108	2	0
1998-99	386	1.83	707	85	0	0
1999-00	361	2.12	764	96	0	0
2000-01	389	2.16	841	126	0	0
2001-02	409	2.10	860	168	0	0
2002-03	408	0.80	327	84	0	0
2003-04	445	1.86	826	126	0	0
2004-05	389	1.57	611	93	0	0
2005-06	347	1.95	676	119	0	0
2006-07	369	0.54	199	44	0	0
2007-08	360	1.25	450	114	0	0
2008-09	355	1.42	503	89	0	0

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABS, *Value of Agricultural Commodities produced, Australia,* cat. no. 7503.0, Canberra; ABARE.

50 Volume of Australian exports of sorghum and oats, by destination

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Sorghum								
Asia								
Chinese Taipei	8	2	9	40	26	9	2	27
Japan	491	1	221	386	86	1	91	1 118
Papua New Guinea	38	45	21	28	19	15	31	29
United Arab Emirates	1	2	1	2	1	1	1	1
Other	48	20	37	58	41	19	126	193
Total	586	70	289	513	173	46	251	1 368
(value, $m)	109	17	61	96	33	13	76	405
Oats								
Asia								
Japan	9	8	8	8	6	4	3	3
Korea, Rep. of	1	1	1	2	2	2	1	1
Philippines	5	5	6	7	7	3	4	5
Libya	3	0	0	0	0	0	0	0
Malta	0	0	0	0	0	0	0	0
Middle East								
United Arab Emirates	2	2	4	2	2	1	1	1
Other **a**	111	161	153	147	174	52	106	186
Total	130	178	172	165	190	62	115	196
(value, $m)	37	44	38	36	47	20	37	64

a No country detail provided due to confidentiality restrictions.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

51 Australian coarse grains supply and disposal, by grain a

	Area	Production	Exports b	Estimated domestic disposals	
				Feed and food	Seed c
	'000 ha	kt	kt	kt	kt
Barley d					
2003-04	4 477	10 382	7 001	2 268	209
2004-05	4 645	7 740	4 863	2 472	198
2005-06	4 406	9 482	5 917	2 576	188
2006-07	4 182	4 257	2 563	2 950	203
2007-08	4 902	7 159	4 054	2 265	195
2008-09	4 790	7 669	4 141	2 321	202
Oats					
2003-04	1 089	2 018	210	1 766	43
2004-05	894	1 282	138	1 099	45
2005-06	931	1 688	191	1 450	48
2006-07	1 003	748	35	670	59
2007-08	1 238	1 503	181	1 278	44
2008-09	856	1 205	190	1 032	44
Sorghum					
2003-04	734	2 009	623	1 382	4
2004-05	755	2 011	259	1 749	4
2005-06	766	1 929	83	1 842	3
2006-07	613	1 283	110	1 169	5
2007-08	942	3 790	957	2 112	4
2008-09	754	2 671	1 341	975	3
Maize					
2003-04	70	395	10	384	1
2004-05	72	420	5	412	1
2005-06	76	380	10	369	1
2006-07	49	240	11	228	1
2007-08	68	387	92	295	1
2008-09	70	368	28	340	1
Triticale					
2003-04	445	826	0	807	19
2004-05	389	611	0	594	17
2005-06	347	676	0	660	18
2006-07	369	199	0	181	18
2007-08	360	450	0	432	18
2008-09	355	503	0	486	17
Total					
2003-04	6 815	15 630	7 845	6 607	276
2004-05	6 755	12 064	5 265	6 326	265
2005-06	6 526	14 155	6 202	6 897	259
2006-07	6 216	6 727	2 719	5 198	286
2007-08	7 510	13 289	5 284	6 381	261
2008-09	6 825	12 416	5 699	5 155	267

a Crop years are November–October for barley, oats and triticale, and March–February for sorghum and maize. **b** Exports reflect the volume of grain exported from the respective crops harvested. For example the volume of exports reported for sorghum in 2002-03, were actually shipped in the period March 2003 to February 2004. **c** Estimated using the following seeding rates for grain crops: sorghum 5 kg/ha; barley 45 kg/ha; maize 15 kg/ha; oats 48 kg/ha; triticale 50 kg/ha. **d** Malt use is expressed as barley equivalent = malt x 1.2. Approximately 1000 tonnes of pearled cooking barley is also included annually.

Sources: ABARE, *Australian Crop Report,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABARE.

52 Australian feedgrains prices

	Barley a	Oats b	Sorghum c	Maize c	Feed wheat c	Triticale c
	$/t	$/t	$/t	$/t	$/t	$/t
1982-83	158.14	163.33	149.48	173.59	184.11	na
1983-84	122.86	96.07	127.82	160.63	175.24	na
1984-85	110.20	104.99	131.69	147.48	204.36	123.32
1985-86	109.47	100.68	126.71	143.76	193.82	121.17
1986-87	106.38	100.83	111.42	135.60	170.12	111.23
1987-88	117.93	109.09	129.02	154.84	189.54	132.25
1988-89	142.35	124.35	152.19	175.95	221.84	147.43
1989-90	151.67	116.15	152.77	176.25	169.08	155.60
1990-91	123.58	107.79	136.79	167.53	132.33	125.17
1991-92	147.28	141.02	172.75	189.15	159.67	150.56
1992-93	130.65	105.43	148.91	181.98	143.50	132.82
1993-94	127.30	105.27	168.60	229.58	137.58	135.59
1994-95	227.00	237.96	215.74	276.08	232.75	229.58
1995-96	226.80	171.69	223.69	244.02	236.24	220.22
1996-97	180.73	143.10	174.79	207.61	188.38	178.47
1997-98	179.48	171.49	182.37	215.50	185.93	184.23
1998-99	133.48	110.44	141.63	173.38	155.38	130.84
1999-00	141.03	103.23	130.58	161.14	153.63	138.95
2000-01	173.80	136.96	162.60	186.58	171.83	176.29
2001-02	202.95	191.46	187.52	224.90	211.97	211.96
2002-03	304.78	333.85	288.89	343.07	309.69	308.47
2003-04	203.16	180.43	194.70	254.06	220.74	210.28
2004-05	178.59	171.27	172.20	226.80	194.77	189.14
2005-06	181.91	180.75	171.41	212.67	191.84	188.45
2006-07	296.75	367.17	271.75	338.25	286.76	297.08
2007-08	348.67	362.33	343.00	422.42	425.49	379.42
2008-09	268.10	261.67	244.67	351.25	314.47	304.08
2008						
January	320.00	355.00	370.00	448.00	441.25	413.00
February	296.00	361.00	301.00	405.00	466.00	351.00
March	322.00	366.00	306.00	348.00	492.50	353.00
April	328.00	374.00	305.00	391.00	468.00	370.00
May	359.00	361.00	291.00	418.00	421.25	368.00
June	380.00	346.00	306.00	434.00	436.25	401.00
July	366.00	336.00	290.00	413.00	449.00	419.00
August	331.00	319.00	274.00	399.00	418.75	393.00
September	320.00	298.00	273.00	415.00	402.50	375.00
October	275.00	267.00	253.00	381.00	342.00	307.00
November	242.00	228.00	243.00	338.00	290.00	260.00
December	240.00	205.00	217.00	335.00	226.67	233.00
2009						
January	240.00	220.00	232.00	328.00	250.00	233.00
February	243.00	251.00	234.00	309.00	282.50	304.00
March	238.00	244.00	214.00	313.00	281.00	308.00
April	240.00	248.00	223.00	331.00	271.00	270.00
May	237.16	260.00	234.00	323.00	279.00	268.00
June	245.00	264.00	249.00	330.00	281.25	279.00
July	250.00	271.00	240.00	330.00	283.40	280.00
August	253.00	254.00	244.00	335.00	262.50	271.00

a Average quote for bulk feed barley, delivered Sydney region. **b** Average quote for bulk feed oats, delivered Sydney region. **c** Average bulk quote, delivered Sydney region. **na** Not available.

Sources: The Land, Rural Press Ltd.

53 Summary of world statistics for coarse grains

	Area	Production	Use	Closing stocks a World	Closing stocks a United States	Stocks to use ratio	Trade b	Use per person	Price c
	million ha	Mt	Mt	Mt	Mt	%	Mt	kg	US$/t
1962-63	314	448.6	450.0	101.4	59	23	32	143	51.0
1963-64	321	458.3	452.8	106.1	64	23	35	140	55.0
1964-65	315	460.5	465.7	98.1	51	21	35	143	56.0
1965-66	313	472.4	484.3	80.3	40	17	41	147	55.0
1966-67	315	508.8	505.4	83.3	36	16	43	148	60.0
1967-68	319	533.4	521.2	94.4	46	18	43	150	50.0
1968-69	318	533.8	530.5	97.8	47	18	41	149	49.0
1969-70	323	558.0	553.2	97.8	46	18	43	154	54.0
1970-71	323	559.2	569.2	83.5	32	15	52	155	63.0
1971-72	324	617.4	598.4	99.6	47	17	57	159	52.0
1972-73	317	594.2	608.0	81.2	32	13	61	159	72.0
1973-74	335	659.3	655.7	79.8	22	12	68	168	114.0
1974-75	333	622.6	610.6	88.8	21	15	63	153	132.0
1975-76	339	641.0	632.8	92.8	24	15	74	156	116.0
1976-77	342	692.0	668.6	113.8	37	17	81	162	108.0
1977-78	344	691.0	676.4	124.0	50	18	87	161	95.0
1978-79	341	744.1	722.7	143.3	58	20	91	169	103.0
1979-80	341	735.5	731.1	153.2	64	21	97	166	115.0
1980-81	341	723.4	726.5	142.6	44	20	107	166	142.0
1981-82	349	759.0	737.7	168.4	78	23	96	162	118.0
1982-83	339	775.3	749.0	202.2	109	27	92	161	115.0
1983-84	334	678.1	743.3	133.1	40	18	92	160	146.0
1984-85	335	806.0	766.7	171.9	58	22	99	161	124.0
1985-86	341	833.7	763.5	242.2	127	32	82	157	106.0
1986-87	338	823.8	785.1	277.9	153	35	85	160	77.0
1987-88	325	787.1	796.9	263.3	134	33	88	159	86.0
1988-89	325	723.0	780.8	203.4	66	26	99	153	118.0
1989-90	323	794.6	815.3	182.5	46	22	105	157	110.7
1990-91	317	828.7	814.4	195.2	48	24	89	154	106.5
1991-92	323	812.5	812.8	194.4	34	24	96	151	110.4
1992-93	326	869.4	834.6	219.3	63	26	92	153	97.9
1993-94	318	798.2	832.8	181.1	27	22	87	150	114.7
1994-95	324	869.2	854.6	196.5	45	23	99	152	105.2
1995-96	315	801.0	829.9	161.8	14	20	88	145	160.1
1996-97	323	909.1	866.8	201.7	27	23	94	149	132.4
1997-98	311	881.2	866.4	215.8	38	25	86	147	112.4
1998-99	309	890.5	869.0	237.2	51	27	94	147	94.5
1999-00	300	877.6	876.8	231.8	49	26	107	147	89.9
2000-01	297	862.3	882.1	209.3	53	24	104	144	86.6
2001-02	301	894.1	904.8	195.6	45	22	102	146	90.1
2002-03	291	875.3	901.4	169.9	31	19	102	144	107.3
2003-04	305	915.9	941.9	140.3	29	15	104	149	115.0
2004-05	299	1 016.0	977.2	177.8	59	18	101	152	97.5
2005-06	301	978.7	990.1	165.1	55	17	107	152	103.9
2006-07	305	986.3	1 007.3	139.3	36	14	118	153	150.8
2007-08	318	1 077.0	1 055.7	160.2	45	15	127	160	201.4
2008-09	313	1 101.9	1 072.9	190.5	47	18	107	164	189.6

a Stocks data are based on national carryover levels at the end of national crop years. Aggregate stocks data therefore should not be construed as representing stock levels at fixed points in time. **b** October–September basis; includes intra-EU trade. **c** Export price US no. 2 yellow corn fob Gulf.
Sources: US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC; ABARE.

54 World coarse grains production, by region and country

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Africa								
Egypt	7.1	7.1	6.8	6.9	7.0	7.2	7.2	7.3
Nigeria	18.8	19.1	20.3	23.2	24.7	26.0	24.0	26.6
South Africa	10.5	10.1	10.4	12.2	7.3	7.8	13.7	13.3
Americas								
Argentina	18.7	19.4	18.6	24.9	19.2	27.0	27.0	16.4
Brazil	36.8	47.1	44.9	37.8	44.2	53.2	61.0	53.6
Canada	22.6	19.9	25.8	25.6	25.0	23.1	27.8	27.2
Mexico	27.2	26.5	30.3	28.9	25.8	29.1	30.8	32.3
United States	261.7	243.7	275.1	319.4	298.7	280.0	349.9	326.1
Asia								
China	122.2	130.7	124.0	138.3	147.7	159.1	159.1	173.2
India	34.7	25.7	37.4	33.6	34.0	33.8	40.6	39.0
Thailand	4.6	4.4	4.2	4.3	4.3	3.9	3.9	4.3
Turkey	9.5	10.0	10.0	11.0	11.9	10.9	9.5	10.3
Europe								
European Union **a**	150.4	148.3	131.7	166.5	146.3	137.4	135.9	161.6
France	28.7	30.1	24.2	30.3	26.5	25.4	26.4	31.1
Germany	27.1	22.7	20.1	25.3	22.2	21.0	19.8	24.1
Italy	12.0	12.4	9.8	12.6	12.5	11.0	11.3	12.0
Spain	11.5	13.4	13.6	16.1	8.6	12.1	16.9	16.5
Romania	11.1	9.9	7.9	16.6	11.8	9.6	4.7	9.7
Russian Federation	35.2	33.4	30.5	29.6	27.6	30.2	29.3	40.7
Ukraine	17.0	17.1	15.6	23.0	18.1	19.2	14.6	26.2
Oceania								
Australia	13.0	6.9	15.6	12.1	14.2	6.7	13.3	12.4
Other	93.0	96.0	106.8	102.2	111.0	122.0	124.7	121.9
Total **b**	894.1	875.3	915.9	1 016.0	978.7	986.3	1 077.0	1 101.9

a Regarded as 27 countries. **b** World totals do not necessarily equal those of other tables as a result of the different sources used.

Sources: ABS, *Agricultural Commodities, Australia*, cat. no. 7121.0, Canberra; US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC; International Grains Council, *Grain Market Report*.

55 World coarse grains production, by grain

	Corn	Barley	Sorghum	Oats	Total a
	Mt	Mt	Mt	Mt	Mt
1962-63	207.3	87.1	41.8	48.7	448.6
1963-64	217.1	89.2	43.7	45.8	458.3
1964-65	215.4	96.3	41.6	42.6	460.5
1965-66	225.5	92.7	46.4	44.6	472.4
1966-67	250.1	102.5	49.3	46.3	508.8
1967-68	262.2	105.0	53.3	48.1	533.4
1968-69	252.5	115.0	51.5	51.5	533.8
1969-70	270.0	118.0	54.8	51.9	558.0
1970-71	268.1	119.8	55.1	51.6	559.2
1971-72	308.5	131.4	57.7	53.8	617.4
1972-73	301.4	132.5	54.0	47.6	594.2
1973-74	330.5	146.0	65.9	49.7	659.3
1974-75	299.8	149.6	60.3	46.7	622.6
1975-76	339.2	136.0	63.8	44.6	641.0
1976-77	356.1	166.2	62.2	45.8	692.0
1977-78	365.4	157.1	64.4	48.4	691.0
1978-79	392.1	175.6	63.6	48.5	744.1
1979-80	425.6	153.8	61.5	42.5	735.5
1980-81	408.7	157.4	59.4	41.5	723.4
1981-82	441.8	149.5	70.4	40.2	759.0
1982-83	439.9	161.2	65.2	46.2	775.3
1983-84	348.3	158.5	58.5	43.5	678.1
1984-85	458.4	170.5	65.8	45.8	806.0
1985-86	479.0	173.6	70.2	47.0	833.7
1986-87	475.4	178.1	64.5	44.6	823.8
1987-88	451.0	175.3	56.6	40.6	787.1
1988-89	400.9	164.0	54.6	35.4	723.0
1989-90	462.0	166.1	55.4	39.3	794.6
1990-91	482.1	179.0	53.8	39.3	828.7
1991-92	493.2	169.8	53.7	33.0	812.5
1992-93	536.1	166.2	65.6	33.9	869.4
1993-94	476.0	169.2	55.5	35.4	798.2
1994-95	559.0	160.7	57.7	32.9	869.2
1995-96	515.9	141.6	55.4	28.6	801.0
1996-97	592.6	153.6	69.7	30.6	909.1
1997-98	573.8	154.2	58.1	31.0	881.2
1998-99	605.7	135.7	60.8	25.7	890.5
1999-00	607.4	127.5	59.4	24.1	877.6
2000-01	607.6	132.9	53.8	26.0	862.3
2001-02	590.7	152.3	58.3	27.0	894.1
2002-03	600.1	134.8	52.8	25.6	875.3
2003-04	627.2	142.5	58.3	26.3	915.9
2004-05	715.8	153.0	57.5	25.7	1 016.0
2005-06	699.2	136.6	58.4	23.9	978.7
2006-07	712.4	137.4	57.0	23.2	986.3
2007-08	791.9	133.0	65.6	25.2	1 077.0
2008-09	791.3	153.9	64.2	26.5	1 101.9

a Includes rye, millet and mixed grain.

Source: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

56 Volume of world coarse grains trade, by region and country

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Africa								
Algeria	2.0	1.7	1.9	2.0	2.2	2.6	2.0	2.4
Egypt	5.0	4.9	3.8	5.4	4.4	4.7	4.2	4.2
Americas								
Brazil	0.6	1.1	0.5	0.7	1.4	1.1	1.0	1.2
Colombia	2.1	2.4	2.2	2.5	3.4	3.7	3.6	3.7
Mexico	9.0	8.8	8.9	9.0	9.9	11.0	11.0	10.2
Asia								
China	2.0	1.8	1.5	2.1	2.3	1.4	1.2	1.6
Chinese Taipei	4.9	4.8	5.1	4.8	4.7	4.6	4.7	4.5
Japan	19.9	20.3	20.0	19.7	19.8	19.7	19.2	19.7
Korea, Rep. of	8.8	8.9	9.0	8.7	8.5	8.8	9.4	7.1
Malaysia	2.4	2.4	2.4	2.4	2.5	2.4	3.2	2.0
Europe								
European Union **a**	3.9	4.4	8.2	3.0	2.8	8.1	20.3	3.2
Russian Federation	0.7	0.4	1.0	0.7	0.5	0.4	0.5	0.2
Middle East								
Iran	1.9	2.2	2.1	3.7	3.4	3.7	3.2	5.0
Saudi Arabia	7.1	8.5	8.4	6.9	8.5	8.3	9.4	9.3
Turkey	1.3	1.5	1.3	0.4	0.1	1.1	1.5	0.6
Total **b**	99.2	100.4	100.6	100.4	104.4	113.2	126.6	106.6
Exports								
Africa								
South Africa	1.1	1.1	0.8	2.2	0.6	0.5	2.2	2.5
Asia								
China	8.6	15.3	7.7	7.6	3.8	5.4	1.0	0.3
Americas								
Argentina	11.4	11.9	11.3	15.2	10.0	16.9	16.9	9.1
Brazil	2.1	4.7	4.8	0.7	4.5	11.1	7.8	7.5
Canada	2.5	1.7	3.6	2.8	4.1	3.7	6.6	3.9
United States	55.1	45.7	53.8	51.4	59.8	58.3	69.9	51.2
Europe								
European Union **a**	6.7	7.6	4.2	4.9	4.4	4.7	4.6	5.6
Oceania								
Australia	5.9	2.8	7.8	5.3	6.2	2.7	5.2	5.8
Total **b**	102.0	102.1	103.6	100.9	107.1	117.7	127.2	107.0

a Regarded as 27 countries. **b** Includes some unspecified countries.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; US Department of Agriculture, *Grain: World Markets and Trade,* Washington DC US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

57 Volume of world corn trade, by region and country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Canada	4.0	3.9	2.0	2.4	1.9	2.1	3.2	1.8
China	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1
Chinese Taipei	4.7	4.7	5.0	4.5	4.5	4.3	4.2	4.4
Colombia	1.9	2.1	2.0	2.3	3.2	3.4	3.3	3.2
European Union **b**	2.2	2.8	5.9	2.5	2.6	7.1	13.5	2.5
Indonesia	1.1	1.6	1.4	0.5	1.4	1.2	0.2	0.1
Japan	16.4	16.9	16.8	16.5	16.6	16.7	16.6	16.5
Korea, Rep. of	8.6	8.8	8.8	8.6	8.5	8.7	9.1	7.0
Malaysia	2.4	2.4	2.4	2.4	2.5	2.4	3.2	2.0
Mexico	4.1	5.3	5.7	5.9	6.8	8.9	9.2	7.4
Saudi Arabia	1.3	1.4	1.6	1.2	1.5	1.6	2.0	1.7
Total **c**	72.5	75.1	76.5	76.7	79.4	90.9	98.3	78.2
Exports								
Argentina	10.9	11.2	10.9	14.6	9.5	15.3	14.8	7.5
Brazil	2.1	4.6	4.4	0.7	4.5	10.8	7.8	7.5
China	8.6	15.2	7.6	7.6	3.7	5.3	0.6	0.3
South Africa	1.1	1.1	0.7	2.1	0.5	0.5	2.2	2.5
United States	48.4	40.3	48.3	46.2	54.2	54.0	61.9	47.2
Other	3.6	4.2	5.3	6.4	8.5	7.9	11.3	14.5
Total	74.6	76.7	77.3	77.6	80.9	93.8	98.6	79.5

a Marketing years of individual countries. **b** Regarded as 27 countries. Excludes intra-EU trade. **c** Includes some unspecified countries.
Source: US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC.

58 Volume of world barley trade, by region and country

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
China	1.9	1.8	1.5	2.0	2.2	1.1	1.1	1.5
European Union **a**	1.4	1.1	0.7	0.3	0.1	0.2	0.3	0.3
Japan	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4
Russian Federation	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.1
Saudi Arabia	5.8	7.1	6.8	5.7	7.1	6.7	7.4	7.6
Total **b**	16.6	16.5	15.0	15.9	17.3	14.8	15.6	19.6
Exports								
Australia	5.3	2.6	7.0	4.9	5.9	2.6	4.1	4.1
Canada	1.1	0.4	1.8	1.2	2.3	1.2	3.0	1.5
European Union **a**	4.2	5.2	2.6	3.3	3.3	3.5	3.8	3.5
United States	0.6	0.7	0.4	0.5	0.6	0.4	0.9	0.3
Total **b**	17.3	16.2	16.4	15.1	18.2	15.3	15.5	20.0

a Regarded as 27 countries. Excludes intra-EU trade. **b** Includes some unspecified countries.
Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC.

59 Volume of world sorghum trade, by country

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Chinese Taipei	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
European Union **a**	0.0	0.0	1.6	0.2	0.1	0.7	5.8	0.4
Israel	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.1
Japan	1.8	1.6	1.4	1.4	1.4	1.3	1.2	1.6
Mexico	4.8	3.4	3.0	2.9	3.0	2.0	1.1	2.5
Total **b**	7.0	5.5	6.5	5.3	5.2	4.7	9.1	6.1
Exports								
Argentina	0.4	0.6	0.2	0.4	0.2	1.1	1.1	0.7
Australia	0.4	0.1	0.6	0.2	0.1	0.1	1.0	1.3
United States	6.1	4.7	5.0	4.7	4.9	4.0	7.1	3.6
Total **b**	7.1	5.7	6.5	5.4	5.4	5.3	9.2	5.7

a Regarded as 27 countries. Excludes intra-EU trade. **b** Includes some unspecified countries.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

60 US coarse grains supply and disposal

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Area	million ha	33.9	33.5	34.8	34.9	34.9	32.5	39.9	37.0
Yield	t/ha	7.7	7.3	7.9	9.2	8.6	8.6	8.8	8.8
Production	Mt	261.7	243.7	275.1	319.4	298.7	280.0	349.9	326.1
Opening stocks	Mt	52.7	45.0	30.9	28.8	58.8	54.8	36.2	45.1
Imports	Mt	2.6	2.6	2.4	2.2	2.1	2.5	3.5	3.1
Availability	Mt	317.0	291.3	308.5	350.4	359.6	337.4	390.7	374.3
Domestic use	Mt	216.8	214.7	225.9	240.3	245.0	243.0	276.8	275.7
– feed	Mt	159.6	150.0	155.8	165.9	163.3	148.4	159.7	142.2
– food, seed	Mt	57.2	64.7	70.1	74.4	81.7	94.6	117.1	133.6
Exports	Mt	55.1	45.7	53.8	51.4	59.8	58.3	69.9	51.2
Closing stocks	Mt	45.1	30.9	28.8	58.8	54.8	36.2	45.1	47.1
– CCC **a**	Mt	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
– free	Mt	44.9	30.8	28.8	58.8	54.7	36.2	45.1	47.1

a Commodity Credit Corporation.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; US Department of Agriculture, World Agricultural Supply and Demand Estimates,Washington DC.

61 US corn supply and disposal a

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Area									
– planted	million ha	30.7	31.9	31.8	32.7	33.1	31.9	38.6	34.7
– harvested	million ha	27.8	28.1	28.7	29.8	30.4	28.6	35.0	31.8
Yield	t/ha	8.68	8.11	8.93	10.06	9.29	9.36	9.49	9.66
Production	Mt	241.4	227.8	256.3	299.9	282.3	267.6	332.1	307.4
Opening stocks	Mt	48.2	40.6	27.6	24.3	53.7	50.0	33.1	41.3
Imports	Mt	0.3	0.4	0.4	0.3	0.2	0.3	0.5	0.4
Availability	Mt	289.9	268.7	284.2	324.5	336.2	317.9	364.8	349.0
Domestic use	Mt	201.0	200.7	211.6	224.6	232.0	230.7	262.6	259.3
– feed	Mt	149.0	141.3	147.2	156.4	156.3	142.2	152.4	132.9
– food, seed	Mt	52.0	59.4	64.4	68.2	75.7	88.5	110.2	126.4
Exports	Mt	48.4	40.3	48.3	46.2	54.2	54.0	61.9	47.2
Closing stocks	Mt	40.6	27.6	24.3	53.7	50.0	33.1	41.3	42.5
– CCC b	Mt	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
– free	Mt	40.4	27.5	24.3	53.7	50.0	33.1	41.3	42.5
Farm price	US$/bus	1.97	2.32	2.42	2.06	3.04	4.20	5.50	4.06
Loan rate	US$/bus	1.89	1.98	1.98	1.95	1.95	1.95	1.95	1.95
Export price c	US$/t	90.1	107.3	115.0	97.5	103.9	150.8	201.4	189.6

a September–August crop years. **b** Commodity Credit Corporation. **c** US no. 2 yellow corn fob Gulf.

Sources: US Department of Agriculture, *Amber Waves,* Washington DC; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; US Department of Agriculture, *World Agricultural Supply and Demand Estimates,* Washington DC.

62 US sorghum and barley supply and disposal

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Sorghum a									
Area harvested	million ha	3.5	2.9	3.2	2.6	2.3	2.0	2.7	2.9
Yield	t/ha	3.8	3.2	3.3	4.4	4.3	3.6	4.6	4.1
Production	Mt	13.1	9.2	10.4	11.5	10.0	7.1	12.6	12.0
Opening stocks	Mt	1.1	1.5	1.1	0.9	1.4	1.7	0.8	1.3
Availability	Mt	14.1	10.7	11.5	12.4	11.4	8.7	13.6	13.3
Domestic use	Mt	6.4	4.9	5.6	6.3	4.8	3.9	5.2	8.3
Exports	Mt	6.1	4.7	5.0	4.7	4.9	4.0	7.1	3.6
Closing stocks	Mt	1.5	1.1	0.9	1.4	1.7	0.8	1.3	1.4
Farm price	US$/bus	1.9	2.3	2.4	1.8	3.3	4.1	5.0	3.2
Loan rate	US$/bus	1.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Export price **b**	US$/t	99.9	120.7	127.9	108.8	119.8	171.2	221.2	188.2
Barley c									
Area harvested	million ha	1.7	1.7	1.9	1.6	1.3	1.2	1.4	1.5
Yield	t/ha	3.1	3.0	3.2	3.7	3.5	3.3	3.3	3.4
Production	Mt	5.4	4.9	6.1	6.1	4.6	3.9	4.6	5.2
Opening stocks	Mt	2.3	2.0	1.5	2.6	2.8	2.4	1.5	1.5
Imports	Mt	0.5	0.4	0.4	0.3	0.1	0.3	0.6	0.6
Availability	Mt	8.2	7.3	8.0	9.0	7.5	6.5	6.7	7.3
Domestic use	Mt	5.7	5.2	5.0	5.7	4.6	4.6	4.3	5.1
Exports	Mt	0.6	0.7	0.4	0.5	0.6	0.4	0.9	0.3
Closing stocks	Mt	2.0	1.5	2.6	2.8	2.4	1.5	1.5	1.9
Farm price	US$/bus	2.2	2.7	2.8	2.5	2.9	4.0	5.7	5.4
Loan rate	US$/bus	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Export price **d**	US$/t	111.6	128.5	132.3	114.8	123.0	190.1	302.6	217.6

a September–August crop years. **b** US no. 2 sorghum fob Gulf. **c** June–May crop years. **d** No. 2 barley fob Portland (July–June average).
Sources: US Department of Agriculture, *Agricultural Outlook,* Washington DC; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; US Department of Agriculture, *World Agricultural Supply and Demand Estimates,* Washington DC.

63 Feed grains export price quotations, by category

	US no. 2 hard red winter wheat (Gulf) a	US no. 2 yellow corn (Gulf) a	US no. 2 sorghum (Gulf) a	US no. 2 barley (Portland) b
	US$/t	US$/t	US$/t	US$/t
1984-85	148.0	124.0	110.0	119.0
1985-86	128.0	106.0	94.0	100.0
1986-87	110.5	77.0	71.0	94.0
1987-88	123.4	86.0	80.0	101.0
1988-89	165.8	118.0	103.5	127.0
1989-90	160.8	110.7	103.7	123.0
1990-91	117.9	106.5	104.4	118.0
1991-92	151.0	110.4	109.7	122.0
1992-93	141.3	97.9	95.8	115.0
1993-94	141.5	114.7	111.9	112.0
1994-95	156.4	105.2	103.7	119.1
1995-96	215.3	160.1	156.9	166.9
1996-97	178.5	132.4	124.5	137.8
1997-98	141.8	112.4	113.3	118.2
1998-99	119.1	94.5	94.5	95.9
1999-00	113.2	89.9	88.6	105.3
2000-01	128.5	86.6	95.6	110.6
2001-02	127.5	90.1	99.9	111.6
2002-03	160.5	107.3	120.7	128.5
2003-04	160.5	115.0	127.9	132.3
2004-05	153.9	97.5	108.8	114.8
2005-06	176.3	103.9	119.8	123.0
2006-07	211.9	150.8	171.2	190.1
2007-08	362.1	201.4	221.2	302.6
2008-09	270.8	189.6	188.2	217.6
2008				
January	385.5	207.0	231.4	na
February	446.0	220.4	239.1	na
March	453.8	234.9	244.7	na
April	388.0	247.0	257.4	na
May	346.4	243.9	250.1	na
June	368.8	287.7	285.7	na
July	346.3	268.6	238.0	na
August	342.6	234.5	226.7	na
September	309.8	235.0	236.8	na
October	253.4	183.0	185.5	na
November	243.5	164.9	169.6	na
December	236.3	158.3	155.1	na
2009				
January	257.4	173.7	175.0	na
February	240.5	163.7	166.4	na
March	242.8	164.7	173.7	na
April	247.0	168.9	173.2	na
May	269.2	180.3	179.8	na
June	260.8	179.7	179.1	na
July	233.2	152.4	154.6	na
August	211.5	152.6	164.6	na

a Export price, fob Gulf ports. **b** Export price, fob Portland to 2007-08; Pacific NorthWest from 2008-09. **Na** not available.
Sources: International Grains Council, *Market Report,* London; US Department of Agriculture, Economic Research Service, *Wheat Situation and Outlook Report,* Washington DC.

64 Coarse grains supply and disposal in major exporting countries

	Area harvested	Yield	Production	Domestic use	Exports	Closing stocks
	million ha	t/ha	Mt	Mt	Mt	Mt
United States (September–August)						
2002-03	33.5	7.28	243.7	214.7	45.7	30.9
2003-04	34.8	7.91	275.1	225.9	53.8	28.8
2004-05	34.9	9.15	319.4	240.3	51.4	58.8
2005-06	34.9	8.56	298.7	245.0	59.8	54.8
2006-07	32.5	8.61	280.0	243.0	58.3	36.2
2007-08	39.9	8.77	349.9	276.8	69.9	45.1
2008-09	37.0	8.82	326.1	275.7	51.2	47.1
Canada (August–July) **a**						
2002-03	6.2	3.20	19.9	22.8	1.7	3.1
2003-04	7.3	3.53	25.8	23.3	3.6	4.1
2004-05	6.4	4.00	25.6	23.0	2.8	6.3
2005-06	6.2	4.03	25.0	22.9	4.1	6.3
2006-07	6.1	3.79	23.1	24.5	3.7	3.7
2007-08	7.4	3.76	27.8	24.0	6.6	4.0
2008-09	6.3	4.30	27.2	22.8	3.9	6.4
Argentina (March–February)						
2002-03	3.6	5.34	19.4	7.4	11.9	1.0
2003-04	3.4	5.50	18.6	7.4	11.3	1.0
2004-05	4.0	6.23	24.9	9.1	15.2	1.6
2005-06	3.5	5.49	19.2	9.5	10.0	1.5
2006-07	4.1	6.59	27.0	9.5	16.9	2.1
2007-08	4.7	5.72	27.0	9.9	16.9	2.4
2008-09	3.5	4.70	16.4	8.4	9.1	1.5
Australia (November–October)						
2002-03	5.9	1.17	6.9	4.9	2.8	1.2
2003-04	6.8	2.29	15.6	6.9	7.8	2.3
2004-05	6.8	1.79	12.1	6.6	5.3	2.3
2005-06	6.5	2.17	14.2	7.2	6.2	3.2
2006-07	6.2	1.08	6.7	5.5	2.7	1.5
2007-08	7.5	1.77	13.3	6.6	5.2	2.2
2008-09	6.8	1.82	12.4	5.4	5.8	2.6
European Union (July–June) **b**						
2002-03	32.7	4.54	148.3	144.9	7.6	22.5
2003-04	32.6	4.04	131.7	145.2	4.2	13.0
2004-05	33.5	4.97	166.5	152.6	4.9	25.0
2005-06	32.6	4.49	146.3	147.5	4.4	22.3
2006-07	31.8	4.32	137.4	147.9	4.7	15.1
2007-08	32.0	4.25	135.9	154.1	4.6	12.6
2008-09	33.5	4.83	161.6	150.8	5.6	21.0
World						
2002-03	291.0	3.01	875.3	901.5	102.1	169.9
2003-04	305.5	3.00	915.9	943.4	103.6	140.3
2004-05	299.3	3.39	1 016.0	977.7	100.9	177.8
2005-06	300.8	3.25	978.7	990.9	107.1	165.1
2006-07	305.1	3.23	986.3	1 007.4	117.7	139.3
2007-08	317.8	3.39	1 077.0	1 055.0	127.2	160.2
2008-09	313.0	3.51	1 101.9	1 070.2	107.0	190.5

a Canada also imports about 0.5 million tonnes of grain from the United States each year. **b** Regarded as 25 countries.

Note: The marketing period of each country is shown in parentheses.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; ABARE.

65 Australian cotton area harvested and lint yield a

	Area harvested			Lint yield		
	New South Wales	Queensland	Australia b	New South Wales	Queensland	Australia b
	'000 ha	'000 ha	'000 ha	t/ha	t/ha	t/ha
1962-63	na	na	15.3	na	na	0.118
1963-64	na	na	15.6	na	na	0.161
1964-65	7.3	7.9	15.3	0.942	0.207	0.555
1965-66	12.5	5.9	22.2	1.247	0.326	0.788
1966-67	12.3	5.5	21.5	0.927	0.541	0.668
1967-68	19.4	5.2	31.1	1.301	0.731	0.933
1968-69	22.3	6.3	32.5	1.158	0.722	0.935
1969-70	23.1	5.9	31.7	0.880	0.735	0.778
1970-71	26.4	5.2	35.1	0.485	0.596	0.454
1971-72	29.3	6.9	40.1	1.133	0.957	0.993
1972-73	31.7	8.0	43.6	0.744	0.600	0.651
1973-74	31.0	7.1	41.7	0.703	0.930	0.681
1974-75	27.5	7.4	38.5	0.982	0.797	0.854
1975-76	23.9	6.0	29.8	0.853	0.750	0.834
1976-77	24.8	8.9	35.3	0.847	0.787	0.794
1977-78	31.6	9.6	41.6	1.104	0.969	1.063
1978-79	36.1	13.4	49.8	1.102	0.993	1.065
1979-80	51.4	20.0	75.0	1.243	0.965	1.109
1980-81	61.6	22.0	83.6	1.252	0.991	1.183
1981-82	74.5	29.0	103.5	1.456	0.900	1.300
1982-83	71.9	24.6	96.5	1.043	1.049	1.045
1983-84	104.5	32.9	137.4	1.027	1.033	1.028
1984-85	131.2	51.9	183.1	1.538	0.904	1.358
1985-86	135.8	41.2	177.0	1.593	1.238	1.510
1986-87	125.0	31.0	156.0	1.451	1.297	1.420
1987-88	163.6	80.9	244.6	1.204	0.890	1.100
1988-89	140.8	53.3	194.1	1.577	1.332	1.510
1989-90	175.0	64.8	239.8	1.346	1.077	1.273
1990-91	202.0	77.0	279.0	1.678	1.403	1.602
1991-92	225.0	87.0	312.0	1.812	1.688	1.777
1992-93	204.0	82.0	286.0	1.478	1.314	1.431
1993-94	210.0	84.0	294.0	1.301	1.123	1.250
1994-95	157.0	89.0	246.0	1.594	1.402	1.524
1995-96	185.5	118.4	303.9	1.460	1.270	1.386
1996-97	277.0	119.1	396.1	1.599	1.403	1.540
1997-98	299.3	138.8	438.2	1.588	1.371	1.519
1998-99	381.7	179.9	561.5	1.243	1.341	1.274
1999-00	313.0	151.3	464.3	1.574	1.638	1.595
2000-01	327.9	199.4	527.3	1.627	1.432	1.553
2001-02	289.7	119.3	409.0	1.771	1.594	1.719
2002-03	165.2	59.3	224.5	1.830	1.430	1.724
2003-04	97.2	100.8	198.1	1.849	1.680	1.763
2004-05	162.8	158.1	320.9	2.136	1.881	2.011
2005-06	214.3	121.2	335.5	1.883	1.597	1.779
2006-07	108.7	34.9	143.6	2.223	1.710	2.099
2007-08	41.2	21.4	62.7	2.252	1.864	2.120
2008-09	88.0	76.0	164.0	2.024	1.987	2.007

a August–July crop years. **b** Includes data for Western Australia. **na** Not available.

Sources: ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; Department of Agriculture, Fisheries and Forestry, *Cotton Market News,* Canberra; ABARE.

66 Australian cottonseed and lint production a

	Cottonseed production			Lint production		
	New South Wales	Queensland	Australia b	New South Wales	Queensland	Australia b
	kt	kt	kt	kt	kt	kt
1962-63	na	na	3.1	na	na	1.8
1963-64	na	na	4.4	na	na	2.5
1964-65	11.8	2.8	17.4	6.9	1.6	8.5
1965-66	27.0	3.3	35.4	15.6	1.9	17.5
1966-67	20.0	5.2	32.1	11.4	3.0	14.4
1967-68	43.9	6.6	57.3	25.2	3.8	29.0
1968-69	44.9	8.0	58.5	25.8	4.5	30.4
1969-70	35.5	7.7	48.3	20.3	4.3	24.7
1970-71	22.3	5.4	31.9	12.8	3.1	15.9
1971-72	52.8	12.7	69.1	33.2	6.6	39.8
1972-73	36.4	10.7	50.7	23.6	4.8	28.4
1973-74	35.7	10.8	49.8	21.8	6.6	28.4
1974-75	44.1	9.7	53.8	27.0	5.9	32.9
1975-76	33.2	7.4	40.6	20.4	4.5	24.9
1976-77	34.9	11.7	46.6	21.0	7.0	28.0
1977-78	56.9	15.2	72.1	34.9	9.3	44.2
1978-79	56.8	21.7	78.5	39.8	13.3	53.1
1979-80	104.3	31.5	135.8	63.9	19.3	83.2
1980-81	125.8	35.6	161.4	77.1	21.8	98.9
1981-82	176.5	42.6	219.1	108.5	26.1	134.6
1982-83	112.3	42.1	154.4	75.0	25.8	100.8
1983-84	135.0	55.2	190.2	107.3	34.0	141.3
1984-85	308.2	102.2	410.4	201.8	46.9	248.7
1985-86	308.0	74.0	382.0	216.3	51.0	267.3
1986-87	281.6	48.4	330.0	181.4	40.2	221.6
1987-88	333.9	101.1	435.0	197.0	72.0	269.0
1988-89	345.0	74.3	419.3	222.0	71.0	293.0
1989-90	380.0	113.0	493.0	235.6	69.8	305.3
1990-91	526.0	160.0	686.0	339.0	108.0	447.0
1991-92	563.0	186.0	749.0	407.6	146.9	554.5
1992-93	365.1	162.4	527.5	301.5	107.7	409.3
1993-94	334.2	131.3	465.5	273.2	94.3	367.5
1994-95	286.5	187.1	473.6	250.2	124.8	375.0
1995-96	382.4	212.4	594.8	270.8	150.4	421.2
1996-97	627.5	232.6	860.1	443.0	167.1	610.1
1997-98	672.3	269.0	941.3	475.3	190.3	665.7
1998-99	677.5	346.9	1 024.4	474.4	241.2	715.6
1999-00	695.7	350.4	1 046.2	492.7	247.8	740.5
2000-01	740.5	399.5	1 140.0	533.5	285.5	819.0
2001-02	777.1	276.4	1 053.5	513.1	190.1	703.3
2002-03	425.3	120.5	545.8	302.3	84.7	387.1
2003-04	254.2	239.6	493.7	179.7	169.4	349.1
2004-05	491.8	420.5	912.3	347.8	297.3	645.1
2005-06	570.6	273.8	844.4	403.5	193.6	597.1
2006-07	311.1	76.7	387.8	241.8	59.6	301.4
2007-08	131.3	56.5	187.8	92.8	40.0	132.8
2008-09	252.0	213.6	465.5	178.2	151.0	329.2

a August–July crop year. **b** Includes data for Western Australia. **na** Not available.

Sources: ABS, *Agriculture, Australia*, cat. no. 7113.0, Canberra; ABS, *Crops and Pastures, Australia*, cat. no. 7321.0, Canberra; ABS, *Summary of Crops, Australia*, cat. no. 7330.0, Canberra; Department of Agriculture, Fisheries and Forestry, *Cotton Market News*, Canberra; ABARE.

67 Australian production, trade and use of raw cotton

	Domestic lint production a	Gross value of production b	Imports		Exports	
			Volume	Value	Volume	Value
	kt	$m	kt	$m	kt	$m
1962-63	1.8	1.9	19.3	na	na	na
1963-64	2.5	2.2	25.7	na	na	na
1964-65	8.5	7.7	25.2	na	na	na
1965-66	17.5	14.3	14.6	8.2	na	na
1966-67	14.4	12.5	9.1	4.7	na	na
1967-68	29.0	19.7	12.3	6.9	na	na
1968-69	30.4	21.0	5.7	3.8	3.7	1.9
1969-70	24.7	19.1	4.7	3.0	11.5	5.1
1970-71	15.9	13.3	7.0	4.3	7.4	3.4
1971-72	39.8	30.1	8.9	5.8	2.4	1.6
1972-73	28.4	32.6	3.8	2.7	22.3	11.3
1973-74	28.4	26.6	8.4	9.3	3.2	1.8
1974-75	32.9	29.3	4.0	4.8	7.7	5.4
1975-76	24.9	37.5	4.1	4.4	16.0	11.5
1976-77	28.0	39.8	5.0	7.4	5.5	7.1
1977-78	44.2	61.2	4.0	5.6	9.8	10.9
1978-79	53.1	71.4	1.7	3.1	23.6	28.5
1979-80	83.2	135.3	2.0	4.0	48.5	66.9
1980-81	98.9	147.2	2.2	4.3	59.0	92.0
1981-82	134.6	182.0	1.0	1.9	79.0	117.0
1982-83	100.8	167.5	0.7	1.3	129.0	198.0
1983-84	141.3	268.7	1.1	2.4	82.0	148.0
1984-85	248.7	330.2	2.7	6.0	140.0	262.0
1985-86	267.3	324.9	0.5	1.4	241.0	380.0
1986-87	221.6	372.1	0.3	0.6	251.0	345.0
1987-88	269.0	421.6	0.3	0.9	176.0	353.0
1988-89	293.0	536.9	1.1	2.9	288.3	464.1
1989-90	305.3	639.5	0.1	0.3	306.0	579.8
1990-91	447.0	898.0	0.7	2.2	339.7	737.7
1991-92	554.5	878.9	0.7	1.8	458.1	945.0
1992-93	409.3	706.3	0.3	1.3	396.0	755.5
1993-94	367.5	652.2	0.3	1.4	360.5	732.0
1994-95	375.0	851.2	0.2	1.2	296.8	678.7
1995-96	421.2	1 002.8	0.7	2.0	311.4	762.3
1996-97	610.1	1 342.0	0.2	0.6	505.0	1 076.9
1997-98	665.7	1 449.2	0.2	1.0	593.4	1 385.6
1998-99	715.6	1 394.7	0.2	1.0	646.7	1 559.0
1999-00	740.5	1 568.3	0.4	1.4	703.0	1 406.6
2000-01	819.0	1 881.9	0.4	1.6	834.3	1 958.3
2001-02	703.3	1 499.4	0.4	1.0	718.5	1 547.4
2002-03	387.1	844.0	0.3	1.0	596.2	1 153.2
2003-04	349.1	689.1	0.1	0.5	459.0	982.2
2004-05	645.1	1 222.0	0.3	0.7	410.2	770.9
2005-06	597.1	995.1	0.0	0.0	650.2	1 137.4
2006-07	301.4	541.6	0.0	0.1	486.5	823.4
2007-08	132.8	252.5	0.0	0.0	266.4	465.7
2008-09	329.2	684.7	0.3	0.3	259.7	500.1

a August–July crop year. **b** Includes cottonseed. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Value of Agricultural Commodities Produced, Australia,* cat. no. 7503.0, Canberra; Raw Cotton Marketing Advisory Committee, *Annual Report,* Canberra; ABARE.

68 Volume of Australian exports of raw cotton, by destination

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Asia	674.8	559.9	444.6	395.8	642.6	481.2	262.6	259.6
China	13.1	29.6	79.9	61.8	284.6	163.0	90.5	89.7
Chinese Taipei	21.5	13.6	2.7	3.9	8.7	4.4	0.8	1.1
India	55.0	6.8	2.2	3.5	1.3	4.2	2.1	3.0
Indonesia	193.9	184.2	147.0	130.0	141.4	126.4	73.9	80.6
Japan	120.9	94.0	52.2	45.2	34.9	36.3	28.8	20.3
Korea, Rep. of	94.0	96.3	56.4	63.6	53.7	53.8	13.8	11.8
Pakistan	29.1	14.9	33.2	13.3	8.2	6.8	3.3	0.1
Philippines	5.1	3.3	0.7	0.2	1.3	0.0	0.4	0.4
Thailand	90.1	86.9	58.6	64.8	93.1	75.0	43.5	44.6
Other	52.1	30.2	11.7	9.7	15.4	11.5	5.6	8.0
Europe	41.3	31.5	11.9	10.2	6.9	4.7	1.8	0.1
Germany	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0
Italy	24.3	17.3	6.6	8.1	6.6	4.4	1.8	0.1
Spain	2.9	2.9	2.9	2.0	0.0	0.0	0.0	0.0
Other	14.1	11.0	2.2	0.1	0.3	0.3	0.0	0.0
United States	0.0	1.2	0.5	0.3	0.0	0.0	0.0	0.0
Other countries	2.4	4.8	2.5	4.2	0.8	0.7	1.9	0.0
Total	718.5	596.2	459.0	410.2	650.2	486.5	266.4	259.7

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

69 Cotton prices and unit values

	Cotlook 'A' index a	Australian base price for raw cotton b	Average unit export return for raw cotton
	USc/lb	Ac/kg	Ac/kg
1963-64	na	57.0	na
1964-65	na	57.0	na
1965-66	na	57.0	na
1966-67	28.4	55.0	na
1967-68	31.3	58.0	na
1968-69	28.8	60.0	51.4
1969-70	28.0	58.0	44.3
1970-71	31.1	65.0	45.9
1971-72	37.2	72.0	66.7
1972-73	42.0	72.0	50.7
1973-74	76.5	120.0	56.3
1974-75	52.5	90.0	70.1
1975-76	65.3	117.0	71.9
1976-77	81.9	166.0	129.1
1977-78	65.1	135.0	111.2
1978-79	76.1	156.0	120.8
1979-80	85.4	179.0	137.9
1980-81	94.2	192.0	155.9
1981-82	73.8	164.0	148.1
1982-83	76.7	199.0	153.5
1983-84	87.7	237.0	180.5
1984-85	69.2	226.0	187.1
1985-86	49.0	174.0	157.7
1986-87	62.1	211.0	137.5
1987-88	72.3	237.0	200.6
1988-89	66.4	186.6	161.0
1989-90	82.4	247.7	189.5
1990-91	82.9	249.5	217.1
1991-92	63.1	198.4	206.3
1992-93	57.7	197.6	190.8
1993-94	70.6	234.4	203.0
1994-95	91.1	286.5	228.7
1995-96	85.5	262.7	244.8
1996-97	78.6	235.0	213.2
1997-98	72.2	248.6	233.5
1998-99	60.2	228.5	241.1
1999-00	52.5	199.2	200.1
2000-01	57.2	251.7	234.7
2001-02	41.8	193.8	215.4
2002-03	55.4	225.3	193.4
2003-04	68.3	225.2	214.0
2004-05	52.4	166.9	187.9
2005-06	56.0	178.9	174.9
2006-07	58.1	175.9	169.2
2007-08	72.9	190.8	174.8
2008-09	61.2	193.3	192.6

a Cotlook 'A' index quotes (cif Northern Europe) for strict middling (SM) 1 1/16" cotton from 1972-73 to July 1981, and for SM 1 3/32" cotton from August 1981. August–July crop year. **b** Equivalent to 'in store' prices – that is, Cotlook prices in USc/lb to which freight differentials have been added, then converted to Australian currency, with 'into store' charges added finally. Prices approximate import parity prices. **na** Not available.
Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Agriculture, Fisheries and Forestry, *Cotton Market News,* Canberra; Cotlook Limited, *Cotton Outlook,* United Kingdom; ABARE.

70 Summary of world statistics for raw cotton a

	Opening stocks kt	Production kt	Total supply kt	Consumption kt	Imports b kt	Price c USc/lb
1962-63	4 176	10 231	17 993	9 578	3 586	na
1963-64	5 015	11 064	19 952	10 404	3 873	na
1964-65	5 671	11 702	21 155	11 153	3 782	na
1965-66	6 314	12 396	22 441	11 719	3 730	na
1966-67	7 087	11 379	22 387	12 202	3 921	28.4
1967-68	6 196	11 226	21 203	12 234	3 781	31.3
1968-69	5 134	12 387	21 209	12 273	3 687	28.8
1969-70	5 220	11 828	20 902	12 186	3 853	28.0
1970-71	4 875	12 099	22 333	12 439	5 359	31.1
1971-72	4 756	12 879	23 006	12 711	5 371	37.2
1972-73	4 888	13 470	24 318	12 954	5 961	42.0
1973-74	5 331	13 603	24 757	13 122	5 823	76.5
1974-75	5 913	13 895	24 995	12 419	5 187	52.5
1975-76	7 262	11 752	24 736	13 412	5 723	65.3
1976-77	5 639	12 307	23 375	13 115	5 428	81.9
1977-78	4 873	13 914	24 692	13 286	5 905	65.1
1978-79	5 582	12 954	24 442	13 767	5 907	76.1
1979-80	4 759	14 249	25 650	14 349	6 642	85.4
1980-81	4 623	13 799	24 355	14 157	5 934	94.2
1981-82	4 487	14 988	25 070	13 784	5 595	73.8
1982-83	5 625	14 442	25 743	14 580	5 676	76.7
1983-84	5 542	14 430	25 864	14 953	5 891	87.7
1984-85	5 287	19 313	30 616	15 418	6 016	69.2
1985-86	9 172	17 449	32 931	16 401	6 310	49.0
1986-87	10 361	15 319	32 885	17 874	7 205	62.1
1987-88	7 711	17 733	32 091	18 321	6 647	72.3
1988-89	7 100	18 337	32 748	18 558	7 312	66.4
1989-90	6 760	17 356	31 237	18 921	7 120	82.4
1990-91	5 437	18 974	31 069	18 621	6 658	82.9
1991-92	5 976	20 748	33 043	18 766	6 319	63.1
1992-93	8 046	17 929	31 865	18 797	5 890	57.7
1993-94	7 508	16 922	30 515	18 626	6 086	70.6
1994-95	6 053	18 799	31 447	18 423	6 594	91.1
1995-96	6 965	20 438	33 282	18 711	5 878	85.5
1996-97	8 732	19 620	34 574	19 146	6 222	78.6
1997-98	9 712	20 092	35 449	19 000	5 645	72.2
1998-99	10 757	18 745	34 832	18 454	5 330	60.2
1999-00	11 499	19 152	36 742	19 831	6 091	52.5
2000-01	11 127	19 399	36 236	20 065	5 710	57.2
2001-02	10 758	21 490	38 628	20 562	6 380	41.8
2002-03	11 873	19 808	38 253	21 422	6 572	55.4
2003-04	10 369	21 066	38 841	21 342	7 405	68.3
2004-05	10 463	26 454	44 198	23 664	7 280	52.4
2005-06	13 165	25 407	48 257	25 350	9 685	56.0
2006-07	13 552	26 552	48 261	26 797	8 156	58.1
2007-08	13 779	26 238	48 358	26 728	8 341	72.9
2008-09	13 732	23 422	43 527	24 036	6 374	61.2

a August–July crop year. **b** Includes trade among the twelve republics of the former Soviet Union and Estonia, Latvia and Lithuania. **c** Cotlook 'A' index quotes (cif Northern Europe) for strict middling (SM) 1 1/16" cotton from 1972-73 to July 1981, and for SM 1 3/32" cotton from August 1981. **na** Not available.

Sources: US Department of Agriculture, *Cotton: World Markets and Trade, Foreign Agriculture Service Circular,* Washington DC; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; Cotlook Limited, *Cotton Outlook,* United Kingdom; ABARE.

71 World area, yield and production of raw cotton [a]

	Area harvested	Lint yield	Production					
			Brazil	India	Pakistan	United States	China	World
	'000 ha	kg/ha	kt	kt	kt	kt	kt	kt
1962-63	31 763	322	501	1 086	368	3 228	740	10 231
1963-64	32 849	337	501	1 103	422	3 330	1 197	11 064
1964-65	33 523	349	457	1 031	380	3 297	1 655	11 702
1965-66	33 285	372	544	961	417	3 252	2 090	12 396
1966-67	31 168	365	427	960	466	2 081	2 330	11 379
1967-68	30 921	363	575	1 129	520	1 621	2 351	11 226
1968-69	31 910	388	718	1 035	529	2 379	2 351	12 387
1969-70	32 458	364	580	1 044	538	2 175	2 079	11 828
1970-71	31 800	380	595	963	544	2 219	2 286	12 099
1971-72	33 023	390	680	1 260	707	2 281	2 112	12 879
1972-73	33 540	402	651	1 125	675	2 984	1 960	13 470
1973-74	32 845	414	535	1 079	633	2 825	2 547	13 603
1974-75	33 507	415	533	1 199	610	2 513	2 460	13 895
1975-76	29 870	393	400	1 130	494	1 808	2 373	11 752
1976-77	30 533	403	590	1 012	418	2 304	2 068	12 307
1977-78	33 576	414	489	1 229	553	3 133	2 047	13 914
1978-79	32 814	395	544	1 348	464	2 364	2 166	12 954
1979-80	32 219	442	572	1 363	744	3 185	2 199	14 249
1980-81	32 369	426	594	1 322	714	2 422	2 700	13 799
1981-82	32 938	455	680	1 428	748	3 407	2 961	14 988
1982-83	31 394	460	586	1 471	823	2 605	3 592	14 442
1983-84	30 920	467	674	1 333	494	1 692	4 638	14 430
1984-85	33 741	572	968	1 820	1 008	2 827	6 249	19 313
1985-86	31 581	553	793	1 964	1 216	2 924	4 137	17 449
1986-87	29 347	522	633	1 579	1 320	2 119	3 549	15 319
1987-88	30 871	574	864	1 555	1 468	3 214	4 246	17 733
1988-89	33 831	542	709	1 788	1 426	3 355	4 159	18 337
1989-90	31 696	548	666	2 295	1 456	2 655	3 788	17 356
1990-91	33 151	572	717	1 989	1 638	3 376	4 507	18 974
1991-92	34 786	596	667	2 023	2 177	3 835	5 683	20 748
1992-93	32 667	549	420	2 346	1 540	3 531	4 507	17 929
1993-94	30 743	550	483	2 134	1 368	3 513	3 745	16 922
1994-95	32 278	582	537	2 427	1 361	4 281	4 333	18 799
1995-96	35 947	569	410	2 885	1 801	3 897	4 768	20 438
1996-97	33 769	581	306	3 030	1 594	4 124	4 202	19 620
1997-98	33 800	594	411	2 686	1 562	4 092	4 594	20 092
1998-99	32 894	570	521	2 805	1 494	3 030	4 507	18 745
1999-00	32 356	592	700	2 652	1 911	3 694	3 832	19 152
2000-01	32 015	606	939	2 380	1 824	3 742	4 420	19 399
2001-02	33 727	637	766	2 678	1 804	4 420	5 312	21 490
2002-03	30 751	644	847	2 308	1 736	3 747	5 487	19 808
2003-04	32 316	652	1 310	3 048	1 708	3 975	5 182	21 066
2004-05	35 725	741	1 285	4 137	2 425	5 062	6 597	26 454
2005-06	34 744	731	1 023	4 148	2 213	5 201	6 183	25 407
2006-07	34 734	764	1 524	4 746	2 155	4 700	7 729	26 552
2007-08	32 942	796	1 602	5 356	1 938	4 182	8 056	26 238
2008-09	30 766	761	1 197	4 899	1 960	2 790	7 990	23 422

a August–July crop year.

Sources: US Department of Agriculture, *Cotton: World Markets and Trade,* Foreign Agriculture Service Circular, Washington DC; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

72 Volume of world exports of raw cotton, by country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Africa	1 121	1 297	1 357	1 396	1 508	1 241	993	788
Sub-saharan Africa	1 014	1 117	1 286	1 250	1 411	1 158	857	759
Burkina	142	158	207	212	305	294	169	174
America	2 668	2 771	3 344	3 608	4 388	3 220	3 532	3 554
United States	2 395	2 591	2 995	3 143	3 821	2 833	2 973	2 891
South America	251	164	319	433	510	347	510	623
Brazil	147	106	210	339	429	283	486	596
Australia	719	596	459	410	650	487	266	260
Greece	218	250	267	255	294	272	283	174
Mali	201	185	256	207	223	185	109	65
Uzbekistan	762	740	675	860	1 045	980	914	566
Other	659	791	871	887	1 599	1 679	2 249	1 039
Total	6 346	6 631	7 228	7 623	9 707	8 064	8 347	6 446

a August–July crop year. Includes small quantities re-exported.

Sources: US Department of Agriculture, *Cotton: World Markets and Trade, Foreign Agriculture Service Circular,* Washington DC; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

73 Volume of world imports of raw cotton, by destination a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Asia	3 228	3 504	4 639	4 469	6 964	5 342	5 992	4 437
Bangladesh	261	348	370	403	482	540	610	642
China	98	681	1 923	1 390	4 199	2 305	2 510	1 523
Chinese Taipei	333	265	220	291	247	253	210	158
Indonesia	513	485	468	479	479	479	501	435
Korea	352	325	277	292	220	233	212	215
Pakistan	188	190	393	382	352	502	851	479
Thailand	410	423	365	497	412	415	420	349
Turkey	648	493	516	743	762	877	712	629
Other Asia	1 073	786	622	734	574	616	679	636
European Union **b**	1 015	903	724	700	534	462	361	222
Mexico	450	507	405	394	380	295	333	286
Middle East	681	540	567	785	813	963	790	716
Russian Federation	392	359	321	316	310	305	261	207
Other	614	759	750	617	684	789	603	505
Total	6 380	6 572	7 405	7 280	9 685	8 156	8 341	6 374

a August–July crop year. Does not include cotton in transit. **b** Regarded as 27 countries.

Sources: US Department of Agriculture, *Cotton: World Markets and Trade, Foreign Agriculture Service Circular,* Washington DC; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

74 Summary of Australian statistics for dairy products

	Dairy cow numbers a	Milk yield per cow	Production			Export price c	
			Milk b	Butter	Cheese	Butter	Cheese
	'000	L	ML	kt	kt	$/t	$/t
1964-65	3 214	2 151	6 914	206	63	688	514
1965-66	3 094	2 236	6 919	209	60	669	534
1966-67	3 061	2 383	7 295	222	70	607	591
1967-68	2 963	2 298	6 808	196	71	584	519
1968-69	2 866	2 430	6 965	198	75	523	545
1969-70	2 829	2 659	7 523	223	76	512	480
1970-71	2 745	2 641	7 249	203	78	516	504
1971-72	2 693	2 629	7 079	196	81	793	673
1972-73	2 647	2 626	6 952	185	93	784	733
1973-74	2 492	2 711	6 756	175	96	695	761
1974-75	2 477	2 623	6 497	161	99	955	1 012
1975-76	2 467	2 533	6 248	148	113	836	1 117
1976-77	2 279	2 533	5 772	118	104	1 124	1 070
1977-78	2 056	2 734	5 621	112	116	1 280	1 259
1978-79	1 921	2 951	5 669	105	142	1 249	1 337
1979-80	1 869	2 905	5 430	84	151	1 595	1 545
1980-81	1 819	2 882	5 243	79	135	1 875	1 926
1981-82	1 810	2 910	5 268	76	153	2 714	2 158
1982-83	1 792	3 083	5 524	88	158	2 412	2 444
1983-84	1 809	3 274	5 923	111	161	1 871	2 611
1984-85	1 809	3 338	6 038	114	160	1 617	2 433
1985-86	1 770	3 411	6 038	105	170	1 592	2 515
1986-87	1 757	3 513	6 172	104	177	1 758	2 645
1987-88	1 714	3 575	6 129	98	176	1 634	2 735
1988-89	1 709	3 679	6 289	101	191	1 970	2 993
1989-90	1 698	3 688	6 262	104	175	2 420	3 462
1990-91	1 682	3 807	6 403	106	179	1 968	3 204
1991-92	1 699	3 963	6 732	114	198	2 177	3 318
1992-93	1 716	4 268	7 325	133	211	2 241	3 695
1993-94	1 786	4 523	8 079	149	233	2 197	3 753
1994-95	1 821	4 506	8 206	141	237	2 076	3 452
1995-96	1 884	4 627	8 718	154	268	2 993	3 882
1996-97	1 977	4 571	9 036	158	285	2 001	3 705
1997-98	2 060	4 582	9 439	163	310	2 264	3 956
1998-99	2 155	4 723	10 178	189	328	2 510	3 969
1999-00	2 171	4 996	10 847	182	373	2 124	3 671
2000-01	2 176	4 847	10 547	172	376	2 419	4 343
2001-02	2 123	5 309	11 271	178	412	2 417	4 738
2002-03	2 050	5 038	10 328	164	379	2 014	3 846
2003-04	2 038	4 944	10 076	149	384	2 187	3 486
2004-05	1 942	5 215	10 127	147	388	2 713	3 851
2005-06	1 880	5 367	10 089	146	373	2 723	4 146
2006-07	1 796	5 336	9 583	133	364	2 212	3 877
2007-08	1 640	5 624	9 223	128	359	3 391	4 764
2008-09	1 645	5 707	9 388	148	340	3 297	5 439

a Cows in milk and dry at 31 March on establishments with an estimated value of agricultural operations (EVAO) of $5 000 or more. From 1999-2000, at 30 June. House cows and heifers are included before 1977-78, but excluded thereafter. Before 1986-87, includes livestock holdings on establishments with an EVAO of $2 500 or more. **b** Before 1980-81, milk production included an estimate of on-farm use. **c** Fob.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Principal Agricultural Commodities, Preliminary,* cat. no. 7111.0, Canberra; Australian Dairy Corporation, Web statistics, Melbourne; ABARE.

75 Value of Australian exports of dairy products, by destination

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Cheese								
Japan	$m	272.0	299.6	378.9	298.5	337.9	426.7	398.9
Philippines	$m	15.7	11.1	18.4	13.7	13.1	23.4	17.1
Saudi Arabia	$m	98.9	69.0	81.5	103.5	86.7	89.7	30.6
United Kingdom	$m	15.2	18.3	20.5	20.1	14.8	21.2	8.9
United States	$m	36.1	33.9	45.4	54.2	52.7	37.2	59.7
Other	$m	362.4	307.4	332.0	347.2	319.0	370.2	280.8
Total	$m	800.3	739.2	876.7	837.2	824.2	968.4	796.1
Butter and butterfat a								
Egypt	$m	18.9	6.4	10.5	12.5	13.9	5.0	22.0
Malaysia	$m	12.7	13.5	11.6	15.8	11.0	17.4	14.0
Philippines	$m	3.7	1.9	2.8	5.4	3.2	2.4	8.6
Singapore	$m	15.5	18.2	16.8	21.1	14.4	26.2	20.2
Thailand	$m	13.2	12.7	13.5	12.0	9.8	13.9	10.1
Other	$m	160.0	130.1	133.2	157.9	126.2	129.6	157.3
Total	$m	224.0	182.9	188.5	224.7	178.6	194.6	232.1
Skim milk powder								
Japan	$m	29.6	13.3	10.6	12.5	11.1	9.8	21.9
Malaysia	$m	51.4	52.7	64.2	77.1	72.2	63.4	49.0
Philippines	$m	71.8	60.1	49.4	72.0	46.1	64.1	99.7
Singapore	$m	38.4	42.4	57.8	56.1	67.1	61.8	54.0
Thailand	$m	33.2	20.0	21.7	76.8	51.1	48.6	33.3
Other	$m	184.1	199.0	216.4	234.3	257.3	285.6	294.8
Total	$m	408.5	387.5	420.1	528.9	505.0	533.2	552.9
Casein								
Japan	$m	20.6	23.3	23.1	30.4	31.8	38.4	43.6
United States	$m	81.4	68.8	56.6	27.3	32.4	42.2	29.5
Other	$m	26.4	30.5	36.5	31.3	49.3	44.2	34.4
Total	$m	128.4	122.5	116.2	89.0	113.5	124.8	107.5
Wholemilk powder								
Malaysia	$m	22.3	28.9	33.1	23.8	14.5	27.3	14.9
Singapore	$m	25.2	21.4	30.9	44.6	41.4	88.9	77.0
Taiwan	$m	44.9	40.0	31.5	22.8	13.5	11.8	9.3
Thailand	$m	14.0	12.0	8.6	10.5	12.3	14.7	14.6
Other	$m	273.4	219.6	220.3	231.9	193.1	249.4	359.6
Total	$m	379.8	321.8	324.4	333.6	274.9	392.2	475.3
Other products								
Fresh milk	$m	98.2	104.0	108.8	107.3	96.3	83.6	102.1
Other fresh products	$m	5.6	9.6	9.1	6.3	11.8	12.0	0.4
Condensed milk	$m	133.3	121.0	139.8	147.5	156.9	152.4	158.9
Other powders	$m	274.4	257.3	248.3	241.5	211.0	247.4	249.7
Total	$m	511.5	492.0	506.0	502.6	476.0	495.4	511.1

a Includes ghee, dry butterfat, butter concentrate and butter oil, all expressed as butter.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

76 Volume of Australian exports of dairy products, by destination

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Cheese								
Japan	kt	73.2	92.4	106.5	81.0	96.2	96.9	74.4
Philippines	kt	4.9	3.7	5.1	3.4	3.3	4.7	3.2
Saudi Arabia	kt	14.8	14.9	17.0	20.7	18.1	16.3	5.4
United Kingdom	kt	4.3	5.0	5.1	5.1	4.4	4.1	1.8
United States	kt	9.0	10.3	11.9	11.7	13.7	8.7	10.6
Other	kt	101.9	85.8	82.0	80.0	76.9	72.6	51.0
Total	kt	208.1	212.1	227.7	201.9	212.6	203.3	146.4
Butter and butterfat a								
Egypt	kt	10.5	3.6	4.4	4.8	7.4	1.6	8.5
Malaysia	kt	4.7	4.7	3.4	4.8	4.4	4.9	3.7
Philippines	kt	2.1	1.0	1.1	2.1	1.6	0.8	2.4
Singapore	kt	6.5	7.0	7.1	8.1	6.9	7.1	5.1
Thailand	kt	7.7	6.5	5.5	4.6	5.1	4.4	2.9
Other	kt	79.6	60.9	48.0	58.1	55.3	38.6	47.7
Total	kt	111.2	83.6	69.5	82.5	80.7	57.4	70.4
Skim milk powder								
Japan	kt	16.4	7.6	3.9	4.1	2.0	1.5	7.0
Malaysia	kt	22.9	22.1	22.0	25.7	24.3	14.2	14.9
Philippines	kt	30.8	24.3	17.7	26.0	15.9	13.3	25.4
Singapore	kt	17.8	17.5	20.8	21.1	23.0	15.9	17.1
Thailand	kt	14.9	7.9	8.3	26.8	17.9	11.6	9.5
Other	kt	79.2	76.4	68.1	77.6	81.3	66.4	88.3
Total	kt	181.9	155.7	140.8	181.2	164.5	123.0	162.3
Casein								
Japan	kt	2.1	2.6	2.1	2.5	2.5	2.5	2.3
United States	kt	13.2	10.5	6.5	2.6	3.4	3.0	2.4
Other	kt	5.2	5.0	4.2	3.2	5.7	3.5	2.9
Total	kt	20.5	18.2	12.8	8.3	11.7	9.0	7.6
Wholemilk powder								
Chinese Taipei	kt	13.3	11.5	9.2	7.4	4.6	2.6	2.4
Malaysia	kt	6.8	11.1	11.0	7.9	4.6	5.7	3.2
Singapore	kt	12.3	8.8	10.6	15.1	13.7	17.0	17.0
Thailand	kt	5.8	4.8	2.9	3.6	4.3	3.4	3.4
Other	kt	103.5	80.9	71.0	76.4	67.2	52.9	90.3
Total	kt	141.7	117.1	104.8	110.3	94.4	81.6	116.3
Other products								
Fresh milk	ML	88.3	85.7	86.7	86.1	81.8	68.3	69.2
Other fresh products	ML	1.5	2.5	2.5	1.8	2.1	1.6	0.2
Condensed milk	kt	102.3	100.2	102.6	94.8	83.0	70.3	81.4
Other powders	kt	74.3	70.7	68.9	68.6	61.7	51.3	51.4

a Includes ghee, dry butterfat, butter concentrate and butter oil, all expressed as butter.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

77 Australian dairy cow numbers, by state a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia b
	'000	'000	'000	'000	'000	'000	'000
1965	719	1 187	689	113	159	143	3 214
1966	675	1 192	627	109	155	148	3 094
1967	668	1 211	599	103	149	149	3 061
1968	645	1 200	556	100	139	152	2 963
1969	604	1 209	497	97	139	153	2 866
1970	568	1 245	460	101	138	155	2 829
1971	527	1 244	441	96	138	153	2 745
1972	491	1 257	420	97	145	155	2 693
1973	465	1 274	390	98	141	155	2 647
1974	418	1 244	341	95	132	140	2 492
1975	387	1 269	329	91	135	144	2 477
1976	384	1 258	330	93	135	143	2 467
1977	373	1 167	312	84	120	128	2 279
1978	341	1 125	287	74	112	118	2 056
1979	320	1 047	265	72	105	110	1 921
1980	308	1 037	247	72	102	103	1 869
1981	289	1 024	236	71	100	99	1 819
1982	283	1 024	235	70	99	100	1 810
1983	293	998	234	69	98	98	1 792
1984	285	1 021	234	69	101	99	1 809
1985	274	1 036	229	69	102	98	1 809
1986	264	1 016	224	68	102	96	1 770
1987	270	997	223	67	102	96	1 757
1988	260	977	218	65	100	94	1 714
1989	258	990	210	64	94	92	1 709
1990	245	995	208	65	90	93	1 698
1991	230	1 000	199	66	89	97	1 682
1992	222	1 026	188	68	90	103	1 699
1993	222	1 033	189	70	93	107	1 716
1994	232	1 085	189	74	94	113	1 786
1995	230	1 113	189	73	97	119	1 821
1996	235	1 161	189	71	97	130	1 884
1997	245	1 229	194	71	101	137	1 977
1998	266	1 268	203	73	107	143	2 060
1999	282	1 340	196	65	117	154	2 155
2000	289	1 377	194	65	105	139	2 171
2001	270	1 360	187	72	132	155	2 176
2002	264	1 363	174	75	110	134	2 123
2003	250	1 303	159	77	117	142	2 050
2004	236	1 322	169	74	106	127	2 038
2005	240	1 319	139	62	93	132	1 942
2006	222	1 217	127	67	104	143	1 880
2007	210	1 150	121	60	114	140	1 796
2008	195	1 055	100	54	103	134	1 640
2009	198	1 044	92	49	110	152	1 645

a Cows in milk and dry at 31 March on establishments with an estimated value of agricultural operations (EVAO) of $5 000 or more. From 2000, at 30 June. House cows and heifers are included before 1977-78, but excluded thereafter. Before 1986-87, includes livestock holdings on establishments with an EVAO of $2 500 or more. **b** Includes data for the Australian Capital Territory and the Northern Territory.

Sources: ABS, *Principal Agricultural Commodities Australia*, cat. no. 7111.0, Canberra; ABS, *Agricultural Commodities, Australia*, cat. no. 7121.0, Canberra.

78 Australian production of wholemilk, by state a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia b
	ML	ML	ML	ML	ML	ML	ML
1961-62	1 567	2 869	1 097	265	434	333	6 563
1962-63	1 473	3 035	1 114	255	434	357	6 673
1963-64	1 466	3 159	1 090	260	443	378	6 803
1964-65	1 327	3 391	1 047	281	465	397	6 914
1965-66	1 367	3 414	1 005	281	447	400	6 919
1966-67	1 468	3 622	1 083	253	449	416	7 295
1967-68	1 410	3 338	987	252	404	413	6 808
1968-69	1 268	3 715	781	265	467	464	6 965
1969-70	1 413	4 028	870	254	483	469	7 523
1970-71	1 237	4 062	770	256	470	450	7 249
1971-72	1 171	3 973	768	255	458	451	7 079
1972-73	1 177	3 945	737	242	424	424	6 952
1973-74	1 069	3 917	665	241	439	422	6 756
1974-75	958	3 745	658	246	426	461	6 497
1975-76	985	3 518	691	240	398	434	6 248
1976-77	944	3 203	613	209	353	421	5 772
1977-78	875	3 013	537	212	316	381	5 621
1978-79	906	3 283	570	213	332	365	5 669
1979-80	907	3 151	506	222	329	315	5 430
1980-81	840	3 065	516	214	319	289	5 243
1981-82	874	3 028	557	209	306	294	5 268
1982-83	905	3 164	572	221	340	322	5 524
1983-84	940	3 400	629	232	382	340	5 923
1984-85	940	3 516	621	243	372	346	6 038
1985-86	904	3 575	600	243	365	351	6 038
1986-87	902	3 692	604	248	374	352	6 172
1987-88	931	3 649	614	251	378	306	6 129
1988-89	919	3 793	627	245	371	334	6 289
1989-90	879	3 787	629	267	356	343	6 262
1990-91	858	3 908	626	282	366	363	6 403
1991-92	894	4 119	635	302	411	372	6 732
1992-93	997	4 456	702	321	436	413	7 325
1993-94	1 099	4 968	764	345	456	447	8 079
1994-95	1 087	5 114	740	343	485	437	8 206
1995-96	1 118	5 482	751	341	512	514	8 718
1996-97	1 192	5 634	797	349	535	529	9 036
1997-98	1 242	5 866	822	387	580	543	9 439
1998-99	1 286	6 414	827	403	646	603	10 178
1999-00	1 395	6 870	848	412	713	609	10 847
2000-01	1 326	6 784	760	389	699	590	10 547
2001-02	1 343	7 405	744	392	715	671	11 271
2002-03	1 301	6 584	720	404	733	585	10 328
2003-04	1 271	6 434	674	404	703	590	10 076
2004-05	1 218	6 613	619	398	679	600	10 127
2005-06	1 197	6 651	597	377	646	622	10 089
2006-07	1 105	6 297	534	349	655	642	9 583
2007-08	1 049	6 102	485	319	606	661	9 223
2008-09	1 065	6 135	512	340	628	708	9 388

a Before 1977-78, milk production includes an estimate of on-farm use. **b** Includes data for the Australian Capital Territory and estimates for the Northern Territory.

Source: Australian Dairy Corporation, Web statistics, Melbourne.

79 Australian manufacture of dairy products

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Butter **a**	178.4	163.7	148.9	146.7	145.8	133.1	127.6	148.5
Cheese	412.1	379.0	383.8	388.4	372.9	363.8	359.3	340.0
Non-cheddar	191.7	166.1	176.0	192.6	181.2	184.7	136.9	111.6
Cheddar	220.3	212.8	207.8	195.9	191.7	179.1	222.4	228.4
Wholemilk powder	238.7	198.3	186.9	189.2	158.2	135.4	142.0	147.5
Skim milk powder **b**	239.5	196.6	182.1	189.1	205.5	191.5	164.3	212.0
Casein	13.9	13.1	14.0	13.0	12.2	7.7	10.3	9.8
Buttermilk powder	18.0	16.6	16.6	16.7	15.9	13.5	12.6	15.4

a Includes the butter equivalent of butter oil, butter concentrate, ghee and dry butterfat production. **b** Includes mixed skim milk powder and buttermilk powder.

Sources: Australian Dairy Corporation, Web statistics, Melbourne; ABARE.

80 Australian consumption of dairy products

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Total consumption								
Butter	kt	67.0	66.9	73.0	82.2	79.6	79.6	87.2
Margarine (table)	kt	84.0	82.9	84.0	88.9	88.0	87.4	85.4
Cheese **a**	kt	227.3	238.8	229.1	228.6	240.5	250.3	250.6
Australian	kt	184.1	190.5	182.3	180.7	182.7	188.4	183.2
Wholemilk powder	kt	24.8	23.7	22.4	35.0	37.0	37.5	42.5
Skim milk powder **b**	kt	26.2	26.2	29.7	27.3	26.7	25.0	25.5
Casein	kt	0.7	0.8	0.8	2.0	2.0	2.1	2.2
Market milk	ML	1 924	1 942	1 981	2 024	2 066	2 162	2 202
Consumption per person								
Butter	kg	3.4	3.4	3.6	4.1	3.9	3.8	4.1
Margarine (table)	kg	4.3	4.2	4.2	4.4	4.3	4.2	4.0
Cheese **a**	kg	11.6	12.1	11.5	11.3	11.7	12.0	11.8
Australian	kg	9.4	9.6	9.1	8.9	8.9	9.0	8.6
Wholemilk powder	kg	1.3	1.2	1.1	1.7	1.8	1.8	2.0
Skim milk powder **b**	kg	1.3	1.3	1.5	1.3	1.3	1.2	1.2
Market milk	L	98.5	98.3	99.0	100.2	100.5	103.7	103.7

a In natural equivalent weight. **b** Includes buttermilk powder and mixed skim milk powder. **s** ABARE estimate.

Sources Australian Dairy Corporation, Web statistics, Melbourne; Australian Dairy Corporation; ABARE.

81 Australian milk prices and gross value of production

	Producer price a			Gross value of production		
	Manufacturing milk	Market milk	Weighted average	Manufacturing milk	Market milk	Total
	c/L	c/L	c/L	$m	$m	$m
1963-64	na	na	5.4	228	139	367
1964-65	na	na	5.6	239	145	384
1965-66	4.3	9.3	5.5	232	150	381
1966-67	4.4	9.3	5.5	251	149	400
1967-68	4.2	9.4	5.4	215	154	370
1968-69	4.3	9.3	5.5	228	155	383
1969-70	4.3	9.6	5.5	253	161	414
1970-71	4.6	10.0	5.9	255	170	426
1971-72	5.2	10.6	6.5	285	173	458
1972-73	5.3	11.0	6.7	280	184	464
1973-74	5.3	11.8	7.0	271	196	468
1974-75	6.0	14.2	8.0	301	218	519
1975-76	5.5	16.1	8.1	252	238	490
1976-77	5.7	18.7	9.2	246	275	521
1977-78	7.3	17.2	9.9	259	295	553
1978-79	8.5	18.5	11.0	296	332	628
1979-80	9.7	20.0	12.5	309	367	676
1980-81	13.0	23.1	16.0	483	402	885
1981-82	15.4	26.2	18.6	561	473	1 034
1982-83	16.7	28.7	20.1	665	522	1 187
1983-84	15.7	29.8	19.4	656	497	1 153
1984-85	13.5	31.2	18.2	510	526	1 035
1985-86	14.7	32.8	19.6	580	527	1 107
1986-87	17.5	34.5	22.1	687	570	1 257
1987-88	19.3	36.2	23.9	805	586	1 391
1988-89	22.7	37.9	26.8	981	654	1 635
1989-90	18.3	39.7	28.6	1 059	691	1 749
1990-91	18.9 **b**	40.9	23.5	1 099	726	1 825
1991-92	19.7	43.2	24.5	1 188	772	1 960
1992-93	24.4	43.5	29.0	1 522	793	2 314
1993-94	23.0	46.2	28.2	1 620	829	2 448
1994-95	22.2	47.8	27.9	1 511	908	2 419
1995-96	26.0	49.9	31.1	1 898	951	2 848
1996-97	24.0	51.1	29.6	1 830	979	2 809
1997-98	23.9	52.0	29.4	1 839	979	2 817
1998-99	22.5	51.5	28.5	1 905	995	2 900
1999-00	22.0	52.3	26.2	1 961	1 011	2 972
2000-01	na **c**	na **c**	29.0	na	na	3 053
2001-02	na **c**	na **c**	33.0	na	na	3 717
2002-03	na **c**	na **c**	27.1	na	na	2 795
2003-04	na **c**	na **c**	27.9	na	na	2 809
2004-05	na **c**	na **c**	31.5	na	na	3 194
2005-06	na **c**	na **c**	33.1	na	na	3 341
2006-07	na **c**	na **c**	33.2	na	na	3 178
2007-08	na **c**	na **c**	49.6	na	na	4 572
2008-09	na	na	42.4	na	na	3 981

a A slight series break occurs in 1977-78 as a result of a change in the method of valuation. **b** From 1990-91, manufacturing milk price is reported net of market support. **c** Since deregulation of farm gate milk prices from July 2000, manufacturing and market milk prices are no longer reported separately. **na** Not available.

Sources: ABS, *Value of Principal Agricultural Commodities Produced,* cat. no. 7501.0, Canberra; ABARE.

82 Average retail prices of selected dairy products, by quarter

	Milk a		Cheese b		Butter c	
	Sydney c/L	Melbourne c/L	Sydney c/kg	Melbourne c/kg	Sydney c/kg	Melbourne c/kg
2001						
March	135	145	734	698	390	446
June	135	145	726	706	434	466
September	138	146	732	752	456	430
December	144	152	848	836	468	440
2002						
March	145	154	820	780	458	436
June	147	153	740	738	480	472
September	147	153	752	758	466	478
December	154	156	762	770	472	456
2003						
March	155	156	770	782	484	476
June	157	156	742	726	464	468
September	155	157	708	698	500	484
December	156	157	724	746	492	480
2004						
March	156	158	818	798	520	504
June	157	159	796	792	504	504
September	128	134	850	788	532	528
December	137	149	822	810	536	548
2005						
March	141	152	816	820	568	604
June	143	155	806	856	588	624
September	144	156	854	852	604	652
December	148	157	852	832	608	676
2006						
March	148	158	854	874	624	672
June	149	160	866	858	640	688
September	156	160	874	908	632	696
December	161	162	866	892	656	716
2007						
March	163	162	982	970	672	716
June	165	163	970	956	700	728
September	172	167	844	944	684	628
December	184	176	928	1 022	724	658
2008						
March	186	180	978	1 020	780	680
June	183	180	990	1 026	784	740
September	179	184	1 042	1 092	772	738
December	181	185	998	1 140	790	726
2009						
March	176	184	1 020	1 184	800	756
June	171	181	1 048	1 152	814	740
September	172	179	1 040	1 090	790	740

a 1litre carton to June 2004, from September 2004 based on 2 litre carton, supermarket. **b** Based on a processed, sliced, wrapped, 500 gram pack. **c** Based on a 500 gram pack.

Source: ABS, *Average Retail Prices of Selected Items*, cat. no. 6403.0, Canberra.

83 Average export unit values of Australian dairy products a

	Butter b $/t	Cheese $/t	Skim milk powder $/t	Wholemilk powder $/t	Casein $/t
1961-62	598	458	na	na	333
1962-63	604	462	na	na	319
1963-64	618	477	na	na	318
1964-65	688	514	na	na	367
1965-66	669	534	na	na	518
1966-67	607	591	281	586	420
1967-68	584	519	241	619	488
1968-69	523	545	153	544	409
1969-70	512	480	157	497	399
1970-71	516	504	185	500	431
1971-72	793	673	332	631	557
1972-73	784	733	390	738	727
1973-74	695	761	417	767	741
1974-75	955	1 012	649	1 007	1 033
1975-76	836	1 117	465	1 042	1 013
1976-77	1 124	1 070	323	867	832
1977-78	1 280	1 259	389	1 038	1 022
1978-79	1 249	1 337	541	1 104	1 366
1979-80	1 595	1 545	577	1 100	1 843
1980-81	1 875	1 926	1 000	1 614	2 476
1981-82	2 714	2 158	897	1 907	2 391
1982-83	2 412	2 444	919	2 057	2 941
1983-84	1 871	2 611	885	2 071	2 500
1984-85	1 617	2 433	849	1 900	2 286
1985-86	1 592	2 515	987	1 938	2 800
1986-87	1 758	2 645	1 127	2 048	3 286
1987-88	1 634	2 735	1 382	2 243	3 875
1988-89	1 970	2 993	2 245	2 650	6 345
1989-90	2 420	3 462	2 341	2 852	5 704
1990-91	1 968	3 204	1 784	2 192	4 179
1991-92	2 177	3 318	1 953	2 432	4 820
1992-93	2 241	3 695	2 554	2 918	6 881
1993-94	2 197	3 753	2 233	2 603	13 941
1994-95	2 076	3 452	2 293	2 471	6 876
1995-96	2 993	3 882	2 845	3 141	8 564
1996-97	2 001	3 705	2 462	2 778	6 027
1997-98	2 264	3 956	2 494	2 882	4 997
1998-99	2 510	3 969	2 254	2 883	5 274
1999-00	2 124	3 671	2 191	2 629	6 022
2000-01	2 419	4 343	3 426	3 464	9 040
2001-02	2 417	4 738	3 320	3 454	9 356
2002-03	2 014	3 846	2 246	2 681	6 258
2003-04	2 187	3 486	2 489	2 748	6 735
2004-05	2 713	3 851	2 984	3 094	9 059
2005-06	2 723	4 146	2 918	3 024	10 739
2006-07	2 212	3 877	3 070	2 912	9 712
2007-08	3 391	4 764	4 334	4 808	13 885
2008-09	3 297	5 439	3 407	4 086	14 076

a Fob. **b** Commercial butter equivalent. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

84 Volume of Australian imports of cheese, by variety

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Volume	kt	kt	kt	kt	kt	kt	kt
Processed							
Cheddar	11.72	11.75	13.35	14.25	13.29	13.59	13.41
Other	1.85	3.46	2.73	2.41	2.29	3.06	2.66
Natural							
Blue vein	1.09	1.14	1.09	1.09	1.39	1.15	0.89
Camembert	0.19	0.25	0.25	0.21	0.26	0.26	0.23
Cheddar	19.24	18.09	18.83	22.88	26.45	29.51	21.90
Colby	1.89	2.00	1.72	2.09	2.15	2.46	2.99
Edam	0.94	1.05	0.97	0.86	1.21	0.92	0.76
Emmenthaler	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fetta	2.07	2.32	2.83	3.30	2.78	3.03	3.04
Gouda	0.36	0.77	0.39	0.50	1.24	0.93	0.93
Kasseri	0.15	0.12	0.12	0.10	0.13	0.12	0.17
Mozzarella	2.88	0.69	0.72	2.64	1.80	1.20	0.56
Parmesan	1.58	1.31	0.93	1.38	1.46	1.90	1.46
Provolone	0.26	0.35	0.38	0.39	0.41	0.43	0.45
Other	6.30	5.76	6.18	8.40	9.55	11.50	9.63
Total	50.52	49.05	50.49	60.51	64.41	70.07	59.07
Unit value							
Processed							
Cheddar	3.45	3.57	4.16	4.30	4.15	4.71	4.78
Other	5.91	4.55	5.20	5.11	5.50	3.91	6.30
Natural							
Blue vein	11.04	10.41	11.46	11.78	11.34	12.68	15.69
Camembert	10.62	9.87	10.53	10.35	10.35	11.55	14.01
Cheddar	3.05	2.97	3.61	3.78	3.43	4.26	4.79
Colby	3.22	2.98	4.11	4.28	3.96	5.26	5.02
Edam	4.34	4.08	4.82	5.05	4.28	5.44	6.08
Emmenthaler	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fetta	5.65	5.50	5.42	5.01	6.00	6.52	7.72
Gouda	5.80	4.26	6.11	5.81	4.11	4.73	6.08
Kasseri	9.51	9.19	9.56	9.12	10.04	10.28	12.88
Mozzarella	3.50	3.15	3.35	3.86	3.50	4.18	3.99
Parmesan	7.33	9.76	10.85	8.69	7.76	8.24	10.59
Provolone	9.62	9.13	9.13	9.07	9.30	9.71	11.05
Other	6.99	7.04	7.77	6.81	7.01	7.74	9.22
Average	4.31	4.32	4.90	4.82	4.69	5.37	6.18

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

85 Summary of world statistics for dairy products

	Production			Consumption		Exports a	
	Milk	Butter	Cheese	Butter	Cheese	Butter	Cheese
	Mt	kt	kt	kt	kt	kt	kt
1967	328	5 309	4 962	5 087	4 811	741	681
1968	333	5 388	5 065	5 103	4 999	744	724
1969	335	5 161	5 233	5 016	5 238	727	718
1970	336	5 162	5 686	5 100	5 679	948	775
1971	338	5 142	6 049	5 109	5 949	788	821
1972	346	5 480	6 480	5 138	6 296	675	836
1973	353	5 593	6 676	5 585	6 590	1 080	933
1974	360	5 564	6 987	5 469	6 732	958	995
1975	361	5 748	6 763	5 600	6 612	895	1 019
1976	366	6 027	7 298	5 674	6 978	994	1 161
1977	376	6 207	7 382	5 837	7 167	1 001	1 203
1978	381	6 230	7 692	5 743	7 487	1 027	1 233
1979	386	6 256	8 079	5 977	7 765	1 233	1 343
1980	390	6 291	8 342	5 982	7 972	1 355	1 358
1981	389	6 075	8 381	5 776	8 004	1 343	1 428
1982	405	6 375	8 811	5 721	8 426	1 312	1 484
1983	421	6 918	9 168	6 066	8 769	1 197	1 504
1984	424	6 857	9 581	6 219	9 313	1 337	1 703
1985	430	6 929	9 962	6 443	9 645	1 400	1 721
1986	438	7 217	10 295	6 568	10 064	1 310	1 734
1987	435	6 737	10 599	6 963	10 374	1 820	1 770
1988	436	6 604	10 717	7 070	10 385	2 090	1 786
1989	438	6 747	10 975	6 404	10 692	1 769	1 785
1990	441	6 797	11 025	6 382	10 744	1 368	1 838
1991	428	6 306	11 068	5 893	10 677	1 410	1 926
1992 b	424	6 056	11 218	5 875	10 823	1 442	2 036
1993	394	5 657	11 093	5 286	10 729	1 422	2 242
1994	384	5 348	11 240	5 188	10 950	1 320	2 338
1995	381	5 218	11 346	4 966	11 037	1 233	2 467
1996	380	5 136	11 705	4 844	11 325	1 131	2 582
1997	370	5 171	11 100	4 931	11 061	749	943
1998	374	5 458	11 378	5 083	11 190	627	907
1999	380	5 653	12 123	4 988	11 845	618	912
2000	389	5 821	12 614	5 355	12 173	712	1 068
2001	394	6 152	12 702	5 724	12 416	743	1 086
2002	405	6 572	13 132	5 934	12 711	738	1 157
2003	410	6 540	13 119	6 119	12 847	881	1 181
2004	416	6 635	13 648	6 250	13 298	905	1 241
2005	421	6 779	14 102	6 336	13 781	797	1 250
2006	428	7 021	14 385	6 723	13 984	760	1 202
2007	437	7 428	14 661	7 142	14 458	811	1 302
2008	438	7 780	14 407	7 393	14 143	709	1 250

a Includes intra-EU trade up to and including 1993. **b** For years up to and including 1991, includes data for 38 selected major countries; from 1992, includes data for 31 major countries.

Source: US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC.

86 Milk production in selected regions and countries

	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt
Americas							
Canada	7 964	7 734	7 905	7 806	8 041	8 212	8 270
United States	77 139	77 269	77 488	80 255	82 455	84 211	86 179
Brazil	22 635	22 860	23 317	24 250	25 230	26 750	28 890
Asia							
China	12 998	17 463	22 606	27 534	31 934	35 252	36 700
India	36 200	36 500	37 500	37 520	41 000	42 890	44 100
Japan	8 385	8 400	8 329	8 285	8 137	8 007	7 990
Europe							
European Union **a**	134 086	135 069	133 969	134 672	132 206	132 604	134 346
Russian Federation	33 500	33 000	32 000	32 000	31 100	32 200	32 500
Ukraine	13 860	13 400	13 787	13 423	12 890	11 997	11 070
Oceania	25 545	24 995	25 388	24 941	25 602	25 520	24 650
Australia **b**	11 620	10 649	10 388	10 441	10 402	9 880	9 509
New Zealand **c**	13 925	14 346	15 000	14 500	15 200	15 640	15 141
Total **d**	405 311	409 579	415 639	421 398	427 713	436 783	438 244

a Regarded as 27 countries. **b** Year ended 30 June. **c** Year ended 31 May. **d** Includes 31 major producing countries. **na** Not available.
Source: US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC.

87 Production of dairy products in selected regions and countries

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Butter								
Australia **abc**	172	178	164	149	147	146	133	128
Brazil	78	70	72	75	77	79	82	84
Europe								
Russian Federation	270	280	280	270	275	290	300	305
European Union **d**	2 028	2 233	2 153	2 164	2 155	2 035	2 053	2 072
Ukraine	156	131	148	138	118	105	100	89
Japan **e**	80	83	80	80	84	80	75	73
New Zealand **bcf**	352	380	405	418	379	390	419	391
United States	559	615	564	565	611	657	695	746
Total	6 152	6 572	6 540	6 635	6 779	7 021	7 428	7 780
Cheese								
Australia **a**	376	412	379	384	388	373	364	359
Brazil	460	470	460	470	495	528	580	630
Europe								
Russian Federation	260	340	335	350	375	405	435	425
European Union **d**	5 965	6 106	6 205	6 481	6 625	6 801	6 760	6 840
Ukraine	105	129	169	224	274	210	244	256
Japan **f**	34	36	35	35	39	40	43	55
New Zealand **fg**	281	312	301	305	297	292	308	314
United States	3 747	3 877	3 882	4 025	4 150	4 320	4 435	4 506
Total	12 702	13 132	13 119	13 648	14 102	14 385	14 661	14 407
Skim milk powder								
Australia **a**	244	239	197	182	189	205	191	164
Brazil	103	107	108	110	113	117	128	133
Europe								
Russian Federation	130	140	145	125	110	110	115	120
European Union **d**	1 224	1 378	1 334	1 074	1 074	955	1 005	990
Ukraine	92	63	71	78	78	80	90	65
Japan	175	183	183	183	187	180	173	170
New Zealand **fg**	227	255	289	274	225	247	304	265
United States	641	724	721	641	695	687	680	859
Total	3 414	3 688	3 666	3 314	3 317	3 266	3 469	3 574

a Year ended 30 June. **b** Includes butter anhydrous milk fat and ghee. **c** Factory production only. **d** Regarded as 27 countries. **e** Year ended 31 March. **f** Year ended 31 May. **g** Includes imported unprocessed cheese which is blended with domestically produced cheese.
Sources: Australian Dairy Corporation, Web statistics, Melbourne; Agriculture and Livestock Industries Corporation, *Monthly Statistics*, Tokyo; Ministry of Agriculture and Fisheries, *Situation and Outlook for New Zealand Agriculture*, Wellington; US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC; ABARE.

88 Volume of exports of dairy products, by selected countries

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Butter								
Australia **ab**	120	123	111	84	69	83	81	57
Brazil	3	0	0	1	1	1	3	4
Canada	16	17	12	17	20	18	13	3
India	2	3	2	2	7	5	10	8
European Union **c**								
Net exports	207	230	321	353	340	248	216	151
New Zealand **bd**	347	353	399	400	316	366	439	367
Russian Federation	3	5	5	5	5	5	5	5
Ukraine	53	15	18	42	24	18	4	7
United States	0	3	12	9	9	11	41	105
Cheese								
Argentina	18	26	23	31	45	58	45	36
Australia **a**	219	218	208	212	228	202	213	203
European Union **c**								
Net exports	484	503	539	524	499	561	534	490
New Zealand **d**	251	277	290	289	265	267	309	283
Ukraine	31	37	61	94	116	50	62	78
United States	53	54	52	61	58	71	99	131
Skim milk powder								
Australia **a**	203	210	182	156	141	181	164	123
Canada	46	49	36	16	6	13	14	15
European Union **c**								
Net exports	278	262	337	277	190	88	202	179
India	8	10	23	10	40	50	40	38
New Zealand **de**	195	248	314	305	221	243	327	251
Russian Federation	15	20	25	20	15	15	15	15
Ukraine	71	43	51	63	57	64	57	40
United States	96	126	141	231	277	287	255	391

a Year ended 30 June. **b** Includes butter, anhydrous milk fat and ghee. **c** Regarded as 27 countries. Excludes intra-EU trade. **d** Year ended 31 May **e** Skim milk and buttermilk powder.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Ministry of Agriculture and Fisheries, *Situation and Outlook for New Zealand Agriculture,* Wellington; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; ABARE.

89 Volume of imports of dairy products, by selected countries

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Butter								
Canada	26	19	20	28	24	15	13	8
Egypt	45	50	47	28	41	45	46	0
European Union **a**	90	93	93	93	81	84	93	65
Japan	0	4	13	7	6	4	11	14
Mexico	35	37	40	53	51	49	53	58
Russian Federation	110	120	160	170	110	115	130	135
United States	34	16	15	23	16	17	18	5
Cheese								
European Union **a**	136	119	127	104	93	99	83	93
Japan	202	204	194	219	212	207	225	205
Korea, Rep. of	34	31	36	41	44	44	50	52
Mexico	66	65	78	82	89	86	89	90
Russian Federation	140	130	175	190	250	230	250	270
United States	198	214	216	214	209	206	197	172
Skim milk powder								
Algeria	80	80	68	75	72	68	91	91
China	18	35	51	61	55	62	40	54
European Union **a**	63	44	62	30	10	21	10	8
Indonesia	98	110	120	125	135	140	147	159
Japan	53	44	43	37	34	32	36	35
Mexico	141	132	129	141	155	113	121	152
Philippines	89	100	110	120	87	95	98	85

a Regarded as 27 countries. Excludes intra-EU trade.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

90 Stocks of dairy products in principal producing countries

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Butter								
Australia **a**	6	2	2	8	14	9	4	18
Canada	20	13	13	15	17	10	11	15
European Union **b**	151	248	276	232	185	122	46	53
New Zealand **c**	50	51	31	23	61	60	15	15
United States	25	72	45	20	27	49	70	54
Total	317	453	423	342	347	283	178	186
Cheese								
Australia **a**	58	73	55	51	25	21	18	15
Canada	49	52	59	59	62	62	68	70
New Zealand **c**	43	51	36	26	32	32	6	15
United States	299	331	323	318	344	371	362	386
Total	551	603	558	514	524	545	518	569
Skim milk powder								
Australia **a**	18	16	7	5	39	38	30	46
Canada	19	8	23	41	38	23	20	41
European Union **b**	45	188	218	77	8	0	0	0
New Zealand **c**	98	100	70	35	35	35	8	20
United States	408	521	445	232	83	48	75	140
Total	835	1 208	1 169	656	377	278	247	367

a Year ending 30 June. **b** Regarded as twenty 27 countries. **c** Year ending 31 May.

Source: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

91 Major components of Australian farm costs

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
	$m	$m	$m	$m	$m	$m	$m	$m
Materials and services								
Fuel	1 091	1 120	1 188	1 236	1 360	1 230	1 450	1 671
Fertiliser	1 244	1 378	1 651	1 760	1 805	1 906	1 840	1 920
Chemicals	1 059	1 139	1 349	1 480	1 497	1 576	1 604	1 664
Seed and fodder	2 437	3 131	2 928	2 801	2 948	2 974	2 847	3 072
Marketing	2 306	1 955	2 519	2 923	2 726	2 901	3 144	3 198
Repairs and maintenance	1 706	1 768	1 920	2 003	2 011	2 154	2 150	2 262
Other	2 828	3 064	2 937	2 954	2 920	2 916	3 017	3 184
Total	12 671	13 555	14 492	15 157	15 266	15 657	16 052	16 971
Other costs								
Wages	2 445	2 667	2 738	2 983	2 976	3 133	3 250	3 360
Interest paid	1 695	2 069	2 182	2 180	1 976	1 917	2 023	2 249
Other overheads	337	344	356	360	360	364	372	389
Total	4 477	5 080	5 276	5 523	5 313	5 414	5 645	5 998
Total cash costs	17 148	18 635	19 769	20 680	20 579	21 071	21 697	22 969
Depreciation	3 039	3 073	3 144	3 230	3 306	3 439	3 526	3 687
Total farm costs	20 187	21 708	22 913	23 910	23 885	24 511	25 223	26 657

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09 s
	$m	$m	$m	$m	$m	$m	$m	$m
Materials and services								
Fuel	1 580	1 520	1 702	1 765	2 223	2 199	2 524	2 183
Fertiliser	1 980	1 820	1 827	1 851	1 843	1 659	2 995	3 174
Chemicals	1 760	1 550	1 649	1 691	1 749	1 545	1 869	1 734
Seed and fodder	3 226	4 874	4 317	4 267	3 827	4 921	6 224	5 602
Marketing	3 395	2 433	3 567	3 433	3 612	2 748	3 184	3 789
Repairs and maintenance	2 328	2 392	2 453	2 493	2 602	2 466	3 132	3 374
Other	3 339	3 329	3 378	3 473	3 692	3 543	3 659	3 840
Total	17 608	17 918	18 893	18 974	19 548	19 081	23 587	23 697
Other costs								
Wages	3 367	3 226	3 420	3 410	3 778	3 654	3 590	3 758
Interest paid	2 087	2 295	2 238	2 306	3 249	3 848	4 901	4 331
Other overheads	400	412	422	432	446	447	462	477
Total	5 854	5 933	6 080	6 148	7 473	7 950	8 953	8 566
Total cash costs	23 463	23 851	24 973	25 122	27 021	27 031	32 540	32 263
Depreciation	3 796	3 915	4 017	4 122	4 255	4 383	4 532	4 675
Total farm costs	27 258	27 766	28 991	29 243	31 276	31 413	37 072	36 938

s ABARE estimate.

Sources: ABS, *Australian National Accounts, National Income and Expenditure*, cat. no. 5204.0, Canberra; ABS, *Australian National Accounts, National Income and Expenditure, Australia*, cat. no. 5206.0, Canberra; ABARE.

92 Indexes of prices paid by farmers in Australia

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Materials and services									
Seed, fodder and livestock									
Seed, seedlings and plants	85.3	87.6	88.9	95.7	101.1	99.2	100.0	100.6	102.7
Fodder and feedstuffs	80.5	78.5	79.9	92.2	101.4	98.9	100.0	91.9	90.0
Store and breeding stock	79.7	78.8	95.0	96.7	96.1	89.4	100.0	100.9	105.0
Total	80.5	79.1	85.1	93.9	100.2	96.6	100.0	94.9	95.0
Fertiliser	90.3	88.7	87.1	89.6	98.2	99.2	100.0	102.7	99.8
Chemicals and medicines	97.5	98.0	97.2	97.9	98.1	99.0	100.0	100.4	101.6
Fuel and lubricants	99.6	104.1	100.5	96.6	100.4	104.9	100.0	104.1	148.6
Electricity	100.4	101.8	100.9	98.3	97.7	99.4	100.0	100.7	100.2
Maintenance									
Plant and equipment	83.6	86.7	89.9	92.5	95.3	97.6	100.0	102.3	106.1
Structures	87.5	89.4	91.0	92.5	94.6	95.4	100.0	102.8	104.6
Total	84.8	87.5	90.2	92.5	95.1	96.9	100.0	102.3	105.6
Contracts	90.0	92.8	95.6	97.3	98.4	99.6	100.0	104.3	107.9
Other materials and services	91.2	92.4	94.1	96.8	100.1	100.0	100.0	102.3	104.2
Total	87.4	87.8	90.2	94.2	98.7	98.6	100.0	99.9	104.2
Labor	86.5	89.7	91.0	92.3	95.1	97.0	100.0	103.7	107.1
Marketing									
Freight outwards	96.9	97.9	98.5	98.5	98.5	98.6	100.0	100.3	102.5
Selling expenses	86.9	86.7	89.3	91.7	95.6	95.5	100.0	102.8	105.2
Total	88.7	88.7	91.0	92.9	96.2	96.1	100.0	102.7	105.0
Overheads									
Interest paid	139.6	107.4	100.2	113.2	127.9	117.0	100.0	90.6	98.8
Rates and taxes	89.3	91.5	92.0	94.2	92.2	95.6	100.0	102.1	107.1
Insurance	64.2	67.0	71.3	74.3	90.8	98.1	100.0	102.8	105.1
Other overheads	92.3	94.1	95.7	96.8	99.2	100.5	100.0	103.1	104.1
Total	109.6	96.9	94.6	101.6	109.3	106.5	100.0	96.6	102.5
Capital items									
Plant and equipment	83.9	87.4	91.7	94.3	97.3	99.0	100.0	103.3	106.6
Structures	89.5	91.7	93.4	94.8	95.8	96.7	100.0	101.7	103.8
Total	84.6	88.0	91.9	94.4	97.1	98.7	100.0	103.0	106.1
Total prices paid	90.8	89.5	91.1	95.0	99.5	99.4	100.0	100.6	104.7
Excluding capital items	91.6	89.8	91.1	95.1	99.8	99.5	100.0	100.1	104.4
Excluding capital and overheads	87.4	88.2	90.4	93.6	97.7	98.0	100.0	100.9	104.8
Excluding seed, fodder and store and breeding stock	93.2	92.0	92.6	95.2	99.3	99.9	100.0	101.6	106.5

Continued

92 Indexes of prices paid by farmers in Australia continued

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Materials and services									
Seed, fodder and livestock									
Seed, seedlings and plants	105.2	112.9	118.3	104.9	95.3	93.8	109.5	135.8	127.6
Fodder and feedstuffs	93.6	105.5	167.5	148.3	140.4	126.4	151.0	196.4	175.6
Store and breeding stock	126.0	145.3	125.8	144.0	159.5	157.6	152.6	152.9	164.6
Total	103.1	116.5	150.3	142.0	140.3	130.8	146.7	178.8	167.3
Fertiliser	106.4	104.3	106.9	102.8	108.8	111.6	121.4	220.4	231.3
Chemicals and medicines	103.3	105.6	108.0	110.0	111.9	114.6	124.7	149.7	136.7
Fuel and lubricants	144.1	128.3	127.0	144.3	167.2	210.6	208.3	243.7	211.0
Electricity	99.9	100.4	100.5	100.0	101.3	104.6	107.6	111.3	120.8
Maintenance									
Plant and equipment	112.0	115.2	118.4	121.4	124.6	128.6	132.5	137.0	141.3
Structures	109.3	112.5	115.7	119.1	122.7	126.4	130.1	134.6	138.8
Total	111.1	114.3	117.5	120.6	123.9	127.9	131.6	136.1	140.4
Contracts	114.4	117.7	120.9	123.8	126.8	130.8	134.6	139.2	143.5
Other materials and services	108.9	112.1	115.5	118.3	121.1	125.0	128.7	133.0	137.3
Total	109.3	113.1	126.0	125.3	128.7	130.9	140.2	171.0	165.3
Labor	110.1	113.3	117.9	121.6	125.7	129.7	133.5	138.0	143.1
Marketing									
Freight outwards	107.0	110.1	113.5	116.3	119.0	120.9	126.4	152.9	136.4
Selling expenses	109.3	112.5	116.0	118.8	121.6	125.5	129.2	133.6	137.7
Total	109.3	112.4	115.9	118.7	121.5	125.4	129.1	143.2	137.1
Overheads									
Interest paid	111.2	104.2	110.7	118.1	120.9	123.8	127.8	142.6	116.7
Rates and taxes	112.4	115.5	119.1	121.9	124.8	128.9	132.7	137.3	141.5
Insurance	109.8	118.6	124.5	128.8	131.9	135.1	139.4	143.5	155.6
Other overheads	108.7	111.9	115.4	118.1	121.0	124.8	128.5	132.8	137.1
Total	111.3	109.9	115.2	120.6	123.5	126.8	130.8	141.8	126.6
Capital items									
Plant and equipment	112.7	116.0	119.2	122.2	125.4	129.5	133.4	137.9	142.2
Structures	108.9	112.0	115.3	118.6	122.2	125.8	129.6	134.0	138.2
Total	111.9	115.2	118.3	121.3	124.4	128.4	132.3	136.8	141.1
Total prices paid	110.1	112.9	121.5	123.0	126.3	129.4	135.8	155.2	149.6
Excluding capital items	109.7	112.4	121.8	123.1	126.5	129.4	136.1	157.4	150.6
Excluding capital and overheads	109.4	113.0	123.3	123.7	127.2	129.9	137.5	161.9	157.7
Excluding seed, fodder and store and breeding stock	111.4	112.1	115.6	119.2	123.6	129.2	133.6	150.2	145.8

Note: ABARE revised the method for calculating these indexes in October 1999. The indexes for the different groups of farm cost items are now calculated on a chained weight basis using Fishers' ideal index with a reference year of 1997-98 = 100.
Source: ABARE.

93 Indicative interest rates for the Australian farm sector

		Major trading banks	
	Australian broadacre farms a	Overdrafts for small businesses b	90 day bank bills
	%	%	%
1970-71	na	na	7.13
1971-72	na	na	5.97
1972-73	na	na	5.09
1973-74	na	na	11.33
1974-75	na	na	10.54
1975-76	na	10.45	8.55
1976-77	na	10.45	9.76
1977-78	9.20	10.45	10.25
1978-79	8.88	10.15	9.54
1979-80	9.24	10.11	11.02
1980-81	10.09	11.46	13.42
1981-82	11.48	13.68	16.83
1982-83	11.35	14.14	14.28
1983-84	12.02	13.78	11.87
1984-85	12.48	14.08	13.22
1985-86	15.45	17.29	16.76
1986-87	15.56	18.32	15.87
1987-88	13.86	15.11	11.90
1988-89	14.28	17.68	15.55
1989-90	16.67	20.34	16.94
1990-91	14.12	16.17	12.29
1991-92	12.02	12.83	8.15
1992-93	9.67	10.48	5.64
1993-94	9.29	9.59	4.87
1994-95	9.67	10.70	7.19
1995-96	10.43	11.43	7.51
1996-97	9.20	10.49	6.31
1997-98	8.30	8.84	4.99
1998-99	7.80	7.82	4.90
1999-00	8.00	8.23	5.60
2000-01	8.70	9.05	5.80
2001-02	7.91	7.91	4.58
2002-03	7.56	8.20	4.83
2003-04	8.01	8.51	5.28
2004-05	8.29	8.78	5.54
2005-06	na	8.99	5.68
2006-07	na	9.60	6.33
2007-08	na	10.59	7.31
2008-09	na	10.05	4.74

a Estimated average rate paid by all broadacre farms on all farm business debt for the year ended 30 June. **b** Refers to the midpoint of a range of rates which apply to the lowest risk borrowers for a range of banks. In practice many borrowers pay an additional risk margin. **na** Not available.
Sources: Reserve Bank of Australia; ABARE.

94 Rural indebtedness to financial institutions

	Rural debt						Deposits
	All banks a	Other government agencies b	Pastoral and other finance companies	Large finance institutional debt	Other farm debt c	Total rural debt	Farm management deposits
	$m	$m	$m	$m	$m	$m	$m
1980-81	3 161	801	325	4 287	na	na	na
1981-82	3 418	842	384	4 644	na	na	na
1982-83	3 980	1 049	385	5 414	na	na	na
1983-84	4 284	1 139	495	5 918	na	na	na
1984-85	5 254	1 230	601	7 085	na	na	na
1985-86	5 976	1 220	739	7 935	na	na	na
1986-87	5 705	1 515	1 345	8 566	na	na	na
1987-88	6 023	1 664	1 195	8 883	1 250	10 133	na
1988-89	7 430	1 803	1 503	10 735	1 350	12 085	na
1989-90	8 514	1 910	1 523	11 946	1 410	13 356	na
1990-91	8 666	1 877	1 205	11 748	1 436	13 184	na
1991-92	9 158	1 856	1 379	12 393	1 460	13 853	na
1992-93	10 049	1 879	1 041	12 969	1 580	14 549	na
1993-94	13 722	1 909	1 150	16 781	1 631	18 412	na
1994-95	14 485	1 872	1 368	17 725	1 690	19 415	na
1995-96	16 351	735	1 720	18 805	1 792	20 597	na
1996-97	17 466	698	2 065	20 228	1 760	21 988	na
1997-98	18 566	609	1 979	21 154	1 810	22 964	na
1998-99	20 085	661	1 093	21 840	1 852	23 692	229
1999-00	23 240	663	2 527	26 430	1 901	28 331	590
2000-01	25 174	701	2 639	28 514	1 920	30 434	1 033
2001-02	26 829	711	2 691	30 231	1 967	32 198	2 074
2002-03	28 957	867	1 628	31 452	2 017	33 469	2 480
2003-04	34 115	891	3 379	38 385	2 067	40 452	2 619
2004-05	39 261	977	3 112	43 350	na	na	2 792
2005-06	43 546	1 073	3 454	48 073	na	na	2 797
2006-07	47 188	1 286	4 592	53 066	na	na	2 782
2007-08	53 743	1 409	5 126	60 278	na	na	2 879
2008-09	56 159	1 620	4 462	62 242	na	na	2 843

a Derived from all banks lending to agriculture, fishing and forestry. **b** Includes the government agency business of state banks and advances made under War Service Land Settlement. Before 1996, includes loans from the Queensland Industry Development Corporation. From 1996, these loans are included in bank lending. **c** Includes loans from life insurance companies, lease agreements and indebtedness to hire purchase companies, trade creditors, private lenders and small financial institutions. **na** Not available.

Sources: Reserve Bank of Australia, *Estimated Rural Debt to Specified Lenders,* Bulletin Statistical Table D9; Department of Agriculture, Fisheries and Forestry; ABARE.

95 Australian tractors sales, by type

	By power segment, by volume a				By power segment, by value			
	Under 30 kW	30–90 kW	Over 90 kW	Total	Under 30 kW	30–90 kW	Over 90 kW	Total
	no.	no.	no.	no.	$m	$m	$m	$m
1992-93	1 290	3 633	965	5 888	21	198	117	336
1993-94	1 200	4 235	1 152	6 587	21	208	148	378
1994-95	1 050	4 806	1 335	7 191	19	249	177	444
1995-96	1 017	4 652	1 982	7 651	19	257	276	553
1996-97	1 131	4 666	2 736	8 533	21	276	402	699
1997-98	1 057	4 657	2 896	8 610	21	283	443	747
1998-99	1 119	4 993	2 361	8 473	25	337	420	782
1999-00	1 185	4 753	2 107	8 045	29	289	335	653
2000-01	1 151	3 997	1 431	6 579	28	273	263	565
2001-02	1 119	5 284	1 784	8 187	31	397	352	779
2002-03	1 326	5 634	2 025	8 985	30	379	388	797
2003-04	1 965	5 980	2 655	10 600	41	434	516	991
2004-05	2 357	6 979	3 068	12 404	48	499	612	1 159
2005-06	2 724	7 275	2 547	12 546	54	509	498	1 061
2006-07	2 635	6 109	1 542	10 286	54	393	294	741
2007-08	3 095	6 924	1 831	11 850	65	448	355	868
2008-09	3 546	7 318	2 288	13 152	76	475	467	1 018
2006 quarter								
March	743	1 617	764	3 124	14	114	154	283
June	653	1 982	737	3 372	13	138	144	295
September	618	1 603	414	2 635	13	104	76	192
December	676	1 479	286	2 441	13	95	54	163
2007 quarter								
March	687	1 430	400	2 517	14	90	80	184
June	654	1 597	442	2 693	14	104	84	202
September	586	1 433	309	2 328	13	92	57	162
December	945	1 968	371	3 284	19	128	69	217
2008 quarter								
March	808	1 541	510	2 859	17	100	106	223
June	756	1 982	641	3 379	16	127	122	266
September	749	1 721	402	2 872	16	109	73	198
December	873	1 557	452	2 882	18	98	84	201
2009 quarter								
March	888	1 533	558	2 979	18	98	117	233
June	1 036	2 507	876	4 419	23	171	194	387
September	784	1 454	487	2 725	18	103	105	226

a Tractor power ratings refer to power takeoff, power in kilowatts. **na** Not available.

Source: Tractor and Machinery Association of Australia, Melbourne.

96 Value of Australian trade in selected farm machinery

	Imports a				Exports			
	Tractors	Tillage machinery	Harvesting/ haymaking machinery	Seeding machinery	Tractors	Tillage machinery	Harvesting/ haymaking machinery	Seeding machinery
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
1971-72	22 081	541	1 859	196	513	2 120	4 696	256
1972-73	36 711	466	4 346	289	662	2 550	8 260	1 030
1973-74	41 606	1 008	9 495	572	411	3 016	9 453	1 111
1974-75	84 148	2 787	21 815	674	790	6 975	15 628	2 247
1975-76	116 290	3 215	21 164	665	2 440	5 889	12 080	626
1976-77	149 663	8 275	38 867	1 177	946	3 314	16 954	747
1977-78	110 697	8 338	46 932	1 744	1 165	4 775	8 888	2 293
1978-79	111 518	7 991	37 021	1 759	2 064	2 178	10 431	873
1979-80	169 008	10 472	62 964	2 316	3 742	2 578	12 268	1 481
1980-81	198 398	11 206	83 650	3 847	8 053	3 733	24 308	9 009
1981-82	260 771	14 252	89 061	3 362	6 638	6 224	12 897	4 002
1982-83	149 386	8 558	52 568	2 529	7 852	2 157	11 357	2 036
1983-84	174 936	10 585	109 281	3 516	4 804	1 935	4 764	2 236
1984-85	241 827	16 372	119 629	4 074	2 201	1 215	6 635	2 578
1985-86	198 476	9 822	68 493	3 555	7 352	1 268	13 745	5 945
1986-87	58 178	4 333	22 588	1 969	5 255	767	8 660	1 333
1987-88	124 132	7 528	39 628	4 189	2 892	1 214	18 183	609
1988-89	7 843	13 269	76 583	5 567	1 151	1 614	8 573	417
1989-90	7 697	22 090	96 195	5 913	1 576	1 133	12 311	889
1990-91	46 739	11 881	64 362	4 045	2 329	2 536	7 313	335
1991-92	91 061	8 631	43 394	4 002	3 320	3 726	11 599	1 013
1992-93	178 920	13 291	72 578	5 011	3 472	2 232	18 095	1 198
1993-94	245 154	15 220	118 227	6 835	2 666	2 952	32 368	856
1994-95	312 964	17 534	142 110	10 342	3 151	1 764	33 324	1 547
1995-96	366 038	25 448	170 307	14 505	2 419	2 933	43 725	1 529
1996-97	454 201	29 511	253 428	22 501	3 404	2 787	33 585	1 961
1997-98	512 157	30 278	243 655	30 525	2 975	1 446	34 408	1 412
1998-99	515 845	30 345	241 217	24 967	2 165	2 520	31 776	1 104
1999-00	416 136	30 127	229 839	24 214	2 348	2 820	30 533	673
2000-01	376 921	20 521	228 927	19 085	4 054	5 230	23 965	1 388
2001-02	477 563	25 789	161 079	29 197	5 720	3 386	45 404	1 214
2002-03	504 775	24 851	225 770	31 722	4 001	1 048	27 105	2 498
2003-04	596 319	31 176	249 504	33 546	2 983	1 302	21 703	1 426
2004-05	664 085	31 042	278 636	39 942	16 212	1 114	6 236	1 458
2005-06	567 629	26 697	236 230	28 691	13 117	1 814	4 495	610
2006-07	420 186	29 316	191 301	21 320	11 842	2 737	3 637	1 634
2007-08	466 924	30 258	164 554	33 465	17 619	5 269	4 126	797
2008-09	682 536	44 957	330 216	67 377	14 069	8 334	5 537	2 277

a Fob at the port of origin.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

97 Australian fertiliser prices, by type a

	Single superphosphate b	Diammonium phosphate b	Ammonium sulphate c	Potassium chloride c	Urea c	Index of prices paid for fertiliser d
	$/t	$/t	$/t	$/t	$/t	
1970	na	na	na	na	na	9.4
1971	16.18	na	40.41	69.10	79.24	11.6
1972	16.87	na	40.09	69.32	80.62	11.6
1973	16.99	na	40.79	68.80	81.44	11.6
1974	19.20	113.00	61.00	83.80	87.20	13.7
1975	54.60	na	103.00	103.40	120.60	30.8
1976	55.60	215.40	105.00	128.60	140.60	27.3
1977	53.16	135.00	91.80	109.45	153.95	28.0
1978	59.04	na	104.32	111.89	175.21	29.4
1979	56.76	247.80	112.06	117.54	185.16	32.1
1980	70.74	296.60	128.71	145.14	245.64	39.0
1981	83.40	337.60	149.14	176.42	274.23	46.5
1982	92.84	337.60	156.53	187.02	269.18	51.3
1983	101.42	334.00	155.64	180.50	261.11	52.6
1984	105.11	322.95	175.92	206.60	286.30	56.0
1985	118.46	342.17	218.19	267.29	321.50	62.2
1986	131.00	378.00	209.00	271.00	280.00	68.3
1987	128.00	339.00	211.00	279.00	276.00	67.0
1988	132.70	379.00	212.20	294.15	303.00	68.3
1989	155.40	396.00	229.40	328.70	339.70	76.9
1990	165.80	364.70	259.50	341.00	324.00	82.4
1991	177.10	389.00	276.00	361.80	390.00	85.0
1992	180.00	385.20	289.60	368.70	380.70	90.3
1993	173.00	368.80	293.10	367.50	389.70	88.7
1994	174.50	343.80	298.40	373.50	382.90	87.1
1995	179.10	417.30	319.20	372.30	455.90	89.6
1996	184.20	449.30	325.90	369.20	479.60	98.2
1997	179.17	460.25	317.88	362.75	434.80	99.2
1998	196.50	497.83	343.00	409.17	380.60	100.0
1999	197.00	487.83	339.25	437.50	333.80	102.7
2000	197.80	441.50	361.00	474.75	371.60	99.8
2001	209.83	475.25	377.25	511.25	443.60	106.4
2002	222.92	455.37	404.00	405.56	376.26	104.3
2003	233.92	448.06	399.00	412.50	363.33	106.9
2004	222.79	458.58	344.00	387.00	377.33	102.8
2005	220.40	468.90	340.57	428.83	441.73	108.8
2006	227.80	532.13	376.80	441.70	471.47	111.6
2007	241.11	649.67	385.22	472.38	512.44	121.4
2008	446.08	1 379.16	610.72	883.26	851.68	220.4
2009	493.88	1 281.31	652.37	1 112.28	845.31	231.3

a Average price paid by Australian farmers at 30 June. **b** Bulk price. **c** Bagged price from 1970 to 2001; Bulk price from 2002 onwards. **d** Based on a four quarter average for the year ending 30 June. **na** Not available.

Sources: Department of Primary Industry, *Chemical Fertilisers in Australia,* AGPS, Canberra; The Land, *Farm Costs Guide;* Farm Weekly, *Budget Guide;* Stock Journal, *Farm Budget Guide;* Other unpublished sources; ABARE.

98 World fertiliser indicator prices

	Phosphate rock a	Sulphur b	Diam-monium phosphate c	Triple super-phosphate c	Ammonia d	Urea d	Potash e
	A$/t	A$/t	A$/t	A$/t	A$/t	A$/t	A$/t
1994-95	49.7	75.2	270.0	216.3	335.0	258.6	152.6
1995-96	49.9	63.2	300.7	229.5	262.6	273.4	149.0
1996-97	46.8	41.8	264.9	246.3	278.1	239.4	144.3
1997-98	53.9	44.8	302.2	279.7	233.0	190.3	166.2
1998-99	75.1	40.9	326.2	296.3	192.9	168.4	179.9
1999-00	74.8	64.1	268.4	242.8	226.6	190.1	178.9
2000-01	87.4	56.5	310.6	283.2	429.5	310.7	209.2
2001-02	89.8	46.5	298.8	262.4	286.2	216.5	214.9
2002-03	80.7	80.4	312.4	277.9	357.3	253.5	193.2
2003-04	66.5	101.8	305.4	260.0	397.0	268.9	159.1
2004-05	62.6	96.0	337.8	274.5	417.4	343.9	192.4
2005-06	63.1	103.1	388.4	297.5	504.7	351.1	218.1
2006-07	60.0	68.6	438.0	na	415.5	375.5	243.1
2007-08	na	184.1	870.4	na	514.3	480.4	294.4
2008-09	303.5	210.6	1015.8	na	626.1	582.5	802.2
2004 quarter							
March	61.5	94.2	311.7	260.4	428.0	256.6	147.3
June	65.9	101.0	328.2	267.9	373.5	268.9	157.8
September	66.4	101.7	347.4	271.9	420.3	325.8	174.6
December	62.2	95.4	345.0	278.6	437.9	347.2	199.1
2005 quarter							
March	60.5	92.7	325.6	270.2	376.2	327.9	196.4
June	61.3	93.8	332.1	276.3	433.9	373.5	198.8
September	62.0	99.6	376.7	296.5	432.5	357.8	201.1
December	63.3	104.0	394.1	300.6	565.4	363.7	218.8
2006 quarter							
March	63.8	104.9	392.1	302.7	532.6	351.4	227.5
June	63.1	103.7	390.8	290.2	488.5	331.4	225.0
September	62.2	79.0	384.5	292.4	369.1	316.7	243.6
December	61.2	66.4	367.5	na	399.1	337.2	250.7
2007 quarter							
March	59.9	54.8	427.2	na	474.5	433.1	245.3
June	56.7	74.1	571.5	na	417.9	413.9	232.0
September	na	122.1	566.3	na	351.7	393.9	227.5
December	na	174.1	595.9	na	381.9	462.6	227.5
2008 quarter							
March	na	440.2	914.1	na	643.4	467.4	251.4
June	na	na	1405.4	na	680.3	597.6	471.1
September	318.3	842.5	1486.9	na	862.6	900.8	613.3
December	445.1	na	1493.9	na	944.7	597.7	810.0
2009 quarter							
March	450.6	60.1	620.3	na	284.2	454.5	888.5
June	na	52.6	462.1	na	412.8	377.1	896.9
September	na	39.0	399.7	na	266.9	354.9	655.4

a US Gulf 68 BPL for the period to June 30 1998. Data after June 1998 refer to Jordan 70-74 BPL. **b** Vancouver spot. **c** Fob US Gulf. **d** Fob Middle East for the period to 30 June 1993 when data from this source became unavailable. Data after 30 June 1993 refer to fob US Gulf. **e** Vancouver standard muriate. **na** Not available.

Source: Derived from data in Pike and Fischer, *Green Markets,* Maryland, United States.

99 Australian fertiliser consumption, by element

	Phosphate (P_2O_5)	Nitrogen (N)	Potash (K_2O)
	kt	kt	kt
1989-90	790.5	440.3	162.6
1990-91	578.9	439.4	145.4
1991-92	680.2	462.3	142.1
1992-93	782.3	488.2	147.4
1993-94	770.0	565.4	176.1
1994-95	922.7	583.2	219.6
1995-96	965.3	671.3	230.8
1996-97	985.3	824.6	206.0
1997-98	1 090.1	839.4	254.6
1998-99	1 039.0	979.0	232.0
1999-00	1 055.0	1 082.0	216.0
2000-01	1 107.0	951.0	217.0
2001-02	1 108.0	1 049.9	225.4
2002-03	1 077.4	972.3	215.6
2003-04	1 078.2	918.6	214.2
2004-05	1 157.9	1 114.3	317.8
2005-06	1 139.2	954.4	273.3
2006-07	840.8	841.9	220.8
2007-08	820.3	793.9	209.1
2008-09	na	na	na

na Not available.

Sources: FAO, *World Fertilisers Year Book,* Rome; FAO, *FAOSTAT - ResourceSTAT Database* , Rome; International Fertilizer Industry Association; ABARE.

100 Volume of Australian imports of fertiliser, by element

	Phosphate (P_2O_5)	Nitrogen (N)	Potash (K_2O)
	kt	kt	kt
1989-90	305.0	257.2	173.0
1990-91	306.0	270.1	147.2
1991-92	331.6	257.2	145.4
1992-93	464.1	308.6	153.7
1993-94	447.3	392.2	179.1
1994-95	516.0	406.8	219.6
1995-96	604.1	469.3	218.6
1996-97	644.5	597.7	196.9
1997-98	713.7	654.7	258.9
1998-99	696.5	695.1	213.0
1999-00	667.7	842.1	211.9
2000-01	661.0	699.5	220.8
2001-02	633.6	767.1	256.2
2002-03	568.1	709.8	240.7
2003-04	589.5	704.1	215.1
2004-05	630.9	869.7	318.2
2005-06	696.8	739.4	273.9
2006-07	348.0	614.2	221.3
2007-08	420.3	590.6	210.6
2008-09	na	na	na

na Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; FAO, *World Fertilisers Year Book,* Rome; FAO, *FAOSTAT - ResourceSTAT Database* , Rome; ABARE.

101 Volume of Australian imports of raw materials for fertiliser production, by source

	Sulphur			Phosphate rock					
	Canada	Other	Christmas Island	China	Morocco	Nauru	Togo	Other	Total
	kt	kt	kt	kt	kt	kt	kt	kt	kt
1971-72	212	65	503	na	0	na	na	na	1 654
1972-73	396	10	684	na	0	na	na	na	2 282
1973-74	381	23	955	na	0	na	na	na	3 104
1974-75	502	78	1 002	na	0	na	na	na	2 639
1975-76	180	26	503	na	0	na	na	na	1 461
1976-77	381	26	567	na	0	na	na	na	1 319
1977-78	470	26	487	na	0	na	na	na	1 610
1978-79	337	99	543	na	0	na	na	na	1 756
1979-80	627	60	674	na	0	na	na	na	1 936
1980-81	552	4	624	na	0	na	na	na	2 232
1981-82	459	0	780	na	25	na	na	na	2 360
1982-83	371	21	699	na	0	na	na	na	2 111
1983-84	470	0	456	na	25	na	na	na	1 688
1984-85	420	1	533	na	111	na	na	na	1 762
1985-86	458	0	506	na	103	na	na	na	1 921
1986-87	329	1	370	na	66	na	na	na	1 459
1987-88	462	11	240	na	256	na	na	na	1 808
1988-89	506	13	0	0	310	1 203	162	562	2 237
1989-90	382	13	0	0	236	768	171	256	1 430
1990-91	108	9	0	0	93	224	25	134	476
1991-92	38	6	0	0	0	257	0	218	474
1992-93	79	20	0	0	62	355	31	401	849
1993-94	71	0	13	0	144	203	33	383	776
1994-95	122	22	22	0	182	178	177	508	1 067
1995-96	114	31	47	32	136	191	0	505	911
1996-97	113	32	66	50	104	167	0	519	906
1997-98	126	5	126	79	238	153	0	464	1 060
1998-99	231	94	146	44	273	88	0	332	884
1999-00	11	7	50	107	151	106	0	342	756
2000-01	7	46	0	293	145	119	0	266	823
2001-02	12	4	0	266	94	27	243	303	933
2002-03	36	21	0	200	48	16	244	202	711
2003-04	1	24	44	179	198	0	253	49	723
2004-05	32	24	38	210	381	0	163	5	797
2005-06	27	6	101	86	405	0	48	15	655
2006-07	32	6	61	23	343	27	0	18	472
2007-08	202	4	52	55	438	112	0	49	707
2008-09	75	3	60	15	284	86	0	95	540

na Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Primary Industry, *Chemical Fertilisers in Australia,* AGPS, Canberra.

102 Volume of Australian trade in manufactured fertiliser, by type

	Imports						Exports	
	Triple superphosphate	Diammonium phosphate	Monammonium phosphate	Other ammonium	Urea	Potassic fertiliser	Nitrogen fertiliser	Ammonium phosphates
	kt	kt	kt	kt	kt	kt	kt	kt
1970-71	3.1	0.0	0.0	15.1	na	na	0.8	0.0
1971-72	2.4	0.0	0.0	27.3	na	na	7.8	0.0
1972-73	2.0	0.0	0.0	9.3	1.3	na	21.4	0.0
1973-74	1.8	0.0	0.0	4.1	0.1	na	37.9	0.0
1974-75	0.3	0.0	0.0	6.5	4.3	na	7.3	0.0
1975-76	0.1	0.0	0.0	0.3	4.7	na	47.9	0.0
1976-77	20.7	0.0	0.0	6.3	17.9	na	1.2	0.0
1977-78	10.1	0.0	0.0	9.4	10.2	na	7.2	0.0
1978-79	66.3	0.2	0.0	8.9	16.7	na	8.2	0.0
1979-80	0.0	2.2	0.0	30.7	41.2	na	24.2	0.0
1980-81	0.0	51.2	9.0	38.7	40.2	na	22.9	0.0
1981-82	0.0	50.5	8.9	62.7	43.2	na	18.5	0.0
1982-83	25.2	183.6	32.4	22.7	76.6	na	21.2	0.0
1983-84	35.1	257.5	45.9	14.7	64.0	na	4.5	0.0
1984-85	55.4	306.6	54.4	46.3	138.2	na	34.6	0.0
1985-86	48.1	229.4	40.2	41.7	144.2	na	6.2	0.0
1986-87	76.4	201.8	38.2	80.3	177.2	na	10.3	0.0
1987-88	88.4	124.7	15.3	98.9	212.0	na	16.1	0.1
1988-89	97.3	250.3	103.1	113.1	255.1	299.4	46.5	0.1
1989-90	114.3	320.3	164.2	78.6	361.7	289.7	48.3	0.1
1990-91	157.8	347.3	141.1	42.9	388.8	247.4	96.6	0.1
1991-92	264.4	355.0	206.2	90.2	364.5	244.4	61.0	0.8
1992-93	249.9	482.7	250.0	116.8	367.2	258.4	50.9	0.2
1993-94	204.2	501.2	237.5	133.7	526.5	301.0	76.7	0.4
1994-95	306.8	548.5	232.6	124.9	554.3	367.8	66.9	0.4
1995-96	269.3	715.4	291.5	154.0	594.9	366.0	40.1	0.3
1996-97	335.5	706.0	317.3	197.3	850.7	329.3	33.1	0.1
1997-98	351.8	757.1	391.6	118.1	953.3	435.0	44.2	0.2
1998-99	284.9	771.7	413.6	78.5	1 038.2	357.1	68.9	0.6
1999-00	240.4	570.2	580.0	74.9	1 399.8	353.3	75.3	23.0
2000-01	224.1	447.4	647.4	22.6	1 139.5	346.0	117.2	283.7
2001-02	280.2	271.0	659.2	75.5	1 295.8	416.9	101.4	180.2
2002-03	188.1	237.2	691.3	72.0	1 072.8	432.6	172.8	255.9
2003-04	163.5	211.6	740.5	62.1	1 156.6	447.0	135.7	264.6
2004-05	231.8	286.7	926.3	180.2	1 288.6	496.7	205.5	313.5
2005-06	310.3	202.5	528.2	144.4	1 056.1	403.7	186.6	312.3
2006-07	165.6	83.0	443.1	107.9	794.6	306.1	269.4	154.9
2007-08	106.8	312.8	582.5	113.5	1 032.5	465.0	310.8	237.0
2008-09	107.3	214.0	455.3	228.1	884.8	331.2	398.6	480.8

na Not available.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Department of Primary Industry, *Chemical Fertilisers in Australia*, AGPS, Canberra.

103 Volume of Australian fertiliser imports, by state

	Triple superphosphate	Diammonium phosphate	Monammonium phosphate	Ammonium fertilisers		Urea	Potassic fertiliser	Phosphate rock
				Sulphate	Nitrate			
	kt	kt	kt	kt	kt	kt	kt	kt
New South Wales								
2003-04	14.2	18.8	115.2	4.4	20.2	107.5	8.9	163.9
2004-05	15.9	26.9	129.1	0.4	36.5	108.2	20.2	94.0
2005-06	23.0	22.4	64.9	0.6	17.3	60.5	16.2	60.0
2006-07	37.4	0.3	46.3	0.9	25.4	68.0	14.6	44.4
2007-08	15.7	25.1	55.9	1.0	18.5	78.4	12.0	97.1
2008-09	3.1	23.5	33.3	1.3	35.5	66.9	9.4	67.1
Victoria								
2003-04	56.5	47.5	228.6	1.0	1.7	356.6	120.9	319.7
2004-05	65.2	93.5	331.4	1.5	1.2	365.6	103.2	404.2
2005-06	185.8	64.2	145.1	1.7	0.9	393.9	140.3	310.3
2006-07	63.4	13.1	113.6	2.5	0.6	242.0	85.2	257.8
2007-08	36.5	124.6	192.1	3.6	6.1	364.8	151.9	367.1
2008-09	39.0	48.7	144.3	6.5	5.4	247.4	76.6	283.2
Queensland								
2003-04	4.0	0.0	63.2	1.3	21.8	168.1	83.7	1.2
2004-05	13.8	0.0	66.8	1.3	94.3	273.8	98.8	2.2
2005-06	3.2	0.0	34.4	4.2	94.7	146.7	72.2	1.6
2006-07	6.7	0.1	11.4	2.4	54.9	152.3	81.9	2.2
2007-08	4.6	0.1	24.0	3.4	33.6	167.9	105.0	1.8
2008-09	0.0	1.2	8.2	3.1	79.4	163.9	67.7	2.2
Western Australia								
2003-04	75.3	74.4	288.2	1.1	7.0	351.7	175.5	158.4
2004-05	119.2	97.4	310.2	1.0	38.7	371.2	210.9	138.1
2005-06	71.3	96.9	267.2	1.4	18.0	304.8	96.1	176.8
2006-07	55.5	55.4	243.3	1.6	15.6	211.9	46.7	124.3
2007-08	46.5	87.5	273.0	0.9	33.5	299.9	145.8	145.9
2008-09	59.9	81.1	236.2	65.7	24.5	305.2	151.9	110.5
South Australia								
2003-04	7.3	70.9	45.4	0.6	3.1	150.8	11.2	0.0
2004-05	4.8	68.9	88.8	0.8	4.6	148.8	15.9	0.1
2005-06	22.3	19.0	16.7	0.9	4.7	124.3	16.5	0.0
2006-07	2.5	14.1	28.5	1.2	2.7	91.8	11.7	0.0
2007-08	0.1	75.5	37.6	1.5	11.4	84.8	17.1	0.2
2008-09	5.3	59.5	33.2	2.1	3.8	84.9	8.6	0.0
Tasmania								
2003-04	6.2	0.0	0.0	0.0	0.0	21.9	22.4	79.8
2004-05	13.0	0.0	0.0	0.0	0.0	21.0	24.8	158.4
2005-06	4.7	0.0	0.0	0.0	0.0	26.0	26.8	106.1
2006-07	0.0	0.0	0.0	0.0	0.1	28.5	19.4	43.5
2007-08	3.4	0.0	0.0	0.0	0.1	36.7	31.7	94.7
2008-09	0.0	0.0	0.0	0.0	0.9	16.5	15.7	76.6
Australia								
2003-04	163.5	211.6	740.5	8.3	53.8	1 156.6	447.0	723.1
2004-05	231.8	286.7	926.3	4.9	175.3	1 288.6	496.7	797.0
2005-06	310.3	202.5	528.2	8.8	135.6	1 056.1	403.7	654.7
2006-07	165.6	83.0	443.1	8.6	99.3	794.6	306.1	472.2
2007-08	106.8	312.8	582.5	10.4	103.1	1 032.5	465.0	706.6
2008-09	107.3	214.0	455.3	78.7	149.4	884.8	331.2	539.7

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

104 Value of Australian fertiliser imports, by state [a]

	Triple superphosphate	Diammonium phosphate	Monammonium phosphate	Ammonium fertilisers		Urea	Potassic fertiliser	Phosphate rock
				Sulphate	Nitrate			
	$m	$m	$m	$m	$m	$m	$m	$m
New South Wales								
2003-04	3.36	5.45	30.47	0.81	4.79	24.29	2.15	10.00
2004-05	3.89	8.33	39.88	0.10	12.31	30.61	4.64	5.76
2005-06	5.45	8.07	22.95	0.13	5.88	19.28	4.57	5.16
2006-07	13.99	0.21	20.11	0.19	8.80	22.18	4.31	3.43
2007-08	9.25	23.11	48.52	0.19	6.25	35.70	4.79	9.61
2008-09	1.61	13.38	18.71	0.51	28.80	37.56	10.29	24.88
Victoria								
2003-04	8.19	13.89	64.43	0.18	0.34	79.22	25.93	16.68
2004-05	10.50	28.20	100.59	0.36	0.32	107.50	21.44	23.07
2005-06	31.31	23.17	53.52	0.40	0.25	124.54	39.24	19.74
2006-07	24.73	4.45	51.00	0.51	0.19	79.26	21.97	17.69
2007-08	21.86	101.35	164.40	1.08	2.05	152.21	51.74	39.78
2008-09	17.79	27.56	79.37	2.22	3.03	145.51	66.62	98.29
Queensland								
2003-04	0.89	0.02	17.23	0.21	5.18	36.97	18.12	0.19
2004-05	2.81	0.02	20.51	0.24	33.32	78.73	21.34	0.33
2005-06	0.90	0.00	11.54	0.89	37.51	46.94	17.91	0.28
2006-07	1.75	0.06	4.92	0.50	17.97	48.92	21.86	0.40
2007-08	1.97	0.05	17.86	0.99	11.89	58.26	34.41	0.35
2008-09	0.00	0.73	7.45	1.35	62.21	108.88	62.94	1.14
Western Australia								
2003-04	16.33	20.18	80.51	0.15	1.74	76.95	33.05	9.62
2004-05	28.55	29.83	96.95	0.20	14.65	116.89	42.05	10.02
2005-06	15.04	35.62	95.35	0.30	6.01	99.26	25.39	10.78
2006-07	12.40	21.67	92.58	0.37	4.92	77.48	13.90	7.17
2007-08	25.48	74.24	191.37	0.22	12.48	150.93	56.01	18.25
2008-09	50.40	63.79	211.70	23.95	15.31	145.20	190.82	41.75
South Australia								
2003-04	1.42	20.82	13.16	0.11	0.65	34.28	2.61	0.00
2004-05	1.26	20.95	27.85	0.16	1.11	44.98	4.21	0.02
2005-06	4.79	7.04	6.27	0.19	1.42	40.13	4.88	0.00
2006-07	0.65	5.49	12.95	0.22	0.92	33.28	3.35	0.00
2007-08	0.05	61.78	31.91	0.46	3.38	39.00	6.56	0.06
2008-09	2.01	34.90	19.76	0.61	1.96	42.66	8.15	0.01
Tasmania								
2003-04	1.83	0.00	0.00	0.00	0.01	4.97	4.34	4.17
2004-05	2.62	0.00	0.00	0.00	0.00	6.42	5.33	9.37
2005-06	1.33	0.00	0.00	0.00	0.00	8.42	7.35	6.14
2006-07	0.00	0.00	0.00	0.01	0.03	9.34	5.35	3.07
2007-08	4.34	0.00	0.00	0.00	0.03	13.74	10.69	11.63
2008-09	0.00	0.00	0.00	0.00	0.53	12.04	14.89	26.57
Australia								
2003-04	32.02	60.36	205.80	1.47	12.72	256.68	86.20	40.65
2004-05	49.63	87.32	285.78	1.05	61.71	385.13	99.01	48.56
2005-06	58.83	73.89	189.64	1.90	51.08	338.57	99.34	42.11
2006-07	53.53	31.88	181.56	1.80	32.83	270.46	70.73	31.76
2007-08	62.93	260.54	454.07	2.94	36.08	449.83	164.21	79.67
2008-09	71.81	140.37	336.99	28.63	111.83	491.85	353.72	192.65

a Fob at the port of origin.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0. Canberra.

105 Volume of Australian fertiliser imports, by quarter

	Triple superphosphate	Diammonium phosphate	Monammonium phosphate	Ammonium fertilisers		Urea	Potassic fertiliser	Phosphate rock
				Sulphate	Nitrate			
	kt	kt	kt	kt	kt	kt	kt	kt
2002 quarter								
March	124.7	138.1	257.7	0.4	13.9	243.1	140.1	193.3
June	70.8	102.9	218.3	9.2	19.8	646.8	107.9	207.1
September	62.4	4.9	60.4	9.0	23.1	159.9	119.6	283.7
December	6.1	21.6	123.9	2.6	13.8	114.0	47.6	160.7
2003 quarter								
March	94.3	127.9	308.3	3.6	19.3	336.0	169.6	144.5
June	25.2	82.8	198.7	13.2	14.5	462.8	95.8	122.4
September	27.9	5.6	70.8	0.7	7.6	163.7	77.7	164.7
December	15.5	12.5	177.8	0.7	27.0	214.7	48.7	225.3
2004 quarter								
March	71.6	126.7	295.4	1.3	7.1	246.6	141.7	119.1
June	48.4	67.0	196.6	5.7	12.0	531.6	178.9	214.0
September	60.1	25.2	95.0	0.7	22.9	299.2	92.8	120.0
December	68.4	51.9	189.5	1.0	50.1	157.2	92.5	242.2
2005 quarter								
March	62.4	120.6	345.1	1.6	60.0	296.8	138.2	193.2
June	40.9	89.1	296.7	1.6	42.2	535.4	173.2	241.7
September	19.3	16.3	118.0	3.9	40.7	211.4	114.1	146.8
December	127.1	33.0	95.3	0.9	29.3	106.8	70.5	239.5
2006 quarter								
March	112.8	96.8	217.0	2.2	46.6	290.9	110.2	70.9
June	51.1	56.4	98.0	1.8	19.0	447.0	108.8	197.6
September	5.8	0.0	50.2	2.2	21.8	234.5	78.0	123.1
December	2.9	0.2	11.4	1.0	24.7	75.8	88.9	145.7
2007 quarter								
March	50.0	54.2	238.7	2.3	18.8	85.5	65.2	55.4
June	107.0	28.6	142.8	3.2	34.0	398.7	74.0	148.0
September	0.0	6.2	20.9	2.5	30.2	304.9	116.4	92.9
December	15.4	67.4	122.2	1.7	17.7	121.8	89.8	278.8
2008 quarter								
March	31.4	106.5	242.2	2.5	29.4	207.1	124.3	108.9
June	59.9	132.7	197.2	3.7	25.8	398.8	134.5	226.1
September	22.0	24.2	28.8	33.2	28.8	304.3	134.4	322.8
December	21.3	6.9	72.4	22.0	77.6	73.9	168.2	188.8
2009 quarter								
March	42.7	63.6	175.2	3.1	23.6	163.4	16.7	0.6
June	21.3	119.3	179.0	20.4	19.3	343.2	11.9	27.5
September	0.3	2.5	35.5	2.5	44.2	179.3	38.6	0.4

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

106 Value of Australian fertiliser imports, by quarter [a]

	Triple superphosphate	Diammonium phosphate	Monammonium phosphate	Ammonium fertilisers		Urea	Potassic fertiliser	Phosphate rock
				Sulphate	Nitrate			
	$m	$m	$m	$m	$m	$m	$m	$m
2002 quarter								
March	26.4	40.7	75.4	0.1	4.0	51.4	37.3	14.5
June	14.2	30.6	62.6	2.1	6.1	126.6	30.9	15.5
September	14.3	1.5	18.3	1.9	6.6	32.3	31.4	20.3
December	1.4	6.8	35.5	0.5	4.0	25.0	13.0	12.4
2003 quarter								
March	19.9	35.1	83.4	0.9	5.1	79.6	41.6	10.0
June	6.3	25.2	59.2	3.0	3.7	108.3	21.8	7.5
September	6.6	1.6	18.5	0.1	1.7	36.0	18.7	10.1
December	4.0	3.1	45.5	0.1	6.3	51.5	10.7	13.5
2004 quarter								
March	12.4	35.9	83.8	0.2	1.7	55.2	29.2	5.7
June	9.0	19.7	58.0	1.0	3.0	114.0	35.0	11.3
September	16.4	7.8	30.4	0.2	7.0	79.3	22.3	7.9
December	12.6	15.6	60.5	0.2	17.1	49.7	19.6	14.8
2005 quarter								
March	11.4	37.0	106.3	0.4	21.1	85.9	28.3	11.2
June	9.3	26.9	88.6	0.3	16.5	170.2	36.0	14.7
September	3.3	6.6	40.7	0.8	14.6	66.0	30.3	8.7
December	24.3	12.0	33.9	0.2	11.8	35.2	19.7	16.1
2006 quarter								
March	20.0	35.0	80.1	0.5	18.3	89.3	33.0	3.9
June	11.2	20.4	34.9	0.4	6.4	148.0	28.8	13.5
September	1.5	0.0	18.7	0.5	7.9	68.0	22.4	8.1
December	0.8	0.2	4.4	0.2	8.6	21.3	24.8	8.4
2007 quarter								
March	10.9	19.0	89.1	0.5	6.0	31.1	17.2	4.3
June	40.3	12.7	69.4	0.6	10.4	150.0	21.0	11.0
September	0.0	2.9	9.0	0.5	9.5	103.0	30.8	6.9
December	6.2	36.2	60.1	0.5	5.9	43.6	26.1	22.6
2008 quarter								
March	16.0	82.7	165.2	0.6	10.7	86.5	47.3	8.4
June	40.7	138.7	219.7	1.4	10.0	216.8	60.8	41.7
September	23.5	31.0	39.6	12.1	16.1	236.8	131.8	91.8
December	18.9	7.3	93.3	10.3	66.2	59.7	190.6	94.8
2009 quarter								
March	19.6	35.9	106.6	1.3	19.6	63.3	20.0	0.3
June	9.8	66.2	97.5	4.9	9.9	131.9	12.7	5.7
September	0.1	1.4	16.2	0.7	26.4	59.6	29.8	0.2

a Fob at the port of origin.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

107 Australian sales and prices of chemicals, by product type

	Herbicides ab	Fungicides/ plant growth regulants ab	Insecticides ab	Animal health products a	Index of prices paid for chemicals c
	$'000	$'000	$'000	$'000	
1975	25 594	8 237	13 424	na	34.3
1976	35 518	10 337	13 627	na	40.1
1977	46 402	10 950	21 202	na	43.6
1978	54 362	12 090	25 317	61 462	44.7
1979	77 349	14 175	28 753	na	49.9
1980	94 301	17 551	34 986	88 552	58.0
1981	108 837	20 167	37 046	92 022	61.0
1982	109 722	19 744	37 957	91 810	62.7
1983	159 888	28 829	42 905	118 443	66.2
1984	192 830	29 536	53 906	137 878	70.3
1985	207 226	30 165	52 659	155 542	76.7
1986	216 820	34 845	60 233	171 839	84.3
1987	284 445	43 332	86 861	188 546	89.4
1988	366 727	46 622	104 395	284 375	89.4
1989	402 573	60 614	93 075	283 240	91.2
1990	398 336	57 856	115 108	267 017	93.2
1991	354 058	55 013	118 383	211 000	96.4
1992	463 104	87 699	120 688	247 823	97.5
1993	501 051	97 286	130 808	266 334	98.0
1994	421 457	79 710	130 823	259 940	97.2
1995	503 700	86 400	189 300	271 500	97.9
1996	600 500	101 300	251 600	285 000	98.1
1997	713 601	123 698	268 380	302 000	99.0
1998	833 987	138 570	328 270	431 033	100.0
1999	895 868	149 892	361 409	476 960	100.4
2000	883 677	155 525	326 686	511 580	101.6
2001	812 503	162 729	352 702	540 162	103.3
2002	694 164	135 525	194 317	551 726	105.6
2003	916 272	161 830	300 576	597 882	108.0
2004	996 719	170 107	374 194	607 748	110.0
2005	908 519	185 120	321 139	620 744	111.9
2006	960 751	179 536	326 735	674 521	114.6
2007	915 018	133 016	261 791	707 383	124.7
2008	1 411 357	145 991	246 888	739 973	149.7

a For the years to 1995, data is based on sales at the factory gate. These figures do not include sales from non-AVCARE members but are likely to represent about 90 per cent of actual total sales. For the years from 2005, data are on a financial basis. **b** For the years after 1997, figures refer to total Australian sales as recorded by the APVMA. **c** Based on ABS benchmark data. **s** ABARE estimate. **na** Not available.

Sources: Australian Pesticides and Veterinary Medicines Australia (APVMA); AVCARE; National Registration Authority (NRA); ABARE.

108 Australian farm fuel prices

	Petrol			Index of prices
	Lead replacement a	Unleaded b	Off-road diesel c	paid for fuel d
	c/L	c/L	c/L	
1970-71	8.70	na	4.39	11.5
1971-72	9.24	na	4.65	11.5
1972-73	9.32	na	4.66	11.5
1973-74	10.31	na	4.74	12.4
1974-75	11.68	na	5.97	15.1
1975-76	13.53	na	7.86	19.5
1976-77	15.73	na	9.02	22.2
1977-78	17.68	na	11.21	25.7
1978-79	20.87	na	14.92	32.8
1979-80	26.77	na	22.22	46.1
1980-81	31.87	na	27.78	57.6
1981-82	36.00	na	29.64	63.0
1982-83	43.81	na	33.22	72.7
1983-84	48.57	na	34.00	78.9
1984-85	49.15	na	36.13	84.2
1985-86	54.32	54.32	33.91	86.9
1986-87	55.11	55.11	30.83	86.0
1987-88	57.19	57.19	31.49	88.7
1988-89	56.24	56.24	27.17	80.4
1989-90	65.41	65.41	30.89	91.6
1990-91	74.44	74.44	36.39	106.0
1991-92	72.54	72.54	33.14	99.6
1992-93	74.53	74.53	35.10	104.1
1993-94	74.72	74.22	32.47	100.5
1994-95	78.42	76.42	38.44	96.6
1995-96	79.83	77.83	38.50	100.4
1996-97	81.89	79.89	40.60	104.9
1997-98	82.19	76.22	36.71	100.0
1998-99	80.44	73.60	32.39	104.1
1999-00	94.11	85.13	41.21	148.6
2000-01	91.15	88.54	53.36	144.1
2001-02	84.64	81.34	46.80	128.3
2002-03	86.33	85.25	43.33	127.0
2003-04	99.58	86.16	55.01	144.3
2004-05	na	96.43	63.73	167.2
2005-06	na	115.35	82.89	210.6
2006-07	na	115.88	81.22	208.3
2007-08	na	127.56	98.46	243.7
2008-09	na	111.91	84.58	211.0

a Leaded petrol phased out as at 1 Jan 2002. Lead replacement petrol (LRP) introduced as at 1 Jan 2002. **b** Petrol price paid at the pump, excludes GST, however includes farm rebates and subsidies. **c** Average diesel price paid by Australian farmers, excludes GST, however includes farm rebates and subsidies. **d** Base: 1997-98 = 100. **na** Not available.

Sources: Fueltrac Pty Ltd; Ampol; Australian Taxation Office; Caltex Australia; Shell Australia; Other unpublished sources; ABARE.

109 Persons employed in agriculture, forestry and fisheries a

	1993-94 '000	1994-95 '000	1995-96 '000	1996-97 '000	1997-98 '000	1998-99 '000	1999-00 '000	2000-01 '000
Agriculture								
Grains, sheep and beef cattle	na	200.8	201.5	203.5	202.5	198.8	211.0	207.5
Horticulture and fruit	na	81.3	96.8	91.5	95.5	96.5	103.0	96.0
Other crops	na	13.3	13.0	13.8	16.0	15.5	15.0	12.0
Dairy cattle	na	34.5	30.3	40.0	38.3	32.5	34.5	29.0
Poultry	na	10.0	11.5	10.0	9.3	8.3	9.0	8.5
Other livestock	na	17.5	16.5	16.0	16.5	14.3	12.5	9.3
Agriculture – other	na	na	na	na	na	na	na	10.3
Total	na	400.8	415.8	418.3	428.3	418.0	436.5	431.5
Services to agriculture **b**	20.1	19.4	18.6	22.2	25.5	27.5	28.1	28.3
Forestry and logging	8.4	9.2	8.5	8.1	10.4	10.4	6.5	10.0
Commercial fishing	14.3	15.7	19.2	13.6	14.1	14.4	16.2	19.9
Total	406.1	400.9	416.1	418.9	428.2	418.1	436.0	431.6

	2001-02 '000	2002-03 '000	2003-04 '000	2004-05 '000	2005-06 '000	2006-07 '000	2007-08 '000	2008-09 '000
Agriculture								
Grains, sheep and beef cattle	212.8	163.8	162.0	130.0	136.8	132.8	144.0	151.3
Horticulture and fruit	100.8	95.5	96.5	84.8	84.5	84.3	72.8	61.0
Other crops	13.0	10.0	8.3	12.5	7.3	11.0	12.3	14.0
Dairy cattle	30.5	25.3	19.5	21.3	22.5	20.3	23.3	28.8
Poultry	9.3	11.0	9.8	9.3	9.0	8.3	6.5	9.3
Other livestock	12.3	12.0	9.8	10.3	10.8	10.0	9.5	14.0
Agriculture – other	5.0	4.5	10.3	39.3	29.8	39.3	33.0	39.3
Total	437.8	370.5	366.8	357.5	348.0	350.3	352.0	357.8
Services to agriculture **b**	25.2	23.3	25.4	27.4	26.9	26.3	29.7	23.4
Forestry and logging	9.7	7.2	9.0	9.1	8.4	8.1	8.3	7.5
Commercial fishing	19.4	18.0	15.9	13.7	12.4	9.8	13.6	9.2
Total	437.6	370.4	366.8	357.1	348.1	350.4	352.5	357.6

a Average employment over four quarters. Based on ANZSIC 2006. **b** Includes hunting and trapping. **na** Not available.

Source: ABS, *Labour Force, Australia, Detailed - Electronic Delivery,* cat. no. 6291.0.55.001, Canberra; ABS, *Labour Force, Australia, Detailed - Electronic Delivery,* cat. no. 6291.0.55.003, Canberra

110 Australian wages and the consumer price index a

	Contract rates %	Shearing rates b %	Rural wages %	Average weekly earnings %	Consumer price index %
1970-71	na	3.4	4.5	na	4.5
1971-72	– 1.4	2.5	5.6	10.2	6.9
1972-73	1.9	6.8	9.3	9.0	6.1
1973-74	6.3	31.1	20.0	16.2	12.9
1974-75	18.8	43.2	37.3	26.6	16.8
1975-76	14.9	9.6	13.7	15.7	12.9
1976-77	12.4	13.1	13.1	14.7	13.9
1977-78	6.7	9.2	10.8	10.3	9.5
1978-79	9.4	6.2	6.1	8.4	8.2
1979-80	8.4	12.3	7.2	8.5	10.2
1980-81	9.6	9.0	9.1	12.6	9.3
1981-82	9.7	9.6	11.7	12.3	10.5
1982-83	14.9	8.5	10.1	13.1	11.5
1983-84	7.8	3.8	6.2	7.1	6.7
1984-85	6.5	8.4	7.9	5.1	4.3
1985-86	3.8	4.2	4.7	5.9	8.4
1986-87	2.2	1.1	4.7	6.2	9.4
1987-88	3.7	3.4	3.9	6.1	7.3
1988-89	7.0	12.0	7.3	6.8	7.3
1989-90	6.1	5.6	7.4	6.6	8.0
1990-91	6.7	1.4	4.8	5.9	5.3
1991-92	4.1	4.0	4.6	2.9	1.9
1992-93	3.1	1.5	3.6	2.0	1.0
1993-94	3.0	0.1	1.4	2.9	1.8
1994-95	1.9	0.8	1.4	3.4	3.2
1995-96	1.0	2.3	3.1	2.5	4.2
1996-97	1.2	1.5	2.0	3.0	1.3
1997-98	2.5	1.9	2.6	3.2	0.0
1998-99	3.6	5.7	3.6	2.4	1.2
1999-00	2.9	3.7	2.9	2.2	2.4
2000-01	2.9	3.6	3.6	5.4	6.0
2001-02	3.9	1.8	2.4	4.1	2.9
2002-03	3.6	3.4	4.0	4.3	3.1
2003-04	3.4	5.6	3.8	4.7	2.4
2004-05	3.6	4.1	3.9	4.2	2.4
2005-06	3.2	3.4	3.6	5.0	3.2
2006-07	3.1	2.8	2.4	4.6	2.9
2007-08	5.4	4.7	5.4	4.0	3.4
2008-09	3.3	3.3	3.3	3.9	3.1

a Percentage change from previous year. **b** Based on price per 100 flock sheep. **na** Not available.

Sources: ABS, *Average Weekly Earnings, Australia,* cat. no. 6302.0, Canberra (derived from average weekly earnings for all employees series); ABS, *Consumer Price Index,* cat. no. 6401.0, Canberra; Australian Government Workplace Authority, *Pastoral Industry Award 1998, AP792378 - Fed (formerly* AW792378); DEWR, *Agriculture, Forestry and Fishing Industry Sector - Minimum Wage Order - Victoria 1997,* AW767376; ABARE.

111 Summary of Australian fisheries statistics

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09 p
Prawns									
Production **as**	kt	29.5	26.5	27.6	23.7	23.6	20.8	22.4	22.5
Value of production	$m	429.3	364.7	359.8	307.1	304.8	267.4	267.5	278.9
Exports **b**	kt	11.9	9.5	9.4	10.3	8.7	6.4	4.9	4.8
Value of exports	$m	262.8	208.2	160.6	163.1	133.9	93.6	68.6	82.2
Imports **b**	kt	17.6	18.1	24.4	29.9	30.4	33.9	29.8	26.7
Value of imports	$m	221.4	220.2	227.6	257.8	256.3	308.0	250.2	270.7
Rock lobster									
Production **ac**	kt	14.1	16.6	19.3	17.9	16.2	13.5	13.8	12.6
Value of production **c**	$m	499.9	454.9	401.2	414.7	476.8	442.8	406.7	446.1
Exports **b**	kt	10.9	11.5	13.5	12.6	11.9	10.3	9.5	9.6
Value of exports	$m	492.6	463.1	426.8	439.6	489.4	463.4	400.9	461.7
Abalone									
Production **as**	kt	5.9	5.2	5.8	6.0	5.5	5.5	5.3	5.6
Value of production	$m	247.4	216.2	197.9	233.0	225.1	217.0	188.5	186.9
Exports **b**	kt	4.0	4.2	4.9	4.0	3.7	3.9	3.6	3.3
Value of exports	$m	263.1	216.1	237.7	263.1	245.6	246.0	217.2	208.2
Scallops									
Production **a**	kt	5.7	9.6	9.4	15.5	9.0	10.6	10.3	11.0
Value of production	$m	23.3	34.9	25.1	47.0	23.3	29.3	32.7	35.9
Exports **b**	kt	1.5	1.2	1.5	1.2	1.5	1.4	1.1	1.1
Value of exports	$m	34.4	28.7	34.9	32.6	38.8	35.4	27.8	33.3
Tuna									
Production **ads**	kt	15.9	13.4	14.7	11.3	12.7	13.1	14.7	12.2
Value of production **d**	$m	322.9	317.0	279.5	172.4	175.1	161.0	210.1	168.4
Exports **b**	kt	13.9	12.6	12.8	10.9	11.7	11.6	12.6	11.5
Value of exports	$m	325.8	321.0	273.5	165.7	179.4	162.2	206.2	176.8
Imports **b**	kt	25.3	33.9	47.4	37.5	36.5	34.5	38.8	38.0
Value of imports	$m	104.9	123.5	109.8	107.7	141.3	141.7	174.1	223.3
Other fin fish									
Production **as**	kt	140.1	152.0	165.6	172.4	149.4	144.4	145.5	152.4
Value of production	$m	558.4	561.6	567.1	558.8	598.1	688.2	714.9	717.1
Exports **b**	kt	17.5	17.4	13.2	15.0	11.6	11.4	9.8	14.2
Value of exports	$m	176.0	164.2	136.5	138.7	115.3	118.2	118.6	157.2
Imports **b**	kt	82.3	89.8	91.2	93.3	92.7	99.1	98.3	95.5
Value of imports	$m	431.8	467.0	435.1	439.6	460.7	559.4	540.9	601.3
All fisheries products									
Production **s**	kt	240.0	254.1	276.0	279.1	246.2	243.6	235.7	na
Value of production	$m	2 444.5	2 287.5	2 187.6	2 085.6	2 166.4	2 210.8	2 186.8	2 182.6
Edible exports	kt	64.3	60.2	58.5	57.3	52.3	48.0	44.0	46.9
Value of edible exports	$m	1 661.7	1 484.9	1 319.3	1 236.0	1 237.3	1 157.9	1 065.4	1 145.3
Value of non-edible exports	$m	438.5	359.6	332.6	305.7	309.6	336.1	276.3	384.0
Edible imports	kt	146.3	164.7	188.0	186.3	188.5	198.6	198.5	193.5
Value of edible imports	$m	889.2	950.2	904.9	959.3	1 028.5	1 184.4	1 132.2	1 282.7
Value of non-edible imports	$m	310.9	251.6	201.6	212.8	237.3	283.0	265.7	427.1

a Live weight. **b** Product weight. **c** Includes bugs for Queensland. **d** Excludes Commonwealth southern bluefin tuna as an input to South Australian farms.
p Preliminary. **s** Includes estimates of aquaculture. **na** Not available.
Sources: ABARE, *Australian Fisheries Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

112 Quantity and value of Australian production of selected fisheries products

	Unit	Prawns	Rock lobster a	Abalone	Scallops	Oysters	Tuna	Other fin fish	All fisheries products b
Quantity cs									
1987-88	kt	23.0	16.0	na	na	8.0	11.0	94.0	na
1988-89	kt	28.0	18.0	1.6	0.0	8.0	9.0	98.0	169.6
1989-90	kt	23.3	15.7	1.5	0.0	7.5	8.2 d	120.9	184.3
1990-91	kt	29.1	14.7	1.5	0.0	8.1	11.7 e	145.4	217.8
1991-92	kt	24.5	18.5	1.5	0.0	8.2	13.2 e	139.8	214.4
1992-93	kt	25.1	18.4	3.4	33.0	8.6	10.2 e	123.6	236.9
1993-94	kt	23.2	16.8	3.3	23.7	8.7	7.7 e	121.9	223.9
1994-95	kt	28.0	16.4	3.8	15.8	9.4	8.7 e	127.5	232.2
1995-96	kt	29.4	15.7	3.9	15.3	10.1	9.2 e	123.5	228.6
1996-97	kt	27.7	15.8	5.2	8.8	10.1	13.0 e	128.5	224.3
1997-98	kt	29.6	16.6	5.2	10.3	10.7	11.9 e	134.3	233.7
1998-99	kt	31.2	18.6	5.6	7.6	8.7	16.7 e	126.5	232.8
1999-00	kt	26.8	19.9	5.6	12.1	9.7	16.2 e	114.5	222.7
2000-01	kt	30.2	16.5	5.7	9.2	9.6	16.1 e	122.6	231.6
2001-02	kt	29.5	14.1	5.9	5.7	10.2	15.9 e	140.1	240.0
2002-03	kt	26.5	16.6	5.2	9.6	10.5	13.4 e	152.0	254.1
2003-04	kt	27.6	19.3	5.8	9.4	12.7	14.7 e	165.6	276.0
2004-05	kt	23.7	17.9	6.0	15.5	11.8	11.3 e	172.4	279.1
2005-06	kt	23.6	16.2	5.5	9.0	12.1	12.7 e	149.4	246.2
2006-07	kt	20.8	13.5	5.5	10.6	14.4	13.1 e	144.4	243.6
2007-08	kt	22.4	13.8	5.3	10.3	12.5	14.7 e	145.5	235.7
2008-09 p	kt	22.5	12.6	5.6	11.0	13.6	12.2 e	152.4	na
Value s									
1987-88	$m	246.0	252.0	96.0	22.0	36.0	19.0	157.0	na
1988-89	$m	274.0	280.0	86.0	21.0	38.0	19.0	215.0	1 022.3 f
1989-90	$m	226.0	245.0	90.0	25.0	36.0	66.0 d	278.0	1 093.0 f
1990-91	$m	262.9	287.5	92.1	42.3	43.2	66.5 e	269.8	1 223.1 f
1991-92	$m	244.1	369.1	94.6	82.8	44.3	76.2 e	301.3	1 376.2 f
1992-93	$m	291.3	348.8	127.5	94.4	41.2	116.2 e	320.7	1 517.4 f
1993-94	$m	320.6	431.7	178.4	82.1	42.4	107.8 e	322.5	1 719.0 f
1994-95	$m	368.0	452.5	144.7	64.2	47.6	129.8 e	336.8	1 844.7 f
1995-96	$m	368.4	374.6	142.4	66.7	51.5	85.0 e	352.2	1 724.8 f
1996-97	$m	344.3	413.3	152.5	36.7	52.0	96.0 e	378.3	1 731.3 f
1997-98	$m	385.3	377.1	182.1	39.8	47.0	130.8 e	395.6	1 835.7 f
1998-99	$m	416.4	430.5	172.9	37.5	45.2	221.5 e	442.5	2 109.5 f
1999-00	$m	411.0	540.7	220.7	42.6	53.3	256.7 e	477.6	2 367.4 f
2000-01	$m	453.3	477.2	276.4	39.0	55.1	328.8 e	514.1	2 464.5
2001-02	$m	429.3	499.9	247.4	23.3	56.9	322.9 e	558.4	2 444.5
2002-03	$m	364.7	454.9	216.2	34.9	62.1	317.0 e	561.6	2 287.5
2003-04	$m	359.8	401.2	197.9	25.1	77.2	279.5 e	567.1	2 187.6
2004-05	$m	307.1	414.7	233.0	47.0	74.1	172.4 e	558.8	2 085.6
2005-06	$m	304.8	476.8	225.1	23.3	75.3	175.1 e	598.1	2 166.4
2006-07	$m	267.4	442.8	217.0	29.3	91.1	161.0 e	688.2	2 210.8
2007-08	$m	267.5	406.7	188.5	32.7	89.1	210.1 e	714.9	2 186.8
2008-09 p	$m	278.9	446.1	186.9	35.9	99.4	168.4 e	717.1	2 182.6

a Includes bugs for Queensland. **b** Excludes those products for which no quantity data is available, eg live fish, pearls and some non-edible fisheries products. **c** Live weight. **d** Includes an estimate of tuna production from joint venture agreements. **e** Excludes Commonwealth southern bluefin tuna as an input to South Australian farms. **f** Includes pearls and other products. **p** Preliminary. **s** ABARE estimate; the values of production are based on values to fishing operators (ABS estimates of gross value of production include certain marketing costs in some cases). **na** Not available.

Sources: ABARE, *Australian Fisheries Statistics,* Canberra; ABS, *Fisheries, Australia,* cat. no. 7603.0, Canberra; ABARE.

113 Australian exports of prawns, by product type and destination

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity a								
Headless	t	580	307	437	150	118	435	466
Hong Kong, China	t	14	3	14	0	2	35	101
Japan	t	428	179	150	121	94	66	106
United States	t	10	1	3	3	0	0	0
Other	t	86	19	89	2	10	148	165
Whole	t	8 739	8 852	9 623	8 409	6 034	3 869	3 990
China	t	780	1 151	1 540	1 107	1 019	430	608
Chinese Taipei	t	219	184	74	40	54	14	55
Hong Kong, China	t	1 388	925	659	401	413	425	625
Italy	t	52	13	42	382	52	18	0
Japan	t	3 815	3 063	3 466	2 993	2 334	1 702	1 923
Malaysia	t	214	274	75	74	110	15	98
New Zealand	t	237	175	189	151	64	93	81
Spain	t	1 223	1 697	1 972	1 434	877	331	288
Thailand	t	90	124	198	376	145	105	113
United States	t	13	54	29	16	27	7	9
Other	t	888	953	618	345	317	349	321
Other	t	213	237	242	185	225	611	340
Chinese Taipei	t	8	20	21	0	0	12	0
Japan	t	15	9	12	1	14	24	3
Singapore	t	30	25	13	19	4	25	25
United States	t	0	1	1	0	2	1	0
Other	t	149	199	194	78	170	526	245
Total	t	9 532	9 396	10 302	8 744	6 376	4 916	4 797
Value								
Headless	$'000	12 002	5 353	6 639	2 835	2 285	5 803	7 502
Hong Kong, China	$'000	318	34	387	0	55	701	1 172
Japan	$'000	9 613	3 917	3 599	2 490	2 011	1 549	2 790
United States	$'000	298	33	69	57	0	0	2
Other	$'000	1 169	468	1 316	28	142	2 026	2 316
Whole	$'000	192 567	151 488	153 239	128 872	88 740	56 100	70 680
China	$'000	14 914	15 777	19 601	11 905	10 805	4 145	6 400
Chinese Taipei	$'000	5 153	3 997	1 483	828	1 183	249	1 201
Hong Kong, China	$'000	26 874	15 985	9 593	5 758	5 960	5 959	10 197
Italy	$'000	1 074	241	956	7 290	943	179	0
Japan	$'000	105 331	62 751	68 784	57 151	43 293	29 888	43 595
Malaysia	$'000	3 890	3 723	567	676	787	182	1 115
New Zealand	$'000	3 365	2 313	2 305	1 604	863	1 147	1 117
Spain	$'000	17 214	23 069	26 524	18 972	10 233	3 424	2 657
Thailand	$'000	1 102	1 442	2 290	3 817	1 505	1 093	2 019
United States	$'000	327	1 189	679	297	598	86	96
Other	$'000	16 396	15 239	8 066	4 001	4 072	3 847	4 407
Other	$'000	3 676	3 762	3 225	2 216	2 538	6 721	3 998
Chinese Taipei	$'000	169	372	453	0	0	240	0
Japan	$'000	345	181	241	24	142	411	92
Singapore	$'000	556	523	169	274	53	222	261
United States	$'000	0	27	16	3	34	17	0
Other	$'000	2 550	3 116	2 598	822	1 859	5 526	2 762
Total	$'000	208 245	160 603	163 104	133 923	93 563	68 624	82 180

a Product weight.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

114 Australian imports of prawns, by product type and source

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity a								
Fresh, chilled or frozen	t	13 086	18 860	22 590	23 111	26 015	18 730	12 823
China	t	544	3 894	4 034	4 465	8 469	5 486	3 484
Chinese Taipei	t	41	102	92	283	120	46	21
India	t	2 763	2 920	3 096	2 459	2 000	1 084	111
Indonesia	t	1 629	1 617	1 669	1 094	686	197	708
Malaysia	t	395	190	183	159	478	1 619	1 812
Myanmar	t	644	564	528	572	597	267	70
New Caledonia	t	123	104	189	100	74	7	33
Papua New Guinea	t	161	196	59	11	24	11	0
Singapore	t	141	211	101	157	79	3	26
Thailand	t	3 597	4 911	5 741	6 106	5 503	4 694	3 755
Viet Nam	t	2 802	3 898	6 260	6 855	7 229	4 856	2 735
Other	t	381	422	466	457	380	144	55
Canned	t	5 032	5 584	7 247	7 239	7 891	11 087	13 908
Malaysia	t	1 202	1 089	1 244	809	767	644	641
Thailand	t	3 064	3 328	4 035	3 706	3 293	3 633	3 998
Viet Nam	t	167	319	437	591	292	1 964	4 810
Other	t	599	848	1 530	2 133	3 539	4 845	4 459
Other	t	29	5	18	54	1	1	5
China	t	0	0	16	33	0	0	0
Malaysia	t	0	2	0	2	1	1	3
Thailand	t	26	1	0	17	0	0	1
Viet Nam	t	0	0	0	1	0	0	0
Other	t	2	1	2	1	0	0	0
Total	t	18 147	24 448	29 855	30 404	33 906	29 818	26 735
Value								
Fresh, chilled or frozen	$'000	174 484	183 537	201 187	200 925	246 372	166 630	134 959
China	$'000	5 704	28 476	26 497	29 417	62 120	36 737	34 461
Chinese Taipei	$'000	714	1 297	1 054	2 884	1 395	351	246
India	$'000	39 759	34 872	32 149	25 451	24 420	12 208	1 479
Indonesia	$'000	17 501	13 423	10 820	8 508	5 675	1 841	8 328
Malaysia	$'000	3 889	1 783	1 826	1 761	4 548	17 535	20 557
Myanmar	$'000	6 451	4 867	4 599	4 816	5 730	2 670	792
New Caledonia	$'000	2 044	1 571	2 370	1 256	874	88	489
Papua New Guinea	$'000	1 357	1 307	406	73	138	65	0
Singapore	$'000	1 608	2 083	1 063	1 474	944	23	325
Thailand	$'000	47 027	44 250	45 556	45 968	48 228	38 613	35 503
Viet Nam	$'000	45 441	47 333	69 650	72 307	85 791	52 951	31 736
Other	$'000	4 047	3 368	3 780	3 940	3 383	1 218	851
Canned	$'000	45 386	44 020	56 491	54 961	61 663	83 530	135 715
Malaysia	$'000	10 082	8 072	8 215	5 216	5 386	4 778	4 878
Thailand	$'000	29 341	27 035	34 433	30 858	26 789	26 783	39 512
Vietnam	$'000	1 558	2 726	3 854	5 072	2 925	19 033	51 994
Other	$'000	4 404	6 187	9 989	13 815	26 563	32 936	39 332
Other	$'000	365	38	116	425	14	16	52
China	$'000	1	4	92	210	3	5	6
Malaysia	$'000	3	12	1	9	6	6	22
Thailand	$'000	334	12	0	200	3	3	18
Viet Nam	$'000	0	6	0	2	0	0	0
Other	$'000	28	4	24	4	3	3	6
Total	$'000	220 236	227 595	257 794	256 311	308 049	250 176	270 726

a Product weight.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

115 Australian exports of rock lobster, by product type and destination

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity a								
Tails b	t	1 698	2 062	1 849	1 612	1 458	1 034	816
Chinese Taipei	t	32	0	9	0	0	1	5
Hong Kong, China	t	16	10	18	12	14	16	5
Japan	t	57	141	38	42	38	26	39
United States	t	1 476	1 757	1 748	1 467	1 383	954	722
Other	t	118	153	36	91	24	36	46
Whole c	t	9 468	10 889	10 184	9 914	8 328	8 101	8 353
Chinese Taipei	t	1 557	1 369	1 194	824	816	1 072	1 083
Hong Kong, China	t	3 603	4 750	4 323	5 449	5 163	5 134	5 904
Japan	t	2 940	2 477	2 096	1 785	1 194	1 234	928
Singapore	t	283	306	214	162	190	209	137
United States	t	53	60	57	43	27	45	34
Other	t	1 032	1 927	2 300	1 650	938	407	267
Other	t	368	501	603	412	465	362	392
France	t	20	12	66	17	11	12	21
Hong Kong, China	t	8	18	8	30	28	32	24
Japan	t	296	414	395	284	345	249	260
United States	t	18	47	48	22	0	7	1
Other	t	26	10	87	59	81	63	85
Total	t	11 535	13 453	12 636	11 938	10 252	9 496	9 561
Value								
Tails b	$'000	112 922	102 506	100 572	97 335	101 500	63 378	52 646
Chinese Taipei	$'000	1 244	0	233	0	0	90	282
Hong Kong, China	$'000	809	475	594	593	862	933	269
Japan	$'000	3 101	5 894	2 031	2 303	2 034	1 411	1 941
United States	$'000	102 178	90 023	96 050	88 585	96 760	58 580	47 349
Other	$'000	5 590	6 114	1 665	5 854	1 844	2 363	2 806
Whole c	$'000	343 797	318 499	329 612	387 448	357 126	333 332	405 095
Chinese Taipei	$'000	51 730	35 547	36 919	29 842	30 112	32 304	33 669
Hong Kong, China	$'000	144 334	156 743	147 902	227 490	234 098	231 654	320 006
Japan	$'000	102 735	68 392	65 147	66 251	48 661	44 394	34 900
Singapore	$'000	10 448	7 620	6 293	5 697	7 313	6 908	4 731
United States	$'000	1 868	2 240	2 210	1 684	1 065	2 116	1 267
Other	$'000	32 681	47 957	71 141	56 484	35 877	15 956	10 521
Other	$'000	6 388	5 829	9 391	4 568	4 739	4 153	3 960
France	$'000	221	450	1 775	775	551	570	863
Hong Kong, China	$'000	279	285	67	271	244	93	82
Japan	$'000	4 164	3 173	3 611	1 248	1 398	2 257	1 396
United States	$'000	762	1 645	1 497	531	0	205	54
Other	$'000	962	275	2 442	1 743	2 546	1 029	1 565
Total	$'000	463 106	426 833	439 575	489 351	463 365	400 864	461 701

a Product weight. **b** Fresh, chilled or frozen. **c** Live, fresh or chilled, frozen or cooked.
Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

116 Australian imports of rock lobster, by source

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity a								
Cuba	t	27	0	31	64	174	81	55
Malaysia	t	25	41	14	17	17	23	22
New Zealand	t	6	6	1	0	1	0	0
Papua New Guinea	t	73	89	79	79	86	99	73
Thailand	t	194	151	118	215	155	175	69
United States	t	82	0	17	0	39	23	14
Viet Nam	t	19	3	3	3	10	138	53
Other	t	57	155	207	190	152	254	142
Total	t	484	444	469	568	634	792	429
Value								
Cuba	$'000	723	0	576	1 273	3 952	2 112	1 595
Malaysia	$'000	303	437	134	185	149	251	270
New Zealand	$'000	192	199	32	1	39	0	12
Papua New Guinea	$'000	3 373	2 151	2 816	2 590	3 727	4 205	2 829
Thailand	$'000	2 826	2 043	1 514	3 197	2 285	2 349	1 132
United States	$'000	2 364	0	359	0	913	594	319
Viet Nam	$'000	327	58	35	41	127	712	985
Other	$'000	953	2 201	2 666	2 962	2 027	3 896	2 066
Total	$'000	11 060	7 088	8 132	10 249	13 218	14 120	9 208

a Product weight.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

117 Australian exports and imports of abalone, by product type and country

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Exports								
Quantity a								
Fresh, chilled or frozen	t	1 701	2 119	2 032	2 133	2 241	2 148	2 139
China	t	30	20	296	609	271	111	210
Chinese Taipei	t	159	137	85	63	44	34	31
Hong Kong, China	t	1 129	1 551	1 229	1 019	1 492	1 545	1 604
Japan	t	351	377	394	404	391	381	258
United States	t	7	8	5	6	10	15	10
Other	t	24	26	23	31	33	63	25
Prepared or preserved	t	2 493	2 791	1 972	1 532	1 670	1 432	1 181
Chinese Taipei	t	207	428	227	153	134	66	43
Hong Kong, China	t	901	1 222	949	609	883	732	593
Japan	t	584	596	402	404	229	183	127
Singapore	t	326	344	311	249	324	339	321
United States	t	118	91	31	37	39	41	27
Other	t	356	110	52	80	61	70	70
Total	t	4 193	4 910	4 004	3 665	3 911	3 580	3 320
Value								
Fresh, chilled or frozen	$'000	109 277	117 482	123 856	131 533	139 041	124 187	118 896
China	$'000	3 141	1 532	16 033	34 493	14 255	5 736	10 512
Chinese Taipei	$'000	8 536	6 088	4 096	3 153	2 301	1 483	1 457
Hong Kong, China	$'000	71 567	87 086	76 529	66 780	94 240	89 809	88 393
Japan	$'000	22 574	19 985	24 250	23 766	24 057	21 978	15 278
United States	$'000	708	746	502	617	1 019	1 482	959
Other	$'000	2 751	2 045	2 447	2 724	3 169	3 700	2 298
Prepared or preserved	$'000	106 838	120 198	139 294	114 094	106 987	93 031	89 289
Chinese Taipei	$'000	8 403	16 366	12 806	10 553	7 836	3 971	3 252
Hong Kong, China	$'000	29 309	53 210	70 010	46 392	54 819	49 462	47 224
Japan	$'000	29 629	25 309	27 462	29 876	16 546	12 096	8 683
Singapore	$'000	20 088	16 744	22 475	18 768	20 861	20 309	22 610
United States	$'000	3 231	3 391	2 381	3 056	3 174	2 608	2 072
Other	$'000	16 177	5 178	4 160	5 449	3 750	4 585	5 448
Total	$'000	216 115	237 680	263 150	245 627	246 028	217 218	208 185
Imports								
Quantity								
Live, fresh or chilled	t	0	0	0	0	0	0	0
New Zealand	t	0	0	0	0	0	0	0
Other	t	0	0	0	0	0	0	0
Frozen or preserved	t	10	10	6	14	15	7	17
Japan	t	0	3	0	0	0	0	0
New Zealand	t	0	0	0	0	0	0	4
Philippines	t	1	0	0	2	0	0	0
Other	t	8	8	6	12	15	7	13
Total	t	10	10	6	14	15	7	17
Value								
Live, fresh or chilled	$'000	0	0	0	0	0	0	0
New Zealand	$'000	0	0	0	0	0	0	0
Other	$'000	0	0	0	0	0	0	0
Frozen or preserved	$'000	540	475	149	252	508	120	867
Japan	$'000	1	316	0	0	0	4	0
New Zealand	$'000	6	0	3	0	0	9	257
Philippines	$'000	50	0	0	9	0	0	0
Other	$'000	482	160	146	244	508	108	610
Total	$'000	540	475	149	252	508	120	867

a Product weight.

Source: ABS. *International Trade.* Australia. cat. no. 5465.0. Canberra.

118 Australian exports and imports of scallops, by product type and country

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Exports									
Quantity a									
Fresh, chilled or frozen	t	1 403	1 130	1 460	1 208	1 484	1 401	1 127	1 137
China	t	1	0	0	0	28	24	26	26
France	t	0	0	0	156	305	187	0	0
Hong Kong, China	t	971	769	1 096	727	764	799	736	730
Malaysia	t	103	72	54	33	61	47	86	70
Singapore	t	305	246	249	181	260	274	254	284
United States	t	0	2	1	1	1	0	0	0
Other	t	23	43	58	110	65	69	25	26
Other	t	85	35	4	0	0	0	0	0
Hong Kong, China	t	84	35	3	0	0	0	0	0
Other	t	1	0	1	0	0	0	0	0
Total	t	1 488	1 165	1 464	1 209	1 485	1 401	1 128	1 137
Value									
Fresh, chilled or frozen	$'000	31 639	26 639	34 789	32 560	38 748	35 414	27 809	33 252
China	$'000	11	5	0	0	769	445	611	627
France	$'000	0	0	0	2 704	6 462	4 551	0	0
Hong Kong, China	$'000	21 270	18 732	26 109	21 971	21 241	21 042	18 461	21 796
Malaysia	$'000	2 471	1 611	1 287	949	1 563	1 130	1 909	1 927
Singapore	$'000	7 389	5 392	5 715	5 232	7 314	7 278	6 225	8 360
United States	$'000	0	63	74	38	19	11	11	10
Other	$'000	498	836	1 603	1 666	1 380	956	591	533
Other	$'000	2 794	2 048	126	6	25	3	29	1
Hong Kong, China	$'000	2 782	2 036	93	5	24	0	0	0
Other	$'000	12	11	34	0	1	3	29	1
Total	$'000	34 433	28 686	34 916	32 566	38 773	35 417	27 838	33 254
Imports									
Quantity									
Fresh, chilled or frozen									
China	t	454	654	928	1 398	1 355	1 583	1 114	1 071
Indonesia	t	39	18	14	8	19	194	5	7
Japan	t	664	937	664	391	523	337	720	649
New Zealand	t	29	13	1	1	1	1	1	28
Peru	t	0	12	37	0	6	7	30	47
Thailand	t	360	338	408	310	257	365	293	197
Viet Nam	t	48	7	7	20	43	32	14	29
Other	t	89	65	53	29	87	243	144	133
Total	t	1 617	2 024	2 104	2 297	2 421	2 665	2 460	2 170
Value									
Fresh, chilled or frozen									
China	$'000	6 137	6 618	8 823	15 250	16 201	16 442	11 195	13 447
Indonesia	$'000	424	144	100	41	145	943	9	59
Japan	$'000	9 058	12 033	7 557	6 027	7 780	4 795	9 766	10 103
New Zealand	$'000	566	267	20	7	5	26	28	550
Peru	$'000	0	140	316	1	41	37	263	386
Thailand	$'000	4 863	4 114	4 547	3 490	2 860	4 695	2 796	2 258
Viet Nam	$'000	564	64	49	144	401	366	141	302
Other	$'000	1 397	935	441	324	980	1 639	2 252	2 286
Total	$'000	22 219	24 241	22 027	27 458	30 756	29 814	28 081	29 889

a Product weight.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

119 Australian exports of fish, by product type and destination a

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity b								
Live fish	t	na	na	na	na	na	na	na
Whole	t	24 096	20 434	20 406	18 534	18 489	18 413	21 829
China	t	2 101	1 369	1 734	672	743	640	1 339
Chinese Taipei	t	93	77	35	9	255	242	1 084
Germany	t	20	246	101	41	96	77	99
Japan	t	14 215	13 508	11 162	11 134	9 471	12 246	11 472
Saudi Arabia	t	120	119	134	75	37	0	0
Singapore	t	175	98	257	99	118	133	764
Thailand	t	1 087	826	2 077	1 635	1 866	826	1 268
United States	t	1 612	1 217	1 009	964	959	629	891
Other	t	4 672	2 974	3 896	3 906	4 944	3 620	4 913
Fillets	t	3 237	2 779	2 537	2 023	1 757	1 016	497
Japan	t	266	219	194	155	463	32	5
Thailand	t	1	127	140	1	31	8	1
United States	t	1 194	768	775	402	161	18	151
Other	t	1 776	1 666	1 427	1 466	1 102	957	340
Smoked, dried or salted	t	222	187	164	135	229	176	190
Canned	t	714	834	1 234	1 204	1 291	1 972	2 400
Other	t	1 783	1 736	1 591	1 364	1 184	838	790
Chinese Taipei	t	106	164	139	105	58	56	71
Japan	t	115	624	380	86	89	115	94
New Zealand	t	76	37	74	129	179	32	47
Other	t	1 486	911	998	1 043	859	634	578
Total	t	30 052	25 970	25 931	23 260	22 949	22 414	25 707
Value								
Live fish	$'000	46 991	39 316	34 946	40 078	40 825	42 827	46 483
Whole	$'000	376 677	311 085	209 555	208 048	194 718	238 924	246 880
China	$'000	3 675	3 549	4 378	1 498	1 871	1 885	5 956
Chinese Taipei	$'000	1 459	816	305	156	1 446	1 217	7 161
Germany	$'000	166	1 320	600	354	879	832	1 264
Japan	$'000	331 251	277 718	172 045	178 452	156 577	207 564	185 032
Saudi Arabia	$'000	124	122	139	78	45	0	2
Singapore	$'000	1 562	776	1 253	728	1 165	1 677	4 198
Thailand	$'000	3 331	2 130	4 729	3 725	4 819	2 459	4 006
United States	$'000	19 320	13 537	10 794	10 268	9 046	5 919	9 531
Other	$'000	15 790	11 117	15 311	12 789	18 869	17 370	29 728
Fillets	$'000	24 455	17 007	18 612	14 637	12 814	5 695	4 820
Japan	$'000	1 689	1 222	1 318	878	4 495	317	125
Thailand	$'000	10	239	268	7	418	165	24
United States	$'000	15 411	8 541	11 306	6 121	2 083	182	1 984
Other	$'000	7 346	7 005	5 720	7 631	5 818	5 031	2 687
Smoked, dried or salted	$'000	18 608	19 471	20 047	13 687	15 305	16 641	17 211
Canned	$'000	5 031	6 354	6 587	6 797	6 300	12 560	9 785
Other	$'000	13 439	16 748	14 627	11 515	10 435	8 149	8 812
Chinese Taipei	$'000	2 694	3 496	4 167	2 743	1 417	903	1 365
Japan	$'000	2 950	6 701	4 971	2 611	2 826	2 557	3 663
New Zealand	$'000	275	308	372	766	745	267	387
Other	$'000	7 519	6 243	5 117	5 395	5 448	4 421	3 396
Total	$'000	485 201	409 980	304 375	294 762	280 398	324 795	333 992

a Excludes tuna. **b** Product weight. **na** Not available.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

120 Australian imports of fish, by product type and source

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity a								
Live	t	na	na	na	na	na	na	na
Fresh, chilled or frozen	t	60 090	64 475	59 847	59 724	59 772	61 914	57 292
Whole	t	23 408	24 846	21 368	18 157	16 614	17 905	15 823
New Zealand	t	11 586	13 429	9 563	8 543	9 132	10 457	10 505
Fillets	t	36 682	39 630	38 479	41 567	43 157	44 009	41 468
Chile	t	1 984	1 880	1 192	835	241	111	443
New Zealand	t	12 325	10 819	8 444	8 628	9 811	10 252	9 688
South Africa	t	5 256	5 144	3 989	2 625	3 023	2 446	2 444
Uganda	t	1 674	1 691	803	621	778	289	146
Smoked, dried or salted	t	2 801	2 811	2 957	3 074	4 219	3 755	3 690
South Africa	t	1 039	668	823	846	1 130	960	774
Denmark	t	581	895	936	923	1 170	920	1 124
Thailand	t	59	62	29	21	56	56	62
Canned	t	47 398	58 804	53 443	52 687	52 156	53 557	54 132
Canada	t	3 534	3 833	3 784	4 206	3 204	2 213	1 840
Thailand	t	30 142	44 266	38 872	36 952	36 373	39 326	40 442
United States	t	5 385	5 055	5 037	4 687	6 151	5 070	5 872
Other fish preparations	t	13 453	12 474	14 508	13 721	17 497	17 852	18 445
Japan	t	253	280	348	222	130	166	214
New Zealand	t	5 001	3 583	3 598	3 229	5 592	4 615	5 030
Thailand	t	3 915	3 746	5 462	4 524	4 818	5 630	5 697
Total	t	123 742	138 564	130 756	129 207	133 644	137 079	133 558
Value								
Live	$'000	6	19	5	1	4	0	0
Fresh, chilled or frozen	$'000	283 171	273 671	262 302	272 718	316 572	325 012	336 897
Whole	$'000	77 118	78 122	72 742	71 421	81 424	90 255	90 700
New Zealand	$'000	44 080	47 703	43 948	45 441	54 512	63 021	65 332
Fillets	$'000	206 054	195 548	189 560	201 297	235 148	234 758	246 197
Chile	$'000	6 554	4 925	3 330	2 352	809	247	1 153
New Zealand	$'000	73 970	61 017	51 018	51 052	62 097	66 586	64 321
South Africa	$'000	29 073	27 461	20 983	14 536	17 938	14 644	15 933
Uganda	$'000	10 931	7 337	3 488	3 387	4 606	1 407	843
Smoked, dried or salted	$'000	26 263	30 459	34 053	36 191	53 076	45 056	49 971
South Africa	$'000	4 847	3 238	4 227	4 448	5 766	5 288	4 313
Denmark	$'000	9 828	14 746	16 769	17 003	24 142	17 353	23 039
Thailand	$'000	404	501	196	178	337	317	454
Canned	$'000	218 762	186 148	188 745	228 710	243 766	257 466	331 171
Canada	$'000	23 358	19 911	19 135	23 280	19 206	12 568	11 089
Thailand	$'000	118 569	108 463	111 617	143 119	150 631	177 728	235 443
United States	$'000	27 755	22 146	21 322	21 577	31 946	23 486	40 111
Other fish preparations	$'000	62 352	54 510	62 181	64 451	87 632	87 467	106 578
Japan	$'000	2 359	2 331	3 002	1 860	1 452	1 682	2 712
New Zealand	$'000	22 555	17 690	17 345	15 945	28 780	24 654	30 222
Thailand	$'000	14 689	11 957	15 814	14 352	15 375	17 186	23 510
Total	$'000	590 553	544 806	547 285	602 070	701 050	715 002	824 617

a Product weight. **na** Not available.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

121 Australian exports and imports of oysters, by country

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Exports									
Quantity									
China	t	5	7	0	0	1	3	0	4
Chinese Taipei	t	5	2	0	1	1	0	0	0
Hong Kong, China	t	85	55	81	103	101	178	134	148
Japan	t	22	34	26	58	63	45	29	70
Singapore	t	77	60	6	5	9	4	48	105
Other	t	24	6	5	7	13	19	16	20
Total	t	219	163	119	174	187	249	228	346
Value									
China	$'000	34	90	0	0	12	27	3	37
Chinese Taipei	$'000	45	88	3	8	9	0	0	3
Hong Kong, China	$'000	1 596	541	692	870	784	1 560	1 182	1 480
Japan	$'000	265	542	326	719	777	521	400	824
Singapore	$'000	1 000	428	106	82	86	35	433	775
Other	$'000	561	52	55	66	115	151	115	159
Total	$'000	3 501	1 742	1 182	1 746	1 783	2 294	2 133	3 278
Imports									
Quantity									
China	t	2	47	4	8	1	7	5	19
Hong Kong, China	t	2	3	1	1	2	1	0	1
Japan	t	18	30	41	11	0	0	2	1
Korea, Rep. of	t	18	28	28	15	0	2	0	0
New Zealand	t	580	685	674	872	673	827	717	790
Other	t	0	0	1	3	1	0	1	0
Total	t	621	792	749	910	678	837	726	811
Value									
China	$'000	86	295	105	72	17	87	48	94
Hong Kong, China	$'000	74	90	31	32	65	16	13	52
Japan	$'000	237	364	440	113	1	0	46	27
Korea, Rep. of	$'000	197	243	221	106	1	12	0	1
New Zealand	$'000	4 134	5 933	5 981	6 631	5 710	6 725	7 128	8 675
Other	$'000	13	0	19	21	13	0	35	18
Total	$'000	4 740	6 926	6 797	6 975	5 808	6 841	7 270	8 867

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

122 Summary statistics for the Australian processed food industry

	Employment at 30 June a		Wages and salaries b		Sales and service income c		Industry value added	
	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
	'000	'000	$m	$m	$m	$m	$m	$m
Meat								
Meat processing	31	31	1 141	1 358	11 491	12 221	1 649	1 973
Poultry processing	18	18	825	822	3 897	4 123	1 247	1 132
Bacon, ham and smallgoods	9	10	333	417	2 448	2 593	436	593
Total	57	59	2 299	2 597	17 836	18 937	3 332	3 698
Dairy								
Milk and cream processing	8	7	373	411	3 710	4 350	771	820
Ice cream	1	1	22	40	174	297	52	64
Other dairy products	10	10	626	640	6 107	6 866	1 061	1 076
Total	19	19	1 021	1 091	9 991	11 513	1 884	1 960
Fruit and vegetables	13	14	612	599	4 672	4 325	1 165	1 056
Oil and fat	2	2	102	119	1 547	1 794	238	264
Flour mill and cereal food								
Flour mill products	2	3	121	197	1 418	2 501	282	463
Cereal food and baking mixes	6	4	318	241	2 274	1 565	660	461
Total	8	8	439	438	3 692	4 066	942	924
Bakery products								
Bread	10	12	455	430	1 917	2 189	757	728
Cakes and pastry products	8	9	251	304	1 134	1 288	372	399
Biscuits	5	5	219	227	954	987	419	424
Total	23	65	925	1 657	4 005	4 464	1 548	2 662
Other food								
Sugar	5	5	261	277	2 359	2 811	518	496
Confectionery	10	12	649	743	4 097	4 570	1 494	1 529
Seafood	4	3	125	120	1 330	1 396	224	130
Prepared animal and bird feed	4	na	241	na	2 700	na	481	na
Food nec	20	21	841	1 001	5 854	8 536	1 474	1 737
Total	44	40	2 117	2 141	16 340	17 313	4 191	3 892
Beverage and malt								
Soft drink, cordial and syrup	9	9	444	464	3 804	4 393	1 289	1 526
Beer and malt	4	4	314	261	3 845	3 891	1 544	1 495
Wine	16	18	751	803	5 640	6 297	1 362	1 512
Spirits	na	na	na	na	na	na	na	na
Total d	29	31	1 509	1 528	13 289	14 581	4 195	4 533
Total food and beverages d	193	238	9 024	10 170	71 372	76 993	17 495	18 989

a Includes working proprietors. **b** Excludes drawings of working proprietors. **c** Prevously turnover. **d** Excludes spirits. **na** Not available.
Sources: ABS, *Manufacturing Industry*, cat. no. 8221.0, Canberra; ABS unpublished data, Canberra.

123 Value of Australian food exports, by level of transformation

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m	$m
Minimally transformed								
Live animals except fish	938	1 001	602	594	668	752	761	924
Fish or shellfish	868	773	677	584	657	632	647	747
Horticulture								
Vegetables	218	200	161	155	149	147	137	152
Fruit and nuts	562	533	407	462	482	451	433	563
Total	780	732	568	617	631	598	571	716
Grains a	5 854	3 873	4 655	4 672	4 305	3 329	4 221	6 361
Oilseeds	752	401	550	492	412	167	346	644
Food nec	61	73	46	46	49	54	41	49
Substantially transformed								
Meat								
Meat processing	6 215	5 626	5 723	6 902	6 673	7 048	6 506	7 411
Poultry processing	26	22	20	20	21	26	32	43
Bacon, ham and smallgoods	80	83	84	107	91	43	33	47
Total	6 322	5 730	5 827	7 029	6 785	7 117	6 571	7 501
Seafood	852	753	660	689	606	548	440	417
Dairy								
Milk and cream processing	1 651	1 181	1 076	1 108	1 210	1 089	1 258	1 354
Ice cream	32	29	35	42	41	42	37	31
Other dairy products	1 594	1 286	1 176	1 335	1 318	1 307	1 467	1 293
Total	3 277	2 496	2 288	2 485	2 569	2 438	2 763	2 679
Fruit and vegetables	662	535	518	511	555	574	568	575
Oil and fat	150	146	147	151	150	169	239	303
Flour mill and cereal food								
Flour mill products	233	214	202	223	230	269	315	419
Cereal food and baking mixes	402	261	222	219	248	372	287	390
Total	636	474	424	441	478	642	602	809
Bakery products								
Bread, cakes and pastry products	14	19	18	18	26	27	26	25
Biscuits	93	97	106	114	107	111	118	127
Total	106	116	123	132	132	137	144	152
Other food								
Sugar **a**	1 446	1 238	1 000	1 169	1 645	1 551	1 035	1 218
Confectionery	289	295	271	259	208	215	237	269
Food nec	1 249	1 075	1 129	1 080	1 099	1 142	1 094	1 422
Total	2 984	2 608	2 400	2 509	2 952	2 907	2 366	2 910
Beverages and malt								
Soft drink, cordial and syrup	42	48	53	46	42	39	38	45
Beer and malt	317	324	282	241	218	273	335	447
Wine	2 109	2 428	2 497	2 721	2 768	2 894	2 700	2 493
Spirit	120	106	84	92	91	89	86	105
Total	2 588	2 905	2 915	3 100	3 120	3 294	3 159	3 091
Total food and beverages								
Minimally transformed	9 253	6 852	7 099	7 006	6 722	5 532	6 586	9 441
Substantially transformed	17 237	15 398	14 956	16 706	17 062	17 530	16 528	18 088
Elaborately transformed	340	365	347	341	286	297	324	350
Total	26 829	22 614	22 402	24 053	24 070	23 359	23 439	27 879

a Includes ABARE estimates where ABS confidentiality restrictions apply.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

124 Value of Australian food exports to selected regions

	Asia		European Union 25		NAFTA	
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
	$m	$m	$m	$m	$m	$m
Minimally transformed						
Live animals except fish	412	527	0	0	4	6
Fish or shellfish	621	718	7	11	8	11
Horticulture						
Vegetables	64	82	23	21	1	1
Fruit and nuts	259	389	26	18	60	51
Total	323	471	49	39	61	51
Grains a	2 794	5 751	56	253	1	2
Oilseeds	193	187	100	438	10	5
Food nec	25	30	3	5	2	1
Substantially transformed						
Meat						
Meat processing	3 819	4 169	267	300	1 487	1 818
Poultry processing	12	17	0	0	0	0
Bacon, ham and smallgoods	21	35	0	0	0	0
Total	3 852	4 220	267	300	1 488	1 818
Seafood	320	314	15	16	68	57
Dairy						
Milk and cream processing	925	972	10	5	21	10
Ice cream	19	12	0	0	0	4
Other dairy products	947	876	85	41	112	133
Total	1 891	1 859	95	46	134	148
Fruit and vegetables	215	207	97	92	35	39
Oil and fat	137	169	6	15	10	20
Flour mill and cereal food						
Flour mill products	188	199	1	6	82	163
Cereal food and baking mixes	92	197	7	4	9	8
Total	280	396	8	10	91	171
Bakery products						
Bread, cakes and pastry products	5	5	0	0	0	0
Biscuits	11	14	6	5	7	9
Total	16	19	6	5	7	10
Other food						
Sugar a	887	1 032	6	5	47	72
Confectionery	100	107	8	8	10	12
Food nec	669	932	41	59	45	72
Total	1 656	2 071	55	72	102	157
Beverages and malt						
Soft drink, cordial and syrup	10	15	2	4	1	1
Beer and malt	305	413	0	0	0	0
Wine	274	314	1 268	1 060	1 000	980
Spirit	16	22	15	29	3	4
Total	605	763	1 285	1 092	1 004	984
Total food and beverage						
Minimally transformed	4 369	7 685	216	746	86	76
Substantially transformed	8 896	9 933	1 821	1 637	2 924	3 383
Elaborately transformed	77	86	14	12	16	20
Total	13 341	17 704	2 050	2 395	3 026	3 479

a Includes ABARE estimates where ABS confidentiality restrictions apply.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

125 Value of Australian food imports, by level of transformation

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m	$m
Minimally transformed								
Live animals except fish	1	0	0	1	1	1	1	2
Fish or shellfish	37	41	46	46	47	57	65	67
Horticulture								
Vegetables	24	27	34	32	41	45	53	49
Fruit and nuts	117	115	140	159	191	194	216	225
Total	141	142	173	191	233	238	269	274
Grains	0	65	1	1	1	2	2	2
Oilseeds	21	61	50	25	20	78	49	49
Food nec	86	93	88	116	140	176	188	180
Substantially transformed								
Meat								
Meat processing	206	172	224	345	290	446	381	525
Poultry processing	0	0	0	0	0	0	0	0
Bacon, ham and smallgoods	36	39	40	41	43	42	50	68
Total	242	211	264	387	333	489	431	593
Seafood	865	923	868	928	998	1 151	1 095	1 249
Dairy								
Milk and cream processing	29	34	35	45	45	40	67	69
Ice cream	15	22	22	29	30	40	37	39
Other dairy products	277	275	272	310	357	401	552	522
Total	321	331	330	384	432	480	656	631
Fruit and vegetables	818	921	945	1 027	1 043	1 233	1 390	1 559
Oil and fat	283	365	373	376	417	481	489	578
Flour mill and cereal food								
Flour mill products	22	41	59	73	57	34	66	83
Cereal food and baking mixes	226	236	260	285	305	325	462	576
Total	248	277	319	358	362	358	527	659
Bakery products								
Bread, cakes and pastry products	89	106	117	120	138	163	175	197
Biscuits	106	152	160	177	199	254	267	297
Total	196	257	277	297	337	417	442	493
Other food								
Sugar	16	20	15	18	19	20	22	44
Confectionery	222	245	261	307	333	371	438	518
Food nec	923	1 034	963	1 038	1 075	1 186	1 270	1 492
Total	1 161	1 299	1 240	1 363	1 427	1 577	1 731	2 055
Beverages and malt								
Soft drink, cordial and syrup	421	461	502	537	571	656	697	791
Beer and malt	66	78	91	99	112	126	161	226
Wine	116	139	158	200	248	334	454	502
Spirit	355	331	354	390	414	465	491	530
Total	957	1 010	1 105	1 226	1 345	1 582	1 802	2 050
Total food and beverages								
Minimally transformed	287	403	359	379	441	551	574	574
Substantially transformed	4 919	5 390	5 504	6 119	6 435	7 430	8 167	9 437
Elaborately transformed	172	204	217	228	259	338	396	429
Total	5 378	5 996	6 080	6 725	7 135	8 319	9 138	10 440

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

126 Value of Australian food imports from selected regions

	Asia		European Union 27		NAFTA	
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
	$m	$m	$m	$m	$m	$m
Minimally transformed						
Live animals except fish	0	0	0	0	0	0
Fish or shellfish	2	2	0	0	0	0
Horticulture						
Vegetables	17	19	2	2	12	12
Fruit and nuts	25	28	8	11	90	102
Total	42	48	9	14	102	114
Grains	1	1	0	0	1	0
Oilseeds	22	21	1	1	5	4
Food nec	80	91	3	4	3	5
Substantially transformed						
Meat						
Meat processing	0	0	142	217	223	286
Poultry processing	0	0	0	0	0	0
Bacon, ham and smallgoods	1	2	13	13	18	27
Total	1	2	156	230	242	312
Seafood	739	866	49	53	47	64
Dairy						
Milk and cream processing	5	6	1	2	3	1
Ice cream	10	12	7	9	3	4
Other dairy products	6	7	128	165	64	29
Total	21	25	137	176	70	33
Fruit and vegetables	430	507	282	323	170	230
Oil and fat	243	326	166	142	7	18
Flour mill and cereal food						
Flour mill products	33	59	11	9	11	6
Cereal food and baking mix	222	311	173	136	23	53
Total	255	371	184	145	34	60
Bakery products						
Bread, cakes and pastry products	60	70	48	52	9	12
Biscuits	93	109	78	77	8	10
Total	154	179	126	130	17	22
Other food						
Sugar	15	21	2	4	2	4
Confectionery	86	99	196	230	21	49
Food nec	471	630	317	355	152	171
Total	572	750	514	589	176	224
Beverages and malt						
Soft drink, cordial and syrup	34	35	504	570	15	37
Beer and malt	17	18	69	85	67	108
Wine	2	1	219	217	2	2
Spirit	13	24	257	283	167	172
Total	65	76	1 048	1 155	251	319
Total food and beverages						
Minimally transformed	147	162	14	18	111	124
Substantially transformed	2 376	2 987	2 529	2 796	1 001	1 267
Elaborately transformed	104	116	133	145	12	16
Total	2 626	3 265	2 675	2 960	1 125	1 407

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

127 Value of world food imports, by level of transformation a

	2003 US$m	2004 US$m	2005 US$m	2006 US$m	2007 US$m	Share b %
Minimally transformed						
Live animals except fish	9 453	10 503	12 503	13 981	15 198	1.8
Fish or shellfish						
Fish, live or fresh	29 551	32 881	37 129	42 053	45 066	5.6
Fish, dried, salted or smoked	2 851	3 149	3 442	3 747	4 328	0.5
Shellfish	20 066	21 130	21 692	23 329	24 109	3.3
Horticulture						
Vegetables	27 738	30 822	33 571	37 607	43 233	5.2
Fruit and nuts	40 721	46 261	51 768	56 020	63 284	7.7
Cocoa	9 649	9 111	9 703	9 845	12 033	1.5
Eggs, albumin	1 889	2 130	2 265	2 396	2 920	0.3
Grains and oilseeds						
Barley	2 830	3 462	3 898	3 855	5 830	0.6
Maize	11 817	13 521	12 684	14 031	22 279	2.2
Oilseeds, not soft oil	949	1 169	1 244	1 294	1 710	0.2
Oilseeds, soft oil	21 523	25 219	24 345	23 992	34 243	3.9
Rice	7 045	8 164	8 595	9 151	9 772	1.3
Wheat or meslin	16 964	20 073	18 501	21 760	28 186	3.1
Other cereal grains, nec	1 747	1 847	1 711	1 936	2 941	0.3
Substantially transformed						
Meat						
Beef, fresh, chilled or frozen	16 153	17 952	20 029	22 456	25 086	3.0
Meat, fresh, chilled or frozen	29 016	33 750	37 887	38 708	44 172	5.5
Meat or offal, preserved	2 539	2 514	2 486	2 800	3 661	0.4
Meat or offal, preserved, nec	7 249	8 573	10 159	11 195	12 947	1.5
Dairy						
Milk products, excluding butter and cheese	16 628	19 512	20 863	22 509	28 332	3.2
Butter and cheese	3 622	4 179	4 310	4 367	5 044	0.6
Cheese and curd	13 184	15 421	16 189	17 331	20 706	2.5
Fish or shellfish	11 462	12 932	13 954	15 264	16 779	2.1
Cereal products						
Flour or meal from wheat or meslin	1 546	1 873	1 561	1 651	2 287	0.3
Cereal flour or meal, nec	561	667	569	627	844	0.1
Cereal etc flour or starch	19 576	22 569	24 264	26 441	31 526	3.7
Horticulture						
Vegetables, prepared or preserved	12 453	14 293	15 032	16 537	19 415	2.3
Fruit, prepared or preserved	8 197	9 430	10 488	11 626	13 376	1.6
Fruit or vegetable juices	8 032	8 401	9 234	10 796	13 934	1.5
Sugar and confectionery						
Sugar, molasses and honey	14 410	15 470	18 809	22 641	22 079	2.8
Sugar confectionery	5 266	5 886	6 268	6 473	7 178	0.9
Chocolate and cocoa preparations	9 567	11 147	12 114	13 299	15 742	1.8

Continued

127 Value of world food imports, by level of transformation a continued

	2003 US$m	2004 US$m	2005 US$m	2006 US$m	2007 US$m	Share b %
Animal and vegetable oil						
Margarine and shortening	1 657	2 069	2 171	2 430	3 157	0.3
Animal oil or fat	2 125	2 550	2 510	2 720	3 393	0.4
Vegetable oil or fat, fixed, soft	13 437	15 911	16 628	19 359	23 078	2.6
Vegetable oils, fixed, not soft	11 791	14 437	14 382	16 263	21 019	2.3
Animal or vegetable oils, processed	3 927	4 575	4 893	5 350	6 772	0.8
Other food						
Coffee and coffee substitutes	10 750	12 199	15 941	18 329	21 795	2.4
Tea and mate	3 206	3 543	3 795	4 101	4 169	0.6
Spices	3 017	3 206	3 007	3 186	3 755	0.5
Edible products, nec	25 306	29 751	32 507	35 910	41 095	4.9
Beverage						
Beverages, nonalcoholic, nec	7 574	8 872	9 982	11 532	13 955	1.6
Alcoholic beverages	37 884	42 932	46 169	50 769	59 624	7.1
Animal feed c	27 320	32 557	32 841	35 436	42 745	5.1
Total	532 249	606 612	652 094	715 102	842 795	100.0

a Based on over 100 reporting countries representing more than 90 per cent of world trade. b Average, 2003–2007. c Excludes unmilled cereal.
Sources: International Trade Centre, UNCTAD/WTO; ABARE.

128 Value of world trade in processed foods, by major exporting countries a

	2003 US$m	2004 US$m	2005 US$m	2006 US$m	2007 US$m	Share b %
Meat						
Australia	3 455	4 804	5 236	5 351	5 495	6.7
Denmark	3 961	4 687	4 655	4 939	5 276	6.5
France	3 675	3 990	4 049	4 117	4 645	5.6
Netherlands	4 911	5 726	6 010	6 547	8 134	8.6
United States	7 379	5 275	6 700	7 313	9 141	9.9
Other	31 836	39 031	47 246	50 543	58 855	62.7
Total	55 217	63 513	73 896	78 811	91 546	100.0
Dairy						
Australia	1 349	1 746	1 859	1 829	2 021	3.9
France	4 664	5 224	5 378	5 574	6 893	12.4
Germany	5 327	6 301	6 795	6 993	9 050	15.4
Netherlands	4 358	4 721	4 649	4 859	5 936	11.0
New Zealand	2 771	3 317	3 665	4 046	5 550	8.6
Other	15 551	19 334	21 350	22 975	29 805	48.7
Total	34 020	40 643	43 695	46 276	59 255	100.0
Seafood						
Australia	74	77	77	72	75	0.5
China	1 923	2 594	3 177	4 216	4 490	22.1
Denmark	533	593	634	699	783	4.4
Korea, Rep. of	203	207	184	153	118	1.2
Thailand	2 145	2 253	2 497	2 994	3 168	17.6
Other	6 548	7 262	7 971	8 853	9 515	54.2
Total	11 427	12 986	14 540	16 986	18 149	100.0
Horticulture						
Australia	177	178	186	190	205	0.5
China	2 684	3 207	3 857	4 681	6 483	11.4
Italy	2 178	2 332	2 315	2 459	3 021	6.7
Netherlands	2 452	2 729	2 765	3 195	4 243	8.4
United States	2 379	2 497	2 710	3 042	3 416	7.6
Other	18 645	21 063	22 865	26 193	31 346	65.4
Total	28 516	32 005	34 698	39 760	48 714	100.0
Beverages c						
Australia	1 646	2 088	2 201	2 184	2 570	3.6
France	10 381	11 183	11 406	13 023	14 964	20.7
Germany	2 824	3 148	3 626	4 234	4 962	6.4
Italy	4 237	4 897	5 066	5 444	6 452	8.9
United Kingdom	5 721	6 179	6 360	6 858	8 193	11.3
Other	22 222	25 541	27 612	31 367	37 917	49.1
Total	47 031	53 036	56 271	63 109	75 058	100.0
Sugar and confectionery						
Australia	259	317	306	326	341	0.8
Belgium–Luxembourg	2 270	2 578	2 908	3 378	3 372	7.8
Brazil	2 442	2 987	4 275	6 513	5 433	11.6
France	2 373	2 617	2 583	2 888	3 112	7.3
Germany	2 785	3 218	3 562	3 935	4 473	9.6
Other	18 167	20 230	22 763	26 675	29 327	62.9
Total	28 295	31 947	36 397	43 715	46 058	100.0

Continued

128 Value of world trade in processed foods, major exporting countries a continued

	2003 US$m	2004 US$m	2005 US$m	2006 US$m	2007 US$m	Share b %
Animal and vegetable oil						
Argentina	2 842	3 171	3 307	3 896	5 517	8.4
Australia	260	319	292	305	420	0.7
Malaysia	6 503	7 195	6 701	7 729	11 788	17.9
Netherlands	2 005	2 333	2 417	3 045	3 974	6.2
United States	2 108	2 115	1 960	2 211	3 202	5.2
Other	19 329	23 862	25 669	29 461	38 470	61.5
Total	33 048	38 995	40 347	46 647	63 371	100.0
Animal feed d						
Argentina	3 500	3 835	4 032	4 660	6 197	14.0
Australia	540	707	584	642	624	2.0
Brazil	2 713	3 402	2 998	2 590	3 191	9.4
Netherlands	2 144	2 808	2 943	3 143	3 757	9.3
United States	4 159	3 981	4 203	4 701	5 720	14.3
Other	12 568	14 451	15 468	17 131	21 401	51.0
Total	25 625	29 185	30 229	32 867	40 890	100.0
Cereal products						
Australia	364	448	448	468	577	1.6
Belgium–Luxembourg	1 981	2 283	2 305	2 442	2 994	8.4
France	2 178	2 549	2 609	2 724	3 255	9.3
Germany	2 431	2 993	3 210	3 630	4 228	11.5
Italy	2 351	2 669	2 791	2 947	3 259	9.8
Other	13 045	14 977	16 690	18 255	22 383	59.5
Total	22 350	25 920	28 051	30 464	36 696	100.0
Other processed food						
Australia	300	333	330	328	349	0.6
Brazil	1 836	2 420	3 330	3 854	4 568	5.9
France	1 959	2 223	2 351	2 514	3 074	4.4
Netherlands	2 488	3 256	3 346	3 457	4 052	6.1
United States	3 935	4 339	4 752	5 347	5 567	8.8
Other	29 914	35 222	40 736	45 215	51 047	74.2
Total	40 432	47 791	54 844	60 715	68 657	100.0
All processed food						
Australia	8 424	11 017	11 518	11 693	12 678	2.6
France	28 956	31 967	32 820	35 872	41 968	8.1
Germany	25 923	30 495	34 731	38 581	45 540	8.3
Netherlands	23 830	27 438	28 072	31 305	38 388	7.0
United States	25 761	24 920	27 524	31 062	37 801	6.9
Other	212 991	251 130	278 303	310 836	372 018	67.1
Total	325 885	376 966	412 968	459 349	548 393	100.0

a Based on over 100 reporting countries representing more than 90 per cent of world trade. **b** Average, 2003–2007. **c** Alcoholic and nonalcoholic. **d** Excludes unmilled cereal.

Sources: International Trade Centre UNCTAD/WTO; ABARE.

129 Value of world trade in processed foods, by major importing countries a

	2003 US$m	2004 US$m	2005 US$m	2006 US$m	2007 US$m	Share b %
Meat						
Australia	153	210	279	287	393	0.4
Germany	4 356	5 022	6 096	6 407	7 070	8.3
Italy	3 806	4 441	4 847	5 516	5 937	7.0
Japan	8 655	9 124	9 746	8 415	8 761	12.8
United Kingdom	5 477	6 478	6 777	7 165	8 202	9.8
Other	32 511	37 513	42 817	47 367	55 502	61.7
Total	54 958	62 789	70 560	75 159	85 865	100.0
Dairy						
Australia	200	256	297	325	394	0.7
Belgium–Luxembourg	2 401	2 726	2 655	2 760	3 491	6.6
Germany	4 093	4 519	4 557	5 286	6 437	11.7
Italy	3 030	3 492	3 518	3 613	4 459	8.5
Netherlands	2 257	2 532	2 584	2 711	3 418	6.4
Other	21 453	25 586	27 751	29 513	35 882	66.1
Total	33 435	39 112	41 363	44 207	54 081	100.0
Seafood						
Australia	215	234	277	302	360	2.0
France	810	891	936	982	1 147	6.8
Japan	2 170	2 707	2 614	2 672	2 551	18.1
United Kingdom	842	945	990	1 063	1 286	7.3
United States	2 362	2 576	2 749	3 104	2 974	19.6
Other	5 064	5 578	6 387	7 141	8 461	46.4
Total	11 462	12 932	13 954	15 264	16 779	100.0
Horticulture						
Australia	322	408	422	474	632	1.2
France	2 450	2 845	2 881	3 170	3 859	8.4
Germany	3 858	4 145	4 509	4 910	5 471	12.6
Japan	2 463	2 803	3 019	3 169	3 395	8.2
United States	3 907	4 282	4 758	5 283	6 375	13.6
Other	15 682	17 641	19 164	21 953	26 992	56.0
Total	28 682	32 124	34 754	38 958	46 724	100.0
Beverages c						
Australia	458	577	649	789	1 002	1.2
Germany	3 770	4 025	4 599	5 024	5 527	7.9
Japan	2 075	2 309	2 231	2 461	2 543	4.0
United Kingdom	5 424	6 540	6 763	6 952	8 074	11.7
United States	11 244	12 085	13 356	15 336	16 779	23.8
Other	22 487	26 269	28 553	31 740	39 655	51.4
Total	45 459	51 804	56 152	62 301	73 579	100.0
Sugar and confectionery						
Australia	214	253	293	304	408	0.8
France	1 849	2 147	2 063	2 168	2 762	5.9
Germany	2 336	2 587	2 657	2 729	3 129	7.2
United Kingdom	2 132	2 574	2 822	2 884	3 334	7.4
United States	3 400	3 476	3 943	4 640	4 206	10.6
Other	19 311	21 467	25 412	29 689	31 161	68.2
Total	29 242	32 503	37 190	42 413	44 999	100.0

Continued

129 Value of world trade in processed foods, by major importing countries a continued

	2003 US$m	2004 US$m	2005 US$m	2006 US$m	2007 US$m	Share b %
Animal and vegetable oil						
Australia	246	295	302	386	475	0.8
Germany	1 664	2 102	2 520	3 648	4 194	6.5
Italy	2 069	2 610	2 742	3 107	3 340	6.4
United Kingdom	1 144	1 293	1 314	1 599	1 967	3.4
United States	1 707	2 437	2 564	3 049	3 717	6.2
Other	26 106	30 806	31 142	34 333	43 726	76.7
Total	32 936	39 543	40 585	46 122	57 420	100.0
Animal feed d						
Australia	202	197	219	253	422	0.8
China	659	947	1 306	1 298	1 280	3.2
France	1 800	1 973	1 942	1 893	2 354	5.8
Germany	1 846	2 158	2 295	2 513	2 881	6.8
Japan	2 309	2 533	2 602	2 767	2 931	7.7
Other	20 504	24 749	24 479	26 713	32 877	75.7
Total	27 320	32 557	32 841	35 436	42 745	100.0
Cereal products						
Australia	187	235	269	316	390	1.0
France	1 725	2 000	2 037	2 125	2 564	7.7
Germany	1 693	1 874	2 121	2 211	2 446	7.6
United Kingdom	1 515	1 878	1 873	1 995	2 561	7.2
United States	2 634	2 883	3 181	3 541	3 959	11.9
Other	13 929	16 239	16 913	18 529	22 736	64.7
Total	21 683	25 110	26 394	28 718	34 656	100.0
Other processed food						
Australia	895	1 028	1 166	1 237	1 498	2.1
France	2 260	2 446	2 666	2 988	3 619	5.0
Germany	3 419	4 071	4 934	5 630	6 429	8.8
Japan	2 391	2 771	3 210	3 142	3 221	5.3
United States	4 980	5 686	6 567	7 283	8 045	11.7
Other	28 333	32 696	36 707	41 246	48 001	67.1
Total	42 279	48 699	55 249	61 526	70 813	100.0
All processed food						
Australia	3 093	3 693	4 173	4 369	5 612	1.0
Germany	27 695	31 174	35 060	39 208	44 554	8.5
Japan	23 217	25 840	27 238	26 552	27 969	6.3
United Kingdom	24 920	29 621	30 821	32 849	38 660	7.5
United States	36 781	41 696	45 470	50 153	54 396	10.9
Other	211 750	245 148	266 280	296 973	356 472	65.8
Total	327 456	377 172	409 042	450 104	527 663	100.0

a Based on over 100 reporting countries representing more than 90 per cent of world trade. **b** Average, 2003–2007. **c** Alcoholic and nonalcoholic.
d Excludes unmilled cereal.
Sources: International Trade Centre, UNCTAD/WTO.

130 Summary of Australian statistics for roundwood a

	Removals of roundwood a						Consumption
	Broadleaved	Coniferous	Total	Imports b	Exports b	Consumption	per person
	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	m^3
1963-64	9 341	1 934	11 275	3 774	315	14 734	1.32
1964-65	9 555	2 054	11 609	4 138	308	15 439	1.36
1965-66	9 583	2 169	11 752	4 002	243	15 511	1.34
1966-67	9 144	2 183	11 327	4 110	414	15 023	1.27
1967-68	9 187	2 238	11 425	4 396	301	15 520	1.29
1968-69	8 987	2 344	11 331	4 624	342	15 613	1.27
1969-70	9 106	2 415	11 521	4 904	406	16 019	1.28
1970-71	9 256	2 555	11 811	4 999	435	16 375	1.25
1971-72	8 988	2 673	11 661	4 603	465	15 799	1.19
1972-73	9 778	2 808	12 586	5 937	2 110	16 413	1.22
1973-74	11 063	2 636	13 699	4 896	2 860	15 735	1.15
1974-75	10 921	2 850	13 771	5 404	3 145	16 030	1.15
1975-76	9 995	2 877	12 872	4 752	2 798	14 826	1.06
1976-77	11 331	3 078	14 409	5 558	3 831	16 136	1.14
1977-78	11 259	3 282	14 541	4 690	3 670	15 561	1.08
1978-79	10 595	3 381	13 976	5 478	4 156	15 298	1.05
1979-80	11 720	3 866	15 586	5 667	5 185	16 068	1.09
1980-81	11 464	4 447	15 911	6 019	4 568	17 362	1.16
1981-82	10 348	4 524	14 872	6 403	4 245	17 030	1.12
1982-83	9 217	4 442	13 659	4 694	4 206	14 147	0.92
1983-84	10 537	4 689	15 226	5 856	4 586	16 496	1.06
1984-85	10 919	5 768	16 687	7 195	4 626	19 256	1.22
1985-86	10 949	5 958	16 907	6 943	4 836	19 014	1.19
1986-87	11 222	5 516	16 738	6 333	5 845	17 226	1.06
1987-88	11 162	5 686	16 848	7 894	5 654	19 088	1.15
1988-89	11 475	6 153	17 628	8 069	5 093	20 604	1.23
1989-90	10 534	7 030	17 564	7 947	5 266	20 245	1.19
1990-91	10 037	6 553	16 590	6 836	5 522	17 904	1.04
1991-92	9 512	7 141	16 653	7 351	5 748	18 256	1.04
1992-93	9 801	7 866	17 667	7 697	6 106	19 258	1.09
1993-94	9 793	8 969	18 762	7 681	6 689	19 754	1.11
1994-95	10 857	8 703	19 560	8 915	7 976	20 499	1.13
1995-96	9 920	9 305	19 225	6 918	7 384	18 759	1.02
1996-97	9 437	10 640	20 077	7 502	8 462	19 117	1.03
1997-98	10 143	11 016	21 158	8 036	10 238	18 957	1.01
1998-99	9 878	10 960	20 838	8 116	10 013	18 941	1.00
1999-00	11 933	12 475	24 408	9 572	12 214	21 765	1.14
2000-01	11 777	12 697	24 474	8 474	13 176	19 772	1.02
2001-02	10 943	13 356	24 299	8 440	13 692	19 047	0.97
2002-03	11 908	13 911	25 819	9 246	14 911	20 154	1.01
2003-04	11 909	14 589	26 498	10 126	14 953	21 671	1.08
2004-05	12 803	14 196	26 998	10 563	15 271	22 291	1.09
2005-06	12 355	14 379	26 734	10 050	15 109	21 674	1.05
2006-07	12 602	14 580	27 182	10 368	16 635	20 915	0.99
2007-08	13 548	14 913	28 461	11 137	16 620	22 978	1.07
2008-09 s	12 395	14 713	27 108	9 792	15 108	21 792	1.00

a Gross roundwood equivalent (GRWE) of industrial log removals. Excludes log removals for firewood. **b** Estimated GRWE of forest products, including sawnwood, wood based panels, pulp, paper and paperboard, and woodchips. **s** ABARE estimate. **na** Not available.

Sources: ABARE; ABS, *International trade,* Australia, cat. no. 5465.0, Canberra; Forestry and Timber Bureau, Department of National Development, *Compendium of Australian Forest Products Statistics: 1935-36 to 1967,* Canberra.

131 Land areas, by vegetation cover a

	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Aust.
	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha
Closed forest	505	242	2 100	141	4	611	666	0	4 270
(% of land area)	0.63	1.06	1.21	0.06	0.00	8.93	0.49	0.00	0.56
Open forest	19 223	4 419	9 310	2 393	357	894	7 439	86	44 120
(% of land area)	24.01	19.43	5.38	0.95	0.36	13.07	5.51	35.38	5.74
Woodland forest	6 480	3 177	41 172	15 130	8 494	1 610	22 905	37	99 007
(% of land area)	8.09	13.97	23.79	5.98	8.64	23.54	16.98	15.22	12.87
Plantation b	370	422	251	416	182	294	30	8	1 973
(% of land area)	0.46	1.86	0.14	0.16	0.18	4.30	0.02	3.24	0.26
Total forest vegetation cover	26 578	8 260	52 833	18 080	9 037	3 409	31 040	131	149 369
(% of land area)	33.20	36.32	30.53	7.15	9.19	49.84	23.01	53.83	19.42
Total land area	80 064	22 742	173 065	252 988	98 348	6 840	134 913	243	769 202

a The increasing availability of high-resolution, remote sensing data and better methods for determining forest continue to improve estimates of Australia's forest cover. This largely explains the change in estimated total forest area from 164 million hectares in 2003 to 149 million hectares reported here; little of the change is because of real forest loss. For a full explanation see *Australia's State of the Forests Report 2008* (Montreal Process Implementation Group for Australia). **b** As at June 2008.

Sources: Native forest: *Australia's State of the Forests Report 2008,* Montreal Process Implementation Group for Australia; National Forest Inventory, Bureau of Rural Sciences, Canberra.

Plantation: Gavran, M and Parsons, M, *Australia's Plantations 2009 Inventory Update,* National Plantation Inventory, Bureau of Rural Sciences, Canberra.

132 Australian prices of selected forest products

		Used in manufacturing b		Produced by manufacturers c			
	Timber, board and joinery a	Wood products d	Paper and paper products e	Wood products d	Paper and paper products e	Hardwood chips f	Softwood chips f
	index	index	index	index	index	$/bdt	$/bdt
1980-81	50.3	na	na	na	na	na	na
1981-82	54.1	na	na	54.7	na	na	na
1982-83	57.7	na	na	58.8	na	na	na
1983-84	63.0	na	na	62.9	74.6	na	na
1984-85	70.1	na	na	68.5	77.3	na	na
1985-86	75.7	na	na	74.1	82.1	na	na
1986-87	79.2	na	na	78.9	88.3	na	na
1987-88	84.0	na	na	84.0	93.7	na	na
1988-89	93.4	na	na	92.8	95.8	144.00	101.83
1989-90	100.0	100.0	100.0	100.0	100.0	147.03	115.34
1990-91	101.9	104.7	101.5	103.6	107.2	147.89	126.74
1991-92	100.1	104.5	96.3	103.2	112.8	150.90	149.32
1992-93	103.8	109.2	95.6	106.1	111.2	148.34	149.22
1993-94	115.6	115.3	89.7	113.3	109.0	149.90	137.75
1994-95	118.8	111.3	95.8	116.6	108.8	152.76	140.65
1995-96	116.4	114.0	108.3	116.2	113.0	160.46	167.50
1996-97	116.2	113.7	97.0	116.8	111.5	161.98	138.58
1997-98	118.8	119.8	96.4	118.9	110.2	151.58	144.16
1998-99	120.6	119.8	97.6	121.0	110.4	152.02	147.52
1999-00	127.1	123.0	99.8	126.0	111.3	140.36	137.00
2000-01	133.3	132.8	110.0	130.7	114.9	146.27	158.39
2001-02	134.6	136.1	109.7	132.4	115.9	149.34	157.57
2002-03	138.1	130.0	104.8	135.1	117.9	150.81	138.71
2003-04	141.7	125.2	103.1	139.1	117.8	156.93	128.15
2004-05	144.1	126.6	103.1	140.5	117.4	158.40	132.56
2005-06	144.5	133.5	105.8	143.8	118.5	160.53	138.35
2006-07	146.5	135.3	110.8	148.2	120.2	162.87	144.97
2007-08	153.5	146.1	113.3	157.4	121.2	175.80	165.40
2008-09	160.1	160.7	123.8	167.7	123.3	188.17	196.43

a Price index of materials used in house building; base 1989-90 = 100. **b** Price indexes of materials used in manufacturing industry; base 1989-90 = 100. **c** Price indexes of articles produced by manufacturing industries; base 1989-90 = 100. **d** Includes log sawmilling and other wood product manufacturing. **e** Includes paper and paper products manufacturing. **f** Average unit fob value of Australian exports in bone dry tonnes. **na** Not available.
Sources: ABS, *Price Index of Materials Used in Building Other Than House Building, Eight Capital Cities,* cat. no. 6407.0, Canberra; ABS, *Producer Price Index,* cat. no. 6427.0, Canberra; ABARE.

133 Sales and service income of turnover in forest product industries a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
	$m	$m	$m	$m	$m	$m	$m
ANZSIC06 group and class b							
Wood and wood products							
Log sawmilling and timber dressing							
Log sawmilling	na	na	na	na	na	1 342	na
Wood chipping	na	na	na	na	na	865	na
Timber resawing and dressing	na	na	na	na	na	2 323	na
Total	na	na	na	na	na	4 530	na
Other wood product manufacturing							
Prefabricated wooden building	na	na	na	na	na	84 c	na
Wooden structural fitting and component	na	na	na	na	na	4 622	na
Veneer and plywood	na	na	na	na	na	na d	na
Reconstituted wood product	na	na	na	na	na	1 159 c	na
Other wood products nec	na	na	na	na	na	782 c	na
Total	na	na	na	na	na	7 254	na
Total wood products e	na	na	na	12 159	12 089	11 784	13 099
Paper and paper products							
Pulp, paper and paperboard	na	na	na	na	na	2 400	na
Corrugated paperboard and paperboard container	na	na	na	na	na	3 008	na
Paper bag	na	na	na	na	na	521 c	na
Paper stationary	na	na	na	na	na	1 136	na
Sanitary paper product	na	na	na	na	na	2 205	na
Other converted paper product	na	na	na	na	na	319	na
Total e	na	na	na	9 557	9 555	9 589	9 904
Total forest product industries e	na	na	na	21 716	21 644	21 373	23 003
Total manufacturing e	na	na	na	320 323	338 136	377 618	395 818
Forest product industries % of total manufacturing	na	na	na	6.8	6.4	5.7	5.8

a Sales and service income is defined as follows: sales of goods whether or not manufactured by the business. They are exclusive of goods and services tax (GST). See ABS publication Explantatory Notes for full details. **b** 2006-07 data is the first release of estimates using the 2006 edition of ANZSIC. Because of the combined effect of this new classification and methodological changes, new series have commenced with the 2006-07 data and are not directly comparable with previous years. See ABS publication Explantatory Notes for full details. **c** Estimate has a relative standard error of 10% to less than 25% and should be used with caution. **d** Not available; estimate included in totals. **e** Data collected for 2004-05 and 2005-06 (under ANZSIC93) has been mapped to ANZSIC06 and methodological changes applied to provide 'bridging' series for key totals only. **na** Not available.

Sources: ABS, *Manufacturing Industry, Australia,* cat. no. 8221.0, Canberra; ABS, *Manufacturing Indicators* , Australia,cat. no. 8229.0, Canberra.

134 Employment in forest product industries

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	'000	'000	'000	'000	'000	'000	'000
Labour force statistics a							
Forestry							
Forestry and logging	7.2	9.0	9.1	8.4	8.1	8.3	7.5
Forestry support services	2.5	3.0	3.3	3.0	3.3	5.0	2.8
Total	9.7	12.0	12.3	11.4	11.3	13.3	10.2
Total agriculture, forestry and fishing	370.4	366.8	357.1	348.1	350.4	352.5	357.6
% forestry and logging	2.6%	3.3%	3.4%	3.3%	3.2%	3.8%	2.9%
Total wood manufacturing industry							
Log sawmilling and timber dressing	19.0	20.0	20.0	17.8	16.8	15.3	10.8
Other wood product manufacturing	36.0	40.0	33.8	35.3	34.3	34.0	34.8
Paper and paper products	25.0	23.5	23.3	24.0	26.3	19.8	21.3
Total	80.0	83.8	76.8	76.5	77.5	69.0	67.0
Total manufacturing industries	1 073.3	1 032.6	1 050.9	1 024.7	1 023.9	1 056.0	1 017.0
% wood manufacturing industry	7.5%	8.1%	7.3%	7.5%	7.6%	6.5%	6.6%
Total forestry, logging and wood manufacturing	89.7	95.7	89.1	87.9	88.8	82.3	77.2
Total employment	9 363.1	9 510.0	9 767.2	10 069.7	10 352.6	10 620.6	10 741.1
% total forestry, logging and wood manufacturing	1.0%	1.0%	0.9%	0.9%	0.9%	0.8%	0.7%

a Labour force annual employment data is the average of the quarterly survey data based on ANZSIC 2006 classification. **na** Not available.

Source: ABS, *Australian Labour Market Statistics*, cat. no. 6105.0, Canberra; ABS, *The Labour Force*, cat. no. 6203.0, Canberra; ABS, *Manufacturing Industry*, cat. no. 8221.0, Canberra.

135 Value of Australian forest products trade a

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m
Imports							
Roundwood	1.8	1.1	1.0	0.4	0.6	0.8	1.1
Sawnwood							
Coniferous roughsawn	223.8	211.6	182.3	150.3	148.1	186.0	133.9
Coniferous dressed	175.9	181.7	188.7	150.5	143.3	191.4	167.5
Broadleaved roughsawn	64.7	58.3	63.1	65.2	66.9	58.8	50.7
Broadleaved dressed	40.3	50.3	57.9	53.5	59.9	56.0	52.7
Total	504.7	501.9	492.0	419.4	418.2	492.3	404.8
Railway sleepers	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Miscellaneous forest products **b**	589.3	583.5	586.1	527.6	567.1	583.2	650.6
Veneer	26.0	23.1	24.3	24.9	31.5	33.4	28.3
Plywood	114.3	113.0	128.6	133.6	167.7	152.7	145.3
Particleboard	21.5	17.2	24.4	13.7	26.2	34.4	26.8
Hardboard	6.0	10.7	18.8	27.3	29.9	28.1	25.7
Medium density fibreboard	29.4	22.9	15.0	21.6	13.8	32.7	41.0
Softboard and other fibreboard	8.9	3.4	4.9	7.1	7.2	2.9	4.0
Paper and paperboard							
Newsprint	243.9	261.0	260.7	266.9	224.1	184.6	173.4
Printing and writing	1 452.8	1 431.0	1 451.1	1 438.2	1 453.2	1 456.1	1 467.9
Household and sanitary	117.9	137.9	127.9	151.6	177.1	137.3	154.2
Packaging and industrial	343.7	306.8	344.4	330.3	416.1	470.4	481.0
Total	2 158.3	2 136.7	2 184.1	2 187.0	2 270.5	2 248.4	2 276.5
Paper manufactures **c**	362.7	340.7	395.8	425.8	469.5	513.3	590.3
Wastepaper	8.0	4.7	2.3	1.5	2.3	2.4	0.8
Pulp	253.7	235.1	225.1	225.0	265.2	285.2	262.6
Pulpwood	1.5	1.4	2.0	2.1	1.5	1.8	1.7
Total	4 086.2	3 995.4	4 104.5	4 017.0	4 271.2	4 411.5	4 459.4

Continued

135 Value of Australian forest products trade a continued

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m
Exports							
Roundwood	106.86	113.66	72.56	82.36	117.38	105.44	100.96
Sawnwood							
Coniferous roughsawn	13.22	18.20	40.81	63.28	80.68	63.12	69.71
Coniferous dressed	15.22	17.20	21.26	15.08	18.07	11.47	8.79
Broadleaved roughsawn	33.92	29.01	27.57	30.64	35.49	37.90	38.30
Broadleaved dressed	8.06	9.69	11.95	11.97	11.05	7.95	8.01
Total	70.42	74.10	101.59	120.96	145.30	120.45	124.80
Railway sleepers	4.40	4.21	3.99	3.70	4.63	3.29	3.72
Miscellaneous forest products **b**	58.01	64.38	74.43	68.74	62.50	55.97	50.97
Veneer	7.53	8.30	6.02	6.53	5.80	18.77	36.48
Plywood	3.07	3.69	5.88	4.71	7.85	8.85	4.09
Particleboard	17.41	11.26	6.35	6.23	6.45	3.82	6.58
Hardboard **d**	4.08	5.99	4.71	4.97	2.95	0.08	1.22
Medium density fibreboard	145.57	112.45	118.89	120.95	96.87	75.67	51.99
Softboard and other fibreboard	10.15	9.48	11.55	9.65	5.65	1.50	0.81
Paper and paperboard							
Newsprint	1.52	0.45	0.72	0.17	0.16	2.72	2.02
Printing and writing	214.75	172.40	183.02	147.13	148.94	132.53	128.15
Household and sanitary	98.28	117.92	104.76	98.08	101.74	105.66	110.91
Packaging and industrial	315.61	344.12	338.35	355.70	399.66	394.56	364.43
Total	630.16	634.89	626.86	601.08	650.50	635.48	605.50
Paper manufactures **c**	173.13	148.88	126.43	125.10	111.61	103.48	106.09
Wastepaper	49.87	52.66	96.74	140.13	175.05	251.68	234.83
Pulp	2.12	1.37	4.40	5.48	12.04	14.72	17.75
Woodchips	807.95	794.44	858.24	839.04	950.30	1 072.22	996.76
Total	2 090.74	2 039.75	2 118.66	2 139.61	2 354.88	2 471.40	2 342.55

a Values are duty or customs values for imports and fob from Australian ports for exports. **b** Includes such items as wooden doors, mouldings, packing cases, parquetry flooring, builders carpentry, cork, gums, resins, eucalyptus oils and other miscellaneous wood articles. Excludes wooden furniture. **c** Includes such items as boxes, bags, account books, note books, letter pads and other paper stationery. **d** Uncoated hardboard confidential from January 2007.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

136 Australian production, trade and consumption of sawnwood

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3
Broadleaved (hardwood)							
Production	1 312	1 277	1 261	1 211	1 152	1 109 **a**	na
Imports	115	142	147	131	128	122	94
Exports	41	37	83	43	49	56	54
Consumption	1 369	1 373	1 314	1 290	1 220	1 164	na
Coniferous (softwood)							
Production	3 355	3 712	3 679	3 821	4 012	4 263 **a**	na
Imports	695	729	700	541	483	661	534
Exports	41	72	165	250	367	282	301
Consumption	4 008	4 369	4 214	4 112	4 128	4 642	na
Total broadleaved and coniferous							
Production	4 668	4 989	4 940	5 032	5 163	5 371 **a**	na
Imports	810	871	847	671	611	784	628
Exports	82	109	249	293	416	338	355
Consumption	5 378	5 742	5 528	5 402	5 348	5 806	na

a ABARE estimate. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; state and territory forest agencies.

137 Volume of Australian imports of sawnwood, by source and type

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3
Country							
Czech Republic							
Spruce pine	49	69	60	52	60	77	57
Canada							
Douglas fir	73	50	48	36	33	28	24
Western red cedar	67	54	54	42	42	44	33
Other	15	22	19	7	7	11	18
Total	155	126	121	86	83	84	74
Malaysia							
Meranti **a**	30	30	27	27	21	20	17
Other	20	25	29	28	24	30	21
Total	49	55	56	56	45	49	38
New Zealand							
Radiata pine	331	332	303	222	198	219	172
Douglas fir	60	57	47	37	33	34	24
Other	47	47	48	38	44	44	39
Total	438	436	398	298	276	297	235
United States							
Douglas fir	6	3	1	0	0	1	0
Western red cedar	1	0	0	0	0	2	1
Other	11	9	6	6	5	7	15
Total	17	13	7	7	6	10	16
Region							
Asia	86	104	114	105	105	103	74
Europe	31	65	98	80	38	153	124
North America	172	139	127	93	89	94	90
Pacific	460	469	423	319	293	316	249
South America	6	17	22	23	25	41	34
Other	56	77	63	53	61	78	58
Total	810	871	847	671	611	784	628
(value $m)	504.7	501.9	492.0	419.4	418.2	492.3	404.8

a Includes lauan and seraya.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

138 Australian production, trade and consumption of panel products

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3
Production a							
Plywood **b**	219	146	156	145	130	134	118
Particleboard	1 025	1 048	944	1 002	933	957	911
Medium density fibreboard	786	795	794	798	680	710	632
Total	2 030	1 989	1 894	1 944	1 743	1 800	1 661
Imports							
Plywood	162	178	200	205	244	237	199
Particleboard	93	60	65	37	77	100	69
Hardboard	8	13	22	30	38	32	24
Medium density fibreboard	77	47	28	52	26	69	88
Softboard and other fibreboards	16	8	12	14	14	14	11
Total	356	306	327	338	400	451	390
Exports							
Plywood	2	3	5	4	13	15	53
Particleboard	54	32	14	14	18	6	17
Hardboard	8	12	8	7	4	0	2
Medium density fibreboard	405	357	365	352	260	204	181
Softboard and other fibreboards	27	18	15	11	10	14	8
Total	497	421	406	389	306	239	260
Consumption							
Plywood	379	321	351	346	361	355	264
Particleboard	1 063	1 077	995	1 025	992	1 050	963
Medium density fibreboard	458	485	457	497	447	575	539
Total	1 900	1 882	1 804	1 868	1 800	1 981	1 767

a Hardboard production is not available, annual capacity is approximately 50,000 cubic metres. **b** Excludes laminated veneer lumber production from July 2003.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Engineered Wood Products Association of Australasia.

139 Volume of Australian imports of veneer and wood based panels, by source

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3	'000 m^3
Plywood							
Chile	5.73	9.77	7.65	10.80	11.43	19.11	22.51
China	5.44	10.38	21.47	35.43	50.56	51.72	32.73
Indonesia	35.05	37.01	49.79	42.17	42.84	37.78	28.38
Malaysia	20.80	20.06	19.41	22.43	25.39	34.13	35.42
New Zealand	70.26	80.76	82.56	74.52	86.16	60.99	50.79
Other	24.57	20.10	19.44	19.48	27.59	32.91	29.17
Total	161.85	178.07	200.32	204.84	243.97	236.64	198.99
(value, $m)	114.3	113.0	128.6	133.6	167.7	152.7	145.3
Veneer							
Malaysia	2.83	3.18	3.19	3.56	1.99	3.14	3.41
New Zealand	0.56	3.07	8.51	12.28	16.46	15.98	7.77
Philippines	3.10	3.20	2.50	2.60	3.63	3.68	2.05
Singapore	0.22	0.14	0.28	0.10	0.28	0.77	0.07
South Africa	0.69	0.49	0.19	0.08	0.11	0.08	0.00
Thailand	0.08	0.02	0.03	0.04	0.03	0.08	0.01
United States	1.16	0.95	0.75	1.27	1.06	1.34	1.06
Other	4.60	4.30	5.48	3.75	5.47	6.41	7.03
Total	13.22	15.34	20.94	23.68	29.03	31.48	21.40
(value, $m)	26.0	23.1	24.3	24.9	31.5	33.4	28.3
Particleboard							
Germany	43.17	17.90	7.09	8.13	17.59	15.42	8.88
New Zealand	27.52	24.12	42.27	10.70	43.35	69.68	46.22
Other	22.30	18.48	15.87	17.94	16.52	14.46	13.62
Total	92.99	60.50	65.23	36.77	77.45	99.56	68.72
(value, $m)	21.5	17.2	24.4	13.7	26.2	34.4	26.8
Hardboard							
Germany	0.57	1.34	6.82	16.76	19.54	7.39	4.22
Malaysia	0.20	1.58	2.47	1.66	1.65	1.73	1.90
New Zealand	3.42	4.50	7.06	3.98	1.88	0.18	0.21
Other	3.79	5.35	5.33	7.85	15.36	22.77	17.20
Total	7.98	12.77	21.68	30.25	38.43	32.07	23.53
(value, $m)	6.0	10.7	18.8	27.3	29.9	28.1	25.7
Medium density fibreboard							
Malaysia	14.86	18.82	15.87	16.91	12.75	10.91	8.69
New Zealand	53.09	23.57	7.74	31.95	7.46	36.26	59.57
Other	9.39	4.78	4.12	3.06	6.26	21.60	20.05
Total	77.34	47.18	27.74	51.91	26.47	68.77	88.31
(value, $m)	29.4	22.9	15.0	21.6	13.8	32.7	41.0
Softboard and other fibreboards							
Germany	0.2	0.1	0.1	0.3	0.5	0.2	2.13
New Zealand	7.29	3.21	6.95	4.69	3.46	1.58	0.00
Other	8.29	4.41	5.21	9.27	10.19	12.49	8.48
Total	15.75	7.67	12.24	14.27	14.15	14.32	10.62
(value, $m)	8.9	3.4	4.9	7.1	7.2	2.9	4.0

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

140 Australian production, trade and consumption of paper and paper products

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt
Production							
Newsprint	412.0	422.0	443.0	415.0	411.0	456.0	na
Printing and writing paper	564.0	585.0	659.0	663.0	693.0	706.0	na
Household and sanitary	194.0	200.0	197.0	203.0	190.0	186.0	na
Packaging and industrial paper	1 892.0	1 956.0	1 945.0	1 926.0	1 907.0	1 933.0	na
Total	3 061.0	3 164.0	3 244.0	3 207.0	3 192.0	3 281.0	na
Imports							
Newsprint	273.3	303.5	314.0	324.5	262.5	227.6	197.6
Printing and writing paper	973.1	1 101.9	1 189.7	1 140.1	1 173.5	1 235.3	1 122.1
Household and sanitary	66.7	84.6	77.9	87.9	101.8	81.1	82.0
Packaging and industrial paper	152.7	159.5	184.1	190.8	258.4	303.1	254.1
Total	1 465.8	1 649.5	1 765.7	1 743.4	1 796.3	1 847.1	1 655.8
Exports							
Newsprint	3.5	0.7	1.7	0.2	0.2	4.7	2.2
Printing and writing paper	200.2	160.3	174.9	147.0	131.7	119.0	111.9
Household and sanitary	55.1	36.2	37.1	31.6	32.5	36.7	37.9
Packaging and industrial paper	483.5	596.8	568.7	632.2	640.5	629.6	617.0
Total	742.3	794.0	782.4	811.0	804.8	790.0	769.0
Total consumption							
Newsprint	681.8	724.8	755.4	739.3	673.3	679.0	na
Printing and writing paper	1 336.9	1 526.5	1 673.8	1 656.1	1 734.8	1 822.3	na
Household and sanitary	205.6	248.4	237.8	259.4	259.3	230.5	na
Packaging and industrial paper	1 561.2	1 518.7	1 560.5	1 484.6	1 524.9	1 606.4	na
Total	3 784.5	4 019.5	4 227.3	4 139.4	4 183.4	4 338.1	na
Consumption per person							
Newsprint	34.3	36.0	37.0	35.7	32.0	31.7	na
Printing and writing paper	67.2	75.8	82.1	80.0	82.3	85.0	na
Household and sanitary	10.3	12.3	11.7	12.5	12.3	10.8	na
Packaging and industrial paper	78.5	75.5	76.5	71.7	72.4	75.0	na
Total	190.2	199.7	207.3	200.0	198.5	202.4	na

na Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Australian Plantation Products and Paper Industry Council (A3P); ABARE.

141 Volume of Australian imports of paper and paperboard, by type and source

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt
Newsprint a							
Finland	7.3	4.3	1.7	1.8	2.5	1.7	1.7
Indonesia	27.9	30.7	24.8	21.6	19.2	20.1	16.1
Korea, Rep. of	34.9	60.0	63.8	74.3	78.5	38.0	17.7
New Zealand	187.4	191.3	201.9	214.3	139.1	137.9	155.0
Norway	0.9	1.2	10.8	4.4	0.1	0.1	0.3
Other	15.8	17.1	21.8	12.6	23.3	29.9	7.1
Total	273.3	303.5	314.0	324.5	262.5	227.6	197.6
(value, $m)	243.9	261.0	260.7	266.9	224.1	184.6	173.4
Printing and writing paper							
Belgium	0.0	12.7	21.3	22.8	20.1	13.7	16.3
China	28.7	25.7	29.0	58.8	98.5	108.8	84.9
Finland	156.9	180.5	226.4	181.0	181.6	208.3	211.8
France	18.3	23.1	25.6	19.9	19.4	15.9	11.1
Germany	49.6	74.4	63.8	63.7	56.9	44.0	30.8
Indonesia	90.1	113.5	70.3	65.4	52.8	44.6	48.8
Italy	35.5	63.9	50.7	44.7	58.0	55.8	45.0
Japan	43.2	36.4	41.3	31.0	33.0	53.4	55.9
Korea, Rep. of	32.6	42.4	103.3	106.9	117.6	51.8	32.7
New Zealand	35.6	29.2	31.9	41.8	43.5	44.3	38.7
Sweden	58.4	70.3	83.9	75.1	83.1	80.6	77.3
United Kingdom	12.6	11.0	12.2	12.1	17.2	13.1	13.5
United States	131.6	126.8	135.7	129.7	118.2	113.3	105.2
Other b	280.1	292.0	294.2	287.1	273.5	387.6	350.0
Total	973.1	1 101.9	1 189.7	1 140.1	1 173.5	1 235.3	1 122.1
(value, $m)	1 452.8	1 431.0	1 451.1	1 438.2	1 453.2	1 456.1	1 467.9
Household and sanitary products							
China	27.1	32.6	35.5	41.7	36.5	23.3	33.3
Indonesia	16.2	23.0	16.5	15.8	32.5	23.1	13.4
New Zealand	10.6	16.0	14.5	20.3	22.0	24.4	23.3
Other	12.8	13.1	11.4	10.2	10.9	10.3	12.1
Total	66.7	84.6	77.9	87.9	101.8	81.1	82.0
(value, $m)	117.9	137.9	127.9	151.6	177.1	137.3	154.2

Continued

141 Volume of Australian imports of paper and paperboard, by type and source continued

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt
Packaging and industrial							
China	8.6	10.5	15.6	20.9	26.9	29.3	26.2
Czech Republic	1.3	4.6	6.6	7.1	4.7	6.1	4.7
Finland	16.4	15.7	17.0	15.3	24.4	27.5	18.8
France	3.6	4.8	5.4	4.8	5.6	8.2	6.9
Germany	8.9	7.1	7.0	8.4	7.8	8.8	8.1
Hong Kong	1.2	1.3	2.9	2.1	2.0	2.5	1.8
Indonesia	3.9	5.1	7.0	7.7	11.2	16.8	12.8
Italy	11.6	8.3	6.8	6.2	5.8	5.6	1.8
Japan	7.3	5.6	8.0	5.6	6.2	6.4	4.1
Malaysia	4.9	6.8	8.5	8.6	11.1	12.2	13.5
New Zealand	18.9	18.0	30.7	35.6	76.0	92.5	73.3
Singapore	11.0	9.8	9.3	2.3	2.5	3.4	4.2
South Africa	5.6	6.3	7.3	9.3	5.8	4.3	3.5
Sweden	6.0	8.7	7.4	9.5	7.1	7.4	7.8
Thailand	3.1	5.9	8.5	12.6	17.3	12.1	10.1
United Kingdom	7.0	6.1	4.9	4.8	3.7	2.9	2.6
United States	19.8	14.1	14.6	12.9	18.0	28.4	24.4
Other	13.8	21.1	16.6	17.2	22.5	28.8	29.6
Total	152.7	159.5	184.1	190.8	258.4	303.1	254.1
(value, $m)	343.7	306.8	344.4	330.3	416.1	470.4	481.0

a Uncoated paper (at least 60 per cent mechanical pulp) used mainly for the printing of newspapers. **b** Includes imports for which country of origin is confidential.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

142 Australian production of wood pulp and use of wastepaper

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt
Mechanical	449	381	387	371	372	445	na
Chemical **a**	770	781	727	782	810	750	na
Total pulp	1 170	1 107	1 160	1 153	1 182	1 195	na
Recovered paper used	1 630	1 546	1 994	2 056	2 030	2 002	na

a Includes semichemical pulp. **na** Not available.

Sources: ABS, *Manufacturing Production, Australia,* cat. no. 8301.0, Canberra; Australian Plantation Products and Paper Industry Council (A3P); ABARE.

143 Volume of Australian imports of wood pulp, by type and source

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt
Mechanical							
Canada	0.4	0.5	0.4	0.8	0.4	0.9	0.0
New Zealand	5.8	3.1	6.2	6.5	5.9	0.6	0.2
United States	0.1	0.0	0.0	0.0	0.0	0.2	0.3
Total	6.5	3.9	7.5	7.6	6.8	2.2	1.7
(value, $m)	4.7	2.5	5.2	5.1	5.1	1.8	1.4
Chemical							
Brazil	33.9	55.4	59.0	78.1	113.4	82.5	81.6
Canada	45.1	55.4	58.5	65.1	64.0	72.4	77.9
Chile	40.1	53.4	45.3	36.5	45.5	85.5	55.2
Hungary	0.0	0.0	0.0	3.1	0.0	0.2	0.0
Indonesia	43.8	30.7	9.8	0.0	0.1	0.5	0.0
New Zealand	122.7	106.4	108.7	105.6	104.0	115.1	93.8
Thailand	32.6	33.9	24.7	22.3	0.0	0.0	0.0
United States	9.0	5.4	10.5	6.4	4.2	7.8	7.6
Other	1.4	2.3	0.4	3.7	10.8	5.1	9.9
Total	328.5	343.1	316.9	320.7	341.9	369.1	326.1
(value, $m)	232.0	212.7	204.0	207.1	252.3	269.9	247.5
Semichemical							
Brazil	4.5	10.5	4.2	1.0	0.0	0.0	0.0
Canada	6.3	8.4	4.2	8.8	4.0	3.8	2.6
Chile	2.5	2.4	3.0	3.3	0.0	0.0	0.0
Indonesia	0.0	0.0	4.0	2.0	0.0	0.0	0.0
New Zealand	5.1	7.1	10.1	4.6	6.3	13.6	14.4
Other	5.5	1.3	0.4	0.1	0.0	0.0	0.0
Total	24.0	29.7	25.9	19.7	10.3	17.4	16.9
(value, $m)	17.1	19.9	15.8	12.8	7.7	13.5	13.7
Total wood pulp	359.0	376.6	350.3	348.0	359.0	388.7	344.7
(value, $m)	253.7	235.1	225.1	225.0	265.2	285.2	262.6

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

144 Volume of Australian roundwood and woodchip trade

	Imports	Exports			
	Roundwood a	Roundwood a	Woodchips b		
			Coniferous	Broadleaved	Total
	'000m^3	'000m^3	kt	kt	kt
1970-71	118.2	na	na	na	na
1971-72	122.2	na	na	na	na
1972-73	97.1	na	na	na	na
1973-74	102.1	na	na	na	na
1974-75	37.2	na	na	na	na
1975-76	46.4	na	na	na	na
1976-77	32.2	na	na	na	na
1977-78	27.6	na	na	na	1 540
1978-79	17.0	na	na	na	1 777
1979-80	0.6	na	na	na	2 213
1980-81	0.1	na	na	na	2 110
1981-82	1.7	na	na	na	1 910
1982-83	1.7	na	na	na	1 898
1983-84	0.5	na	na	na	2 222
1984-85	0.5	na	na	na	2 283
1985-86	1.0	na	na	na	2 224
1986-87	1.0	na	na	na	2 477
1987-88	1.0	na	na	na	2 749
1988-89	2.9	8.4	110	2 787	2 897
1989-90	6.3	16.3	122	2 475	2 597
1990-91	0.5	79.6	118	2 687	2 804
1991-92	0.3	86.3	317	2 454	2 770
1992-93	1.6	242.0	384	2 458	2 843
1993-94	6.1	420.7	503	2 530	3 033
1994-95	2.1	286.7	857	2 870	3 728
1995-96	1.6	351.1	820	2 531	3 351
1996-97	1.1	615.5	852	2 471	3 323
1997-98	6.1	391.0	1 045	3 270	4 315
1998-99	5.7	778.4	1 033	2 852	3 885
1999-00	2.3	1 149.8	1 046	3 582	4 628
2000-01	1.3	1 097.6	1 100	3 894	4 994
2001-02	0.9	1 192.4	849	3 872	4 721
2002-03	2.3	1 198.9	995	4 442	5 437
2003-04	1.7	1 335.1	1 099	4 165	5 264
2004-05	1.4	806.5	1 104	4 494	5 598
2005-06	0.6	863.6	989	4 374	5 363
2006-07	5.0	1 171.4	1 072	4 880	5 952
2007-08	0.7	1 044.9	1 133	5 033	6 166
2008-09	1.4	986.4	964	4 291	5 255

a Includes saw logs and pulp logs. **b** Bone dry tonnes. **na** Not available.
Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

145 Summary of Australian statistics for grapes and grape products

	Grape production	Grape use: Wine making	Grape use: Drying and table	Australian wine: Domestic sales	Australian wine: Sales per person	Production of dried vine fruit	Exports of dried vine fruit
	kt	kt	kt	ML	L	kt	kt
1963-64	665.3	214.3	451.0	60.9	5.5	106.0	64.0
1964-65	690.5	225.4	465.1	63.0	5.5	109.6	70.9
1965-66	591.5	186.7	404.8	69.7	6.0	92.4	82.1
1966-67	694.7	241.5	453.2	79.8	6.8	108.4	69.0
1967-68	638.6	253.4	385.2	90.1	7.5	86.4	68.5
1968-69	553.4	299.6	253.8	100.2	8.2	55.6	62.4
1969-70	757.6	357.7	399.9	110.9	8.9	94.3	44.1
1970-71	548.0	293.6	254.4	110.5	8.5	60.4	59.9
1971-72	827.0	345.4	481.6	115.7	8.7	103.4	56.3
1972-73	606.3	330.5	275.8	130.0	9.6	57.0	72.6
1973-74	555.2	344.0	211.2	148.1	10.8	56.9	26.9
1974-75	733.6	432.5	301.1	168.0	12.1	66.9	31.6
1975-76	714.6	413.1	301.5	177.3	12.6	70.3	53.2
1976-77	728.4	458.3	270.1	187.0	13.2	64.5	44.2
1977-78	726.7	423.7	303.0	197.4	13.7	68.7	35.9
1978-79	760.4	466.1	294.3	231.1	15.9	61.8	46.1
1979-80	914.0	503.2	410.8	247.4	16.8	98.6	61.8
1980-81	754.8	486.8	268.0	264.9	17.7	60.2	52.1
1981-82	942.9	499.9	443.0	278.3	18.3	96.2	39.9
1982-83	807.3	431.3	376.0	293.7	19.1	84.5	58.1
1983-84	881.1	495.1	386.0	305.8	19.6	86.7	58.3
1984-85	890.0	559.0	331.0	320.5	20.3	77.0	56.0
1985-86	906.6	509.9	396.7	325.2	20.3	100.9	54.0
1986-87	859.2	523.5	335.7	329.8	20.3	69.8	58.2
1987-88	864.4	498.0	366.4	330.5	20.0	78.8	42.0
1988-89	977.1	640.6	336.5	309.1	18.4	64.4	51.9
1989-90	936.1	602.6	333.5	300.6	17.6	65.0	38.8
1990-91	940.0	539.0	401.0	296.3	17.1	88.7	36.4
1991-92	1 111.5	635.2	476.3	314.8	18.0	101.9	44.5
1992-93	909.5	626.2	283.3	312.1	17.7	45.4	55.1
1993-94	1 080.8	777.4	303.4	319.5	17.9	50.4	41.2
1994-95	939.7	629.8	309.8	316.3	17.5	53.5	14.7
1995-96	1 095.4	883.3	212.0	307.5	16.8	37.7	15.2
1996-97	1 161.0	798.0	363.0	332.8	18.0	69.3	25.3
1997-98	1 146.7	950.8	196.0	338.8	18.1	29.0	12.3
1998-99	1 293.8	1 101.0	192.8	348.3	18.4	44.0	13.7
1999-00	1 338.5	1 129.0	209.5	369.3	19.3	31.0	4.9
2000-01	1 590.7	1 421.9	168.8	384.8	19.8	16.7	6.4
2001-02	1 833.4	1 606.3	227.1	385.3	19.6	34.0	5.9
2002-03	1 578.7	1 411.4	167.3	402.5	20.2	17.0	9.7
2003-04	2 115.4	1 917.0	198.4	417.4	20.7	27.0	6.8
2004-05	2 133.1	1 925.0	208.1	430.1	21.1	28.5	6.6
2005-06	2 101.5	1 902.0	199.5	432.4	20.9	28.3	7.3
2006-07	1 557.1	1 397.4	159.7	446.5	21.2	17.4	6.8
2007-08	1 956.8	1 837.0	119.8	427.5	19.9	11.0	4.9
2008-09	na	1 683.6	na	430.7	19.7	17.0	4.3

Sources: ABS, *Australian Wine and Grape Industry,* cat. no. 1329.0, Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Sales of Australian Wine and Brandy by Winemakers,* cat. no. 8504.0, Canberra; ABS, Vineyards Survey; Australian Dried Fruits Corporation, *Annual Report,* Melbourne; Australian Dried Fruits Board, *Annual Report,* Melbourne; Australian Dried Fruits Association, Mildura; ABARE.

146 Australian wine exports, by type and major destination

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Type								
Table wine	ML	498.16	568.74	646.73	719.92	779.87	689.22	733.41
Red	ML	307.09	364.09	417.97	454.82	497.33	446.13	441.51
White	ML	191.07	204.65	228.76	265.11	282.54	243.10	291.90
Sparkling wine	ML	7.24	9.23	11.26	13.39	15.45	16.54	14.94
Fortified wine	ML	1.79	2.11	1.89	1.85	1.80	1.66	1.41
Other wine	ML	0.77	0.66	0.96	0.56	0.93	1.15	0.59
Total	ML	507.96	580.74	660.83	735.72	798.04	708.58	750.34
Major destination								
Canada	$m	174.0	205.1	247.4	249.2	266.8	259.9	214.0
China	$m	3.4	5.9	9.9	20.8	49.0	61.8	93.8
Germany	$m	58.0	70.9	71.7	75.6	65.6	49.3	51.4
Hong Kong, China	$m	15.0	17.9	20.0	25.1	26.4	33.8	43.1
Ireland	$m	39.7	49.4	54.0	54.0	68.7	69.9	46.3
Japan	$m	31.7	35.7	48.7	44.1	49.0	48.7	52.3
Netherlands	$m	38.6	39.3	45.9	45.3	65.3	71.1	57.4
New Zealand	$m	99.0	98.0	94.0	92.2	101.8	85.9	76.0
Singapore	$m	23.2	30.7	33.1	37.6	42.9	46.0	41.3
Sweden	$m	33.6	39.2	36.2	49.6	51.1	41.0	40.0
Switzerland	$m	36.0	23.9	19.6	19.1	18.1	15.6	14.9
Thailand	$m	4.4	5.2	7.7	7.8	10.4	13.3	12.0
United Kingdom	$m	859.4	860.3	967.0	960.5	976.3	888.1	723.3
United States	$m	827.9	905.4	896.7	901.3	956.1	745.5	741.2
Other	$m	142.1	158.2	196.4	216.8	242.5	253.4	221.4
Value	$m	2 385.9	2 545.0	2 748.2	2 799.0	2 989.9	2 683.2	2 428.4
Unit value	$/L	4.70	4.38	4.16	3.80	3.75	3.79	3.24

Sources: ABS, *Sales of Australian Wine and Brandy by Winemakers,* cat. no. 8504.0, Canberra; Australian Wine Export Council, *Wine Export Approval Report,* Adelaide.

147 Australian domestic wine sales and imports, by type [a]

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	ML	ML	ML	ML	ML	ML	ML
Table wine	344.47	355.04	364.84	366.80	380.67	362.00	364.13
Red	142.84	147.07	155.49	154.24	162.11	155.19	159.55
White	201.63	207.96	209.35	212.56	218.57	206.81	204.58
Sparkling wine	31.62	34.68	38.40	39.79	39.88	36.59	36.52
Bottle fermented	22.99	21.56	22.99	23.13	23.27	21.66	20.77
Bulk fermented	8.63	13.12	15.41	16.66	16.62	14.94	15.75
Carbonated wine	2.80	3.47	4.21	4.25	5.43	8.48	9.73
Total unfortified wine	378.89	393.19	407.44	410.83	425.98	407.08	410.37
Total fortified wine	20.84	21.20	19.93	18.51	17.39	17.18	16.28
Vermouth and other wine	2.75	2.99	2.76	3.03	3.12	3.26	4.09
Total domestic sales	402.48	417.38	430.13	432.37	446.49	427.52	430.74
Total wine	419.60	436.16	452.27	459.54	480.75	481.84	492.97
Wine imports							
Table wine	11.58	11.87	14.78	19.60	25.48	43.58	50.61
Sparkling wine	3.85	4.78	5.19	5.92	7.00	8.27	9.59
Fortified wine	0.19	0.73	0.25	0.13	0.12	0.16	0.19
Other	1.50	1.40	1.92	1.51	1.66	2.31	1.84
Total	17.11	18.74	22.14	27.17	34.26	54.32	62.23

a Covers wine produced by winemakers with sales of 250 000 litres or more in the previous financial year.
Sources: ABS, *Sales of Australian Wine and Brandy by Winemakers,* cat. no. 8504.0, Canberra.

148 Australian wine grape production and prices

	Unit	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bearing area	'000 ha	146	153	158	163	166	157 **a**
Wine grape production							
Red wine	kt	1 106.1	1 064.5	1 047.0	674.2	984.1	888.0
White wine	kt	690.1	768.1	786.0	658.0	796.3	795.6
Multipurpose	kt	120.8	92.4	69.0	65.2	56.6	0.0
Total	kt	1 917.0	1 925.0	1 902.0	1 397.4	1 837.0	1 683.6
Exports							
Wine	ML	580.7	660.8	735.7	798.0	708.6	750.3
– value	A$m	2 545.0	2 748.2	2 799.0	2 989.9	2 683.2	2 428.4
Australian weighted average wine grape price							
Cool climate	A$/t	1 246	1 132	1 011	1 156	1 243	1 011
Warm climate	A$/t	536	474	379	389	546	369

a This figure is for wine grapes only. Prior to 2008-09 this figure includes grapes used for winemaking and other purposes such as drying and table. **na** Not available.
Sources: ABS, *Australian Wine and Grape Industry,* cat. no. 1329.0, Canberra; ABS, *Sales of Australian Wine and Brandy by Winemakers,* cat. no. 8504.0, Canberra; Phylloxera and Grape Industry Board of South Australia, Adelaide; ABS, *Vineyards Survey;* Australian Wine Export Council, *Wine Export Annual Report;* Australian Regional Winegrape Crush Survey; ABARE.

149 Retail price indexes for alcoholic beverages a

	Beer	Wine	Spirits	Consumer price index b
1981-82	51.1	60.5	51.2	54.6
1982-83	58.2	65.8	55.6	60.9
1983-84	63.8	70.7	59.7	65.0
1984-85	69.0	75.6	63.7	67.8
1985-86	75.1	77.7	69.8	73.5
1986-87	82.8	83.9	77.1	80.4
1987-88	90.4	89.0	84.1	86.3
1988-89	91.9	96.0	91.4	92.6
1989-90	100.0	100.0	100.0	100.0
1990-91	107.0	100.9	110.6	105.3
1991-92	112.0	103.7	117.3	107.3
1992-93	115.2	105.6	119.3	108.4
1993-94	119.1	110.4	122.4	110.4
1994-95	122.7	116.0	126.4	113.9
1995-96	129.4	122.0	130.0	118.7
1996-97	132.9	124.3	134.6	120.3
1997-98	103.9	128.6	134.2	120.3
1998-99	135.9	130.3	136.6	121.8
1999-00	138.8	130.7	138.5	124.7
2000-01	151.2	137.8	147.3	132.2
2001-02	155.3	141.8	151.8	136.0
2002-03	161.6	143.2	157.2	140.2
2003-04	172.8	146.6	161.4	143.5
2004-05	180.4	148.2	165.0	147.0
2005-06	188.9	150.3	171.3	151.7
2006-07	197.9	148.8	179.0	156.1
2007-08	207.8	153.3	195.5	161.4
2008-09	216.7	152.3	213.1	166.4

a Weighted average for eight capital cities. **b** Base: 1989-90 = 100.
Source: ABS, *Consumer Price Index,* cat. no. 6401.0, Canberra.

150 Production and trade of Australian dried vine fruit

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Production									
Dried weight	kt	34	17	27	29	28	17	11	17
Gross value	$m	na	na	na	na	35	22	19	28
Gross unit value a	$/t	na	na	na	na	1 232.0	1 286.0	1 752.0	1 640.7
Exports									
Volume	kt	6	10	7	7	7	7	5	4
Value	$m	14	20	15	15	18	16	13	15

a Weighted average based on realisations by Australian Dried Fruits Association packers (who pack over 90 per cent of Australian dried vine fruit) before deduction of packers' costs and charges. **na** Not available.
Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Vineyard Estimates, Cat. no. 1329.0,* Canberra; Australian Dried Fruits Association, Mildura.

151 Production and export of Australian citrus, by variety

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Navel oranges									
Production	kt	178	296	208	225	256	246	236	na
Exports **a**	kt	86.83	101.12	67.09	80.87	102.88	98.19	99.40	83.48
– value	$'000	110 405	119 165	84 646	94 458	111 674	112 990	118 027	98 227
Valencia oranges									
Production	kt	236	337	199	228	302	224	194	na
Exports **a**	kt	47.77	32.14	25.94	29.18	35.68	28.61	13.97	23.01
– value	$'000	40 820	25 761	21 670	23 591	24 370	25 086	12 710	21 254
Mandarins									
Production	kt	78	98	97	121	103	108	106	na
Exports **a**	kt	23.56	29.63	28.58	27.37	22.76	18.22	20.51	23.25
– value	$'000	40 023	49 206	43 284	40 594	34 837	28 782	33 619	34 486
Lemons and limes									
Production	kt	31	38	31	36	38	30	29	na
Exports **a**	kt	3.58	4.05	1.83	0.91	0.63	0.16	1.19	0.57
– value	$'000	5 696	6 081	2 340	1 109	602	373	1 605	1 064
Grapefruit									
Production	kt	14	12	10	11	13	13	10	na
Exports **a**	kt	0.31	0.34	0.54	0.29	0.37	0.57	0.41	0.93
– value	$'000	462	559	649	325	377	627	407	1 145

a Fresh and dried.

Sources: ABS; Australian Citrus Growers Incorporated; Australian Horticultural Corporation, *Australian Horticultural Handbook,* Sydney.

152 Summary of Australian statistics for fruit and vegetables

	Fruit			Vegetables		
	Production $m a	Exports $m	Imports $m	Production $m a	Exports $m	Imports $m
1981-82	593	na	na	554	na	na
1982-83	632	na	na	557	na	na
1983-84	655	na	na	739	na	na
1984-85	797	na	na	629	na	na
1985-86	837	na	na	714	na	na
1986-87	926	na	na	868	na	na
1987-88	1 004	na	na	928	na	na
1988-89	1 098	340	228	1 165	180	183
1989-90	1 176	325	223	1 328	185	249
1990-91	1 267	403	215	1 285	197	219
1991-92	1 599	456	290	1 290	236	238
1992-93	1 572	499	269	1 249	296	272
1993-94	1 478	501	290	1 444	349	305
1994-95	1 579	508	317	1 492	345	298
1995-96	1 709	571	362	1 616	384	309
1996-97	1 857	640	372	1 662	390	311
1997-98	1 819	625	391	1 812	403	338
1998-99	1 990	645	461	1 864	443	373
1999-00	1 976	670	473	2 004	453	374
2000-01	2 253	745	481	2 183	509	410
2001-02	2 333	857	506	2 269	586	451
2002-03	2 408	830	565	2 258	439	497
2003-04	2 350	690	587	2 380	399	527
2004-05	2 767	791	704	2 315	340	512
2005-06	2 834	829	741	2 833	365	528
2006-07	3 739	774	846	3 103	410	621
2007-08	2 951	760	928	3 363	384	731
2008-09	2 907 s	898	991	3 430 s	397	842

a Gross value of production. **s** ABARE estimate. **na** Not available.

Source: ABS, *Agricultural Commodities Australia, cat. no. 7121.0,* Canberra; ABS, *Value of Principal Agricultural Commodities Produced, cat. no. 7501.0,* Canberra; *Value of Agricultural Commodities Produced, cat. no. 7503.0,* Canberra.

153 Summary of Australian statistics for meat a

	Cattle numbers b	Sheep numbers b	Total red meat production c	Total red meat exports d	Total domestic consumption	Apparent consumption per person: Beef and veal e	Lamb and mutton	Pig meat	Poultry meat
	million	million	kt	kt	kt	kg	kg	kg	kg
1968	18.65	166.9	1 720	598	1 088	41.3	40.7	10.8	9.0
1969	20.02	168.9	1 850	785	1 136	38.6	37.5	11.3	10.5
1970	21.55	174.3	1 955	775	1 120	39.6	36.4	13.6	10.4
1971	23.73	171.7	2 148	924	1 263	40.3	43.6	13.8	11.1
1972	26.70	155.4	2 283	1 168	1 240	40.4	39.2	14.6	12.3
1973	28.44	134.1	2 269	1 154	1 163	43.6	27.5	16.0	13.0
1974	30.16	139.5	1 945	665	1 278	55.0	25.6	13.1	13.4
1975	32.04	145.8	2 364	1 001	1 415	62.0	23.7	11.7	13.4
1976	32.67	144.1	2 670	1 204	1 421	66.4	21.1	12.1	14.4
1977	30.95	131.3	2 889	1 420	1 440	70.3	19.4	13.0	15.6
1978	28.63	127.5	2 824	1 449	1 370	65.9	17.0	13.3	16.6
1979	26.41	130.5	2 513	1 334	1 229	50.4	21.0	13.5	18.7
1980	25.52	132.7	2 311	1 159	1 180	45.3	19.8	15.5	20.1
1981	25.17	131.4	2 172	939	1 232	47.6	19.0	15.3	20.2
1982	24.55	135.0	2 473	1 184	1 294	49.3	20.4	14.8	19.4
1983	22.48	130.5	2 131	948	1 218	42.3	20.5	15.9	20.2
1984	22.16	135.1	2 003	709	1 301	44.3	22.1	16.4	19.8
1985	22.78	145.7	2 162	859	1 288	40.1	24.4	16.7	21.6
1986	23.44	150.4	2 341	1 032	1 306	41.4	22.5	17.2	22.8
1987	23.67	153.2	2 452	1 131	1 314	39.9	23.0	17.3	23.2
1988	23.52	156.5	2 404	1 079	1 335	41.2	21.3	17.5	23.5
1989	24.03	164.9	2 465	1 054	1 420	43.2	23.0	17.7	23.8
1990	24.86	173.8	2 705	1 318	1 368	40.1	21.3	18.3	24.6
1991	25.37	166.6	2 739	1 380	1 386	39.5	21.8	18.4	25.0
1992	25.33	151.0	2 827	1 490	1 349	37.2	20.2	19.3	25.0
1993	25.18	140.5	2 805	1 460	1 345	37.0	19.7	19.0	26.4
1994	25.76	132.6	2 863	1 475	1 429	38.8	20.8	20.0	27.3
1995	25.74	120.9	2 656	1 365	1 306	35.0	17.0	19.8	26.7
1996	26.38	121.1	2 634	1 289	1 369	39.3	16.6	18.4	27.5
1997	26.69	120.2	2 883	1 479	1 432	41.3	16.9	18.8	29.0
1998	26.85	117.5	2 973	1 590	1 406	38.3	17.0	19.3	30.8
1999	26.58	115.5	2 982	1 628	1 397	37.9	16.3	19.2	31.0
2000	27.59	118.6	3 132	1 745	1 461	37.7	18.3	19.8	32.9
2001	27.72	110.9	3 136	1 835	1 367	34.5	16.7	18.8	32.3
2002	27.87	106.2	3 131	1 787	1 441	36.9	15.4	20.7	35.8
2003	26.66	99.3	2 960	1 608	1 468	37.7	13.5	22.1	34.6
2004	27.47	101.3	3 081	1 728	1 476	37.6	13.0	22.3	36.2
2005	28.18	100.6	3 097	1 758	1 509	36.7	13.0	23.8	37.7
2006	28.39	91.0	3 240	1 855	1 559	38.0	13.9	23.4	39.3
2007	28.04	85.7	3 258	1 829	1 651	37.9	14.8	25.9	38.9
2008	27.32	76.9	3 179	1 847	1 566	35.1	13.6	24.7	37.4

a Data up to 1970 are on a financial year (July–June) basis (1970 = 1970-71). **b** Before 1987, includes livestock holdings on establishments with an estimated value of agricultural operations (EVAO) of $2 500 or more. From 1987, the EVAO was raised to $5 000. **c** Beef and veal, mutton and lamb and pig meat production, expressed in carcass weight. **d** Before 1970, the exportable surplus of meat was derived by subtracting consumption from production, expressed in carcass weight. **e** Includes canned beef and veal before 1976. **na** Not available.

Sources: ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABS, *Livestock Products, Australia,* cat. no. 7215.0, Canberra; Department of Agriculture, Fisheries and Forestry, *Export Statistics,* Canberra; ABARE.

154 Australian saleyard prices of livestock [a]

	Yearling	Ox	Cow	Weighted average	Lamb	Mutton	Pig
	c/kg	c/kg	c/kg	c/kg	c/kg	c/kg	c/kg
1983	166.8	157.5	136.9	150.5	108.6	45.3	162.4
1984	194.5	164.1	149.4	166.8	113.1	48.5	171.1
1985	193.0	173.8	155.6	171.3	89.1	35.8	176.9
1986	197.5	183.2	155.2	174.3	116.1	34.8	182.2
1987	207.6	196.3	167.3	186.7	128.5	43.0	186.3
1988	232.4	210.2	179.9	203.6	132.3	61.7	201.0
1989	245.8	213.5	185.1	212.6	137.7	45.4	222.1
1990	247.4	219.2	183.3	213.4	137.0	16.5	201.4
1991	229.5	219.6	176.2	202.1	120.6	11.2	214.3
1992	226.7	225.4	174.2	200.3	131.4	28.9	196.1
1993	244.9	250.1	184.8	218.6	185.4	34.3	213.0
1994	257.8	243.9	187.0	222.6	146.3	34.1	202.3
1995	238.3	216.9	169.2	201.8	187.3	68.4	218.1
1996	185.4	163.2	129.9	155.3	237.4	67.7	247.4
1997	190.0	184.7	135.3	162.6	205.6	75.2	218.6
1998	208.2	203.3	158.3	181.0	179.4	79.3	179.9
1999	233.1	215.4	183.5	204.3	208.5	61.7	216.0
2000	261.8	246.1	219.7	237.1	170.1	71.8	249.1
2001	331.0	315.5	289.4	307.2	262.4	145.8	276.2
2002	289.3	275.4	235.3	259.1	327.5	169.7	260.3
2003	318.7	309.3	249.9	281.3	388.0	204.3	232.7
2004	343.7	324.0	281.1	309.1	375.8	182.2	229.4
2005	367.6	329.0	285.2	320.7	348.3	169.4	233.5
2006	340.7	324.4	267.5	303.4	325.7	139.9	245.9
2007	324.1	311.8	253.8	287.3	322.1	153.3	243.4
2008	332.8	318.6	267.8	297.5	385.0	173.6	276.7
2008							
January	320.8	303.8	249.1	281.2	350.9	157.0	252.6
February	334.6	304.0	257.7	288.9	365.2	166.5	248.0
March	327.5	295.7	247.2	281.3	346.1	167.5	244.9
April	324.3	304.5	252.2	284.6	339.6	173.5	243.3
May	321.5	304.1	250.3	281.0	362.1	182.9	242.2
June	333.2	315.8	261.0	292.2	432.5	197.0	246.8
July	340.3	329.5	271.5	303.8	454.3	200.4	258.8
August	347.0	342.7	284.6	316.3	449.3	189.0	272.6
September	351.6	355.7	297.3	327.7	417.1	180.5	290.8
October	344.0	341.4	288.5	317.0	346.9	149.0	315.2
November	326.5	312.0	275.3	297.9	348.0	152.8	345.4
December	322.3	313.8	278.7	298.7	407.8	167.8	359.6
2009							
January	319.0	302.4	258.3	284.2	410.8	178.0	366.1
February	307.4	287.4	252.7	274.9	409.1	183.1	364.7
March	318.8	301.5	256.1	283.5	430.6	203.9	361.7
April	324.5	292.2	252.3	278.5	447.7	227.9	358.5
May	322.9	293.2	250.5	278.0	464.7	253.9	342.7
June	332.7	309.3	260.4	284.0	502.3	298.4	322.5

a Prices are on an estimated dressed weight basis and, with the exception of 'yearling', are for export quality stock: ox, 320–400 kilograms; cow, 200–240 kilograms; before January 1996, lamb,16–18 kilograms, score 3; from January 1996, lamb, 18–20 kilograms, score 3; mutton, 18–24 kilograms, score 3, from July 2003, trade lamb, 18-22 kilograms, score 2-4, mutton, 18-24 kilograms, score 2-3, from June 2006, trade lamb 18-22 kilograms, score 2-4, mutton 18-24 kilograms, score 2-3; and pig, 60–75 kilograms. Quotation is the monthly average of fat stock prices in each major state market, weighted by the monthly production of each meat in the respective states.

Sources: Meat and Livestock Australia, *Meat the Market, Sydney;* National Livestock Reporting Service; Meat and Livestock Australia, *Meat and Livestock Weekly;* ABARE.

155 Australian retail prices of meat

	Beef a	Lamb a	Pork a	Chicken b
	c/kg	c/kg	c/kg	c/kg
1986	708.3	433.1	556.9	427.2
1987	747.0	481.6	586.6	449.2
1988	814.4	519.6	621.9	463.6
1989	908.9	554.4	679.9	504.8
1990	961.6	582.6	700.2	502.6
1991	974.0	570.7	710.0	479.7
1992	963.7	551.8	698.7	456.0
1993	963.7	620.8	716.7	448.2
1994	997.4	611.0	719.6	422.6
1995	1 008.0	655.0	732.2	453.5
1996	991.0	708.8	771.7	481.3
1997	978.0	704.7	798.1	494.2
1998	982.3	696.1	773.7	484.6
1999	1 010.8	723.3	807.7	490.0
2000	1 061.0	724.3	850.1	477.7
2001	1 226.2	857.8	945.6	496.9
2002	1 320.7	982.8	1 024.8	503.4
2003	1 367.4	1 097.2	1 021.3	509.1
2004	1 400.3	1 159.2	1 025.5	533.8
2005	1 506.4	1 189.0	1 140.5	510.0
2006	1 551.9	1 225.9	1 168.3	490.0
2007	1 532.8	1 214.0	1 194.6	505.7
2008	1 579.5	1 276.7	1 261.2	550.8
2005				
March	1 474.3	1 171.7	1 095.4	527.5
June	1 509.2	1 157.3	1 156.7	511.7
September	1 506.4	1 228.9	1 173.4	502.0
December	1 535.6	1 198.0	1 136.5	498.9
2006				
March	1 551.6	1 204.3	1 175.5	493.3
June	1 564.8	1 231.8	1 144.8	496.9
September	1 560.1	1 238.1	1 172.0	485.7
December	1 530.9	1 229.5	1 181.0	484.1
2007				
March	1 515.8	1 191.1	1 212.4	494.3
June	1 545.0	1 220.9	1 183.8	497.4
September	1 538.5	1 222.1	1 173.4	505.1
December	1 531.9	1 222.1	1 208.9	526.0
2008				
March	1 579.0	1 249.0	1 236.0	551.5
June	1 571.4	1 272.4	1 263.2	552.0
September	1 572.4	1 277.0	1 258.3	548.5
December	1 595.0	1 308.5	1 287.5	551.0
2009				
March	1 627.1	1 389.8	1 388.4	553.6
June	1 620.5	1 401.9	1 372.4	541.8

a Price estimates are formed by indexing forward from actual average prices of beef, lamb and pork during December quarter 1973, based on meat subgroup indexes of the consumer price index. These indexes are based on average retail prices of selected cuts (weighted by expenditure) in state capitals. **b** Price estimates are formed by indexing from the December quarter 2007 price for fresh whole chickens.

Source: ABS, *Consumer Price Index,* cat. no. 6401.0, Canberra; ABS, *Average Retail Prices of Selected Items,* cat. no. 6403.0, Canberra.

156 Prices for Australian meat on principal overseas markets

	Beef				Mutton	Lamb	
	United States		Japan a		Japan a	United Arab Emirates a	United States a
	Boneless frozen b	Boneless frozen b	Boneless frozen	Boneless chilled	Boneless chilled c	Carcasses frozen	Carcasses frozen
	USc/kg cif	Ac/kg fas	Ac/kg fob	Ac/kg fob	Ac/kg fob	Ac/kg fob	Ac/kg fob
1984	226.0	222.0	273.0	352.0	170.0	167.0	na
1985	212.0	260.0	305.0	397.0	172.0	160.0	na
1986	201.0	262.0	308.0	439.0	159.0	166.0	na
1987	229.0	283.0	341.0	464.0	186.0	184.0	na
1988	245.0	270.0	336.7	477.0	172.8	188.9	238.3
1989	270.7	295.0	339.4	527.3	189.7	186.3	231.3
1990	266.5	301.0	366.8	523.5	241.2	176.9	223.2
1991	265.5	304.4	344.2	571.5	190.3	199.2	229.1
1992	247.5	301.4	335.8	567.6	246.4	239.2	244.8
1993	265.2	354.9	318.7	585.2	283.8	213.3	299.8
1994	239.3	297.7	308.9	576.4	270.8	192.5	259.6
1995	194.5	227.8	269.5	582.1	310.0	213.1	277.0
1996	173.9	187.9	228.2	473.3	298.2	217.3	327.6
1997	188.2	218.4	236.7	486.8	263.4	234.4	351.4
1998	175.5	244.3	253.9	523.9	324.9	249.2	398.8
1999	186.0	259.7	270.9	540.7	344.5	222.8	374.2
2000	195.4	308.8	311.9	566.5	559.7	272.9	380.5
2001	214.4	384.0	374.6	650.3	717.8	290.6	472.9
2002	218.4	368.9	339.7	636.5	782.5	320.4	548.6
2003	211.9	291.0	315.1	645.2	728.6	322.2	505.0
2004	272.6	339.3	378.4	710.5	766.5	349.6	539.5
2005	281.9	336.4	367.0	708.5	519.0	362.1	547.5
2006	277.2	332.8	350.4	703.8	703.9	331.2	532.1
2007	281.1	302.5	319.9	668.9	925.9	315.7	512.8
2008	329.1	338.8	367.3	775.6	883.5	325.7	618.7
2007							
March	281.5	321.0	340.1	695.3	981.3	309.2	435.7
June	279.0	300.2	330.3	653.3	995.1	330.8	522.4
September	283.6	303.9	308.4	657.9	975.6	333.5	549.9
December	280.3	284.8	300.9	669.2	751.5	289.4	543.1
2008							
March	301.5	303.3	309.9	739.4	785.1	292.7	667.1
June	346.6	338.8	333.2	744.0	826.2	325.7	576.1
September	385.8	404.1	397.5	768.1	800.5	335.9	510.6
December	282.5	388.8	428.6	850.8	1122.3	348.5	721.0
2009							
March	265.6	362.7	395.7	756.5	535.5	385.0	822.5
June	282.0	336.0	356.5	682.9	949.1	384.5	761.0

a Average unit value of exports. **b** Beef that is 90 per cent chemical lean. **c** Fresh, chilled. Before and including 1987, figures are for the financial year ending June of the year quoted, from 1988 figures are for the calendar year ending December. **na** Not available.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Meat and Livestock Australia, *Meat the Market*, Sydney.

157 Australian exports of meat, by product a

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity									
Beef and veal **b**	kt	902	902	860	948	892	974	930	968
Mutton **b**	kt	159	152	120	137	145	162	158	146
Lamb **b**	kt	109	98	112	123	143	150	163	156
Pig meat **b**	kt	59	63	51	43	44	41	39	32
Poultry meat **b**	kt	21	23	20	20	22	28	30	37
Live sheep **c**	'000	6 443	5 843	3 843	3 233	4 248	4 138	4 069	4 064
Live cattle **c**	'000	797	977	581	574	549	638	713	856
Value d									
Beef and veal **e**	$m	4 189	3 756	3 793	4 584	4 272	4 634	4 190	4 857
Mutton **e**	$m	492	442	380	398	432	458	443	482
Lamb **e**	$m	577	533	602	673	767	748	803	925
Pig meat	$m	265	256	181	150	143	142	128	124
Poultry meat	$m	26	22	20	20	21	26	32	43
Live sheep **c**	$m	392	408	266	207	291	289	286	339
Live cattle **c**	$m	526	569	318	374	358	437	451	559
Total	$m	6 467	5 987	5 560	6 405	6 284	6 734	6 333	7 329
Unit value d									
Beef and veal	$/kg	4.65	4.16	4.41	4.83	4.79	4.76	4.51	5.01
Mutton	$/kg	3.09	2.92	3.16	2.93	2.98	2.84	2.81	3.28
Lamb	$/kg	5.29	5.44	5.36	5.47	5.36	4.98	4.94	5.94
Pig meat	$/kg	4.50	4.07	3.58	3.44	3.24	3.45	3.27	3.84
Poultry meat	$/kg	1.23	0.95	0.98	1.01	0.97	0.93	1.06	1.15
Live sheep	$/head	60.79	69.87	69.34	63.92	68.61	69.77	70.40	83.44
Live cattle	$/head	664.48	582.90	549.85	652.47	659.60	694.67	635.27	653.25

a Excludes re-exports and ships' stores. **b** Fresh, chilled and frozen; shipped weight. **c** Excludes animals for breeding. **d** fob. **e** Based on quantity data from DAFF and export price data from the ABS.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Agriculture, Fisheries and Forestry, *Export Statistics,* Canberra; ABARE.

158 Summary of world statistics for livestock

	Livestock numbers		Production			
	Cattle	Sheep	Beef and veal	Mutton and lamb	Pig meat	Poultry meat
	million	million	Mt	Mt	Mt	Mt
1962	959	999	29.2	5.1	26.1	9.2
1963	972	1 002	30.9	5.1	28.0	9.8
1964	989	1 015	31.3	5.0	28.7	10.1
1965	1 010	1 033	31.9	5.1	31.3	11.0
1966	1 029	1 042	33.6	5.1	32.4	11.7
1967	1 051	1 061	35.3	5.3	33.9	12.4
1968	1 066	1 075	37.0	5.5	34.4	12.8
1969	1 071	1 081	37.9	5.4	34.1	13.7
1970	1 083	1 064	38.4	5.6	35.8	15.1
1971	1 098	1 067	38.1	5.7	39.4	15.7
1972	1 120	1 038	38.6	5.7	40.6	16.8
1973	1 139	1 017	38.8	5.4	40.5	17.6
1974	1 167	1 030	41.9	5.2	42.4	18.3
1975	1 188	1 049	43.7	5.3	41.7	18.7
1976	1 200	1 049	46.1	5.3	40.8	20.0
1977	1 205	1 039	46.5	5.4	43.0	21.2
1978	1 206	1 051	47.0	5.4	45.6	22.7
1979	1 211	1 070	45.8	5.4	50.1	24.6
1980	1 217	1 099	45.6	5.6	52.7	26.0
1981	1 228	1 114	45.9	5.9	53.0	27.5
1982	1 242	1 133	45.9	5.9	53.2	28.5
1983	1 249	1 128	47.1	6.1	55.5	29.2
1984	1 255	1 121	48.5	6.1	57.5	29.8
1985	1 260	1 121	49.3	6.2	60.0	31.2
1986	1 267	1 128	51.0	6.2	61.5	33.3
1987	1 267	1 144	50.9	6.3	63.6	35.9
1988	1 273	1 165	51.4	6.6	67.1	37.7
1989	1 290	1 200	51.7	6.8	68.2	38.6
1990	1 298	1 207	53.4	7.0	69.9	41.0
1991	1 298	1 183	53.9	7.1	71.9	43.1
1992	1 304	1 160	53.1	7.0	74.1	45.5
1993	1 305	1 119	52.6	7.1	76.5	48.1
1994	1 316	1 108	53.4	7.2	79.2	50.8
1995	1 325	1 072	54.2	7.2	80.1	54.6
1996	1 319	1 058	54.7	7.0	79.4	56.3
1997	1 310	1 040	55.4	7.2	83.1	59.7
1998	1 309	1 043	55.3	7.3	88.4	62.3
1999	1 312	1 050	56.3	7.3	89.3	65.2
2000	1 313	1 030	56.9	7.6	90.1	69.1
2001	1 320	1 023	56.1	7.6	92.0	71.9
2002	1 334	1 035	57.7	7.7	95.0	74.9
2003	1 350	1 062	58.4	7.8	98.2	76.6
2004	1 362	1 089	59.6	8.2	100.1	80.2
2005	1 373	1 092	60.9	8.5	103.5	83.9
2006	1 382	1 105	61.0	8.7	106.4	85.3
2007	1 390	1 113	61.9	8.9	115.5	86.8
2008	na	na	na	na	na	na

na Not available.

Sources: FAO, *FAOSTAT Agriculture Database*, Rome.

159 Summary of US meat statistics

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Cattle numbers a	million	97.3	96.7	96.1	94.9	95.4	96.3	96.6	96.0
Beef and veal b									
Production c	kt	11 983	12 427	12 039	11 261	11 318	11 980	12 163	12 163
Imports	kt	1 435	1 459	1 363	1 669	1 632	1 399	1 384	1 151
Exports and shipments	kt	1 029	1 110	1 142	209	316	519	650	856
Total consumption	kt	12 351	12 737	12 340	12 667	12 664	12 833	12 829	12 452
Consumption per person	kg	43.3	44.3	42.5	43.2	42.8	43.0	42.6	41.0
Pork b									
Production c	kt	8 691	8 929	9 056	9 312	9 392	9 559	9 962	10 599
Imports	kt	431	486	538	499	464	449	439	377
Exports and shipments	kt	707	731	779	989	1 209	1 359	1 425	2 117
Total consumption	kt	8 389	8 684	8 817	8 817	8 660	8 643	8 965	8 806
Consumption per person	kg	29.4	30.2	30.4	30.1	29.3	29.0	29.8	29.0
Poultry d									
Production c	kt	16 523	17 024	17 225	17 727	18 334	18 473	18 889	19 357
Exports and shipments	kt	2 741	2 380	2 451	2 371	2 618	2 609	2 926	3 464
Total consumption	kt	13 827	14 585	14 846	15 353	15 676	15 966	15 982	15 858
Consumption per person	kg	48.5	50.7	51.2	52.4	53.0	53.5	53.0	52.2

a At 1 January. **b** Carcass weight equivalent. **c** Refers to commercial production, which excludes farm slaughter. **d** Retail weight equivalent.
Sources: US Department of Agriculture, *Livestock and Poultry: World Markets and Trade*, Foreign Agricultural Service Circular, Washington DC.

160 Summary of New Zealand meat statistics a

	Unit	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Livestock numbers b									
Cattle	million	9.6	9.7	9.7	9.6	9.5	9.6	9.7	9.8
– dairy cattle	million	4.8	5.2	5.1	5.2	5.1	5.2	5.3	5.6
– beef cattle	million	4.8	4.5	4.6	4.4	4.4	4.4	4.4	4.3
Sheep	million	40.0	39.6	39.6	39.3	39.9	40.1	38.5	34.2
Production c									
Beef and veal	kt	591.5	576.2	660.2	709.6	642.9	623.3	634.6	634.6
Lamb	kt	433.5	413.9	433.5	411.3	437.6	438.5	452.7	na
Mutton	kt	128.7	107.2	112.9	107.0	105.2	103.7	120.5	na
Exports of meat d									
Beef and veal	kt	331.4	324.8	373.5	422.5	391.3	373.0	352.3	na
Lamb	kt	298.5	289.2	296.2	293.2	300.0	311.5	330.8	na
Mutton	kt	58.1	52.4	57.5	58.4	60.4	56.9	69.3	na
Consumption per person ce									
Beef and veal	kg	27.2	26.4	30.0	31.9	29.2	na	na	na
Lamb	kg	10.0	10.3	10.0	9.4	10.0	na	na	na
Mutton	kg	7.1	5.5	4.4	3.5	3.0	na	na	na

a October–September year. **b** At 30 June of second year shown. **c** Carcass weight. **d** Shipped weight. **e** Excludes meat withdrawn from export stocks for local consumption. **na** Not available.
Sources: Meat and Wool New Zealand, *Annual Report,* Wellington; Meat and Wool New Zealand, Economic Service, Wellington.

161 Gross value of Australian livestock slaughterings

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09 s
	$m	$m	$m	$m	$m	$m
Livestock slaughterings						
Cattle and calves a	6 340.9	7 454.7	7 327.1	7 550.5	6 902.5	7 110.1
Cattle exported live b	317.9	374.1	357.8	437.4	450.5	558.7
Sheep c	454.2	417.8	443.6	380.0	414.1	477.1
Lambs cd	1 318.1	1 327.0	1 377.6	1 387.2	1 466.4	1 829.4
Sheep exported live b	266.5	206.7	291.5	288.7	286.4	339.1
Pigs	878.9	906.0	890.1	943.6	901.7	1 160.0
Poultry	1 280.8	1 303.7	1 222.7	1 294.1	1 636.7	1 730.0
Total	10 896.0	12 032.7	11 959.9	12 334.8	12 108.8	13 255.3

a Includes dairy cattle slaughtered. **b** Excludes animals for breeding. **c** Excludes skin values. **d** 18–20 kilograms dressed weight. **s** ABARE estimate.
Note: The gross value of production is the value placed on recorded production at the wholesale prices realised in the market place. The point of measurement can vary between commodities. Generally the market place is the metropolitan market in each state and territory. However, where commodities are consumed locally or where they become raw material for a secondary industry, these points are presumed to be the market place. Prices used in these calculations do not include the GST.
Sources: ABS; ABARE.

162 Australian supply and use of beef and veal

	Slaughterings a	Average weight b	Production b	Exports bc	Apparent consumption b
	'000	kg	kt	kt	kt
1962	5 672	145	820	na	na
1963	6 136	154	943	na	na
1964	6 554	153	1 005	na	na
1965	6 564	154	1 013	na	na
1966	6 231	152	946	na	na
1967	5 597	155	869	na	na
1968	5 508	165	907	na	na
1969	5 788	164	952	na	na
1970	5 727	176	1 011	510	na
1971	6 093	173	1 054	574	na
1972	7 491	159	1 192	780	na
1973	8 443	172	1 453	920	na
1974	6 988	184	1 282	530	na
1975	9 596	171	1 638	777	na
1976	11 434	166	1 899	905	917
1977	12 791	169	2 158	1 138	986
1978	12 345	173	2 131	1 199	937
1979	9 839	180	1 770	1 096	728
1980	8 833	174	1 534	883	663
1981	8 099	176	1 422	711	716
1982	9 460	177	1 678	942	754
1983	8 118	174	1 414	767	655
1984	6 824	186	1 272	581	695
1985	7 151	187	1 338	690	637
1986	7 883	188	1 481	809	668
1987	8 048	194	1 564	908	654
1988	7 723	201	1 551	868	688
1989	7 483	210	1 573	850	731
1990	8 253	211	1 738	1 052	688
1991	8 427	208	1 749	1 068	687
1992	8 731	210	1 834	1 183	653
1993	8 343	217	1 814	1 158	656
1994	8 366	221	1 845	1 160	696
1995	7 906	217	1 719	1 092	636
1996	7 968	218	1 734	1 016	723
1997	9 148	212	1 939	1 175	768
1998	9 308	213	1 987	1 268	721
1999	8 756	227	1 991	1 272	721
2000	8 734	235	2 053	1 329	726
2001	8 764	237	2 079	1 407	674
2002	9 050	231	2 090	1 362	729
2003	8 906	224	1 998	1 246	754
2004	8 803	240	2 113	1 357	762
2005	8 466	247	2 090	1 343	755
2006	8 854	247	2 188	1 408	786
2007	8 960	243	2 180	1 387	797
2008	8 771	246	2 161	1 411	750

a Includes calves. **b** Carcass weight. **c** Includes canned and miscellaneous product. **na** Not available.

Sources: ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABS, *Livestock Products, Australia,* cat. no. 7215.0, Canberra; Department of Agriculture, Fisheries and Forestry, *Export Statistics,* Canberra; ABARE.

163 Australian cattle numbers, by state and territory [a]

	New South Wales '000	Victoria '000	Queensland '000	South Australia '000	Western Australia '000	Tasmania '000	Northern Territory '000	Australian Capital Territory '000	Australia '000
Adult female beef cattle									
1999	2 859	1 054	5 071	514	948	224	946	5	11 621
2000	2 859	1 054	5 071	514	948	224	946	5	11 621
2001	2 801	1 134	5 667	480	1 086	194	913	6	12 282
2002	2 849	1 138	5 304	516	1 013	201	981	6	12 007
2003	2 852	1 158	5 762	594	1 013	199	1 069	6	12 652
2004	2 809	1 240	5 380	590	981	219	1 023	5	12 245
2005	2 873	1 185	5 638	568	1 049	233	1 019	5	12 570
2006	2 879	1 276	5 979	645	1 117	243	1 089	5	13 234
2007	2 997	1 272	5 745	591	1 199	228	1 160	5	13 197
2008	2 883	1 218	5 589	527	1 144	223	1 211	6	12 800
2009	3 035	1 238	6 163	574	1 320	228	1 059	4	13 620
Total beef cattle and calves									
1999	5 846	2 180	10 444	1 006	1 817	491	1 566	9	23 358
2000	5 846	2 180	10 444	1 006	1 817	491	1 566	9	23 358
2001	5 531	2 371	11 503	995	2 059	411	1 570	10	24 448
2002	5 786	2 435	11 088	1 050	2 001	426	1 707	11	24 504
2003	5 593	2 463	11 284	1 201	1 980	432	1 777	10	24 739
2004	5 419	2 491	10 507	1 209	1 815	482	1 683	8	23 615
2005	5 416	2 390	11 245	1 164	1 962	496	1 730	8	24 410
2006	5 464	2 601	11 655	1 253	2 060	510	1 771	9	25 323
2007	5 862	2 646	11 354	1 161	2 275	501	1 798	9	25 605
2008	5 609	2 575	11 495	1 067	2 223	481	1 912	11	25 373
2009	5 507	2 319	12 005	1 041	2 138	443	1 824	6	24 784
Total dairy cattle and calves									
1999	445	1 945	304	177	114	233	1	0	3 220
2000	445	1 945	304	177	114	233	1	0	3 220
2001	440	1 893	305	189	106	206	1	0	3 140
2002	428	1 971	288	192	126	210	0	0	3 217
2003	428	1 949	260	180	124	187	0	0	3 131
2004	398	1 896	233	191	130	200	0	0	3 049
2005	400	1 890	255	188	133	189	0	0	3 055
2006	373	1 843	207	150	109	179	0	0	2 860
2007	349	1 758	194	168	116	203	0	0	2 788
2008	326	1 668	189	176	104	201	0	0	2 663
2009	317	1 566	176	161	103	193	0	0	2 537
Total cattle and calves									
1999	6 291	4 125	10 748	1 183	1 931	724	1 567	10	26 578
2000	6 291	4 125	10 748	1 183	1 931	724	1 567	10	26 578
2001	5 970	4 264	11 808	1 184	2 165	617	1 571	10	27 588
2002	6 215	4 405	11 376	1 242	2 128	636	1 707	11	27 722
2003	6 021	4 412	11 544	1 381	2 104	619	1 777	10	27 870
2004	5 817	4 388	10 740	1 401	1 945	682	1 683	8	26 664
2005	5 816	4 281	11 500	1 352	2 095	684	1 730	8	27 465
2006	5 837	4 444	11 862	1 403	2 169	689	1 771	9	28 183
2007	6 211	4 403	11 548	1 329	2 391	704	1 798	9	28 393
2008	5 935	4 243	11 684	1 242	2 327	682	1 912	11	28 037
2009	5 824	3 885	12 181	1 202	2 241	636	1 824	6	27 321

a At 31 March, an establishment with an estimated value of agricultural operations (EVAO) of $5 000 or more. From 2000, at 30 June. House cows are excluded.

Sources: ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABARE.

164 Volume of Australian exports of beef, veal and live cattle, by destination

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Beef and veal a									
Americas									
Canada	kt	50.9	82.9	29.0	7.5	7.6	9.6	12.3	8.5
United States	kt	397.7	385.9	367.9	347.2	317.5	295.2	296.1	234.8
Asia									
Chinese Taipei	kt	29.1	34.4	31.1	26.5	30.3	28.6	29.1	27.1
Hong Kong, China	kt	3.1	2.9	2.1	2.4	1.8	1.8	2.4	3.2
Indonesia	kt	9.6	14.6	13.0	7.1	8.8	12.2	26.8	33.0
Japan	kt	319.1	237.0	279.3	393.5	405.1	405.8	377.9	364.3
Korea, Rep. of	kt	56.8	80.2	62.3	93.3	106.4	149.6	148.9	127.2
Malaysia	kt	5.4	7.4	6.5	4.8	2.3	2.0	3.3	6.2
Philippines	kt	19.7	12.9	8.6	2.1	3.0	1.9	3.4	14.1
Singapore	kt	3.4	3.9	3.7	2.1	1.9	3.2	5.5	8.1
Europe									
European Union b	kt	6.5	6.5	5.5	6.7	6.5	8.5	6.0	11.9
CIS	kt	5.3	1.4	0.3	0.4	0.5	12.5	5.1	72.2
Eastern Europe	kt	0.4	3.0	1.4	0.4	0.1	0.0	0.0	0.8
Middle East									
Kuwait	kt	1.1	0.4	2.5	0.7	0.2	0.2	0.5	1.1
Saudi Arabia	kt	5.0	2.3	1.8	0.7	0.3	1.0	0.9	3.7
United Arab Emirates	kt	2.0	1.7	1.1	1.2	1.3	1.4	1.8	4.3
Oceania									
New Zealand	kt	1.4	6.8	3.5	2.3	2.0	1.7	1.6	2.2
Pacific Isles	kt	2.5	2.7	2.1	1.7	1.5	2.0	3.3	3.5
Papua New Guinea	kt	4.8	4.3	2.3	2.5	2.2	2.7	3.6	4.7
Total beef and veal	kt	946.6	920.4	840.9	913.8	909.4	953.9	941.4	957.5
Live cattle									
Slaughter cattle									
Asia									
Indonesia	'000	287.7	426.2	375.8	357.1	348.0	386.6	517.0	644.6
Japan	'000	17.4	14.0	21.9	17.1	24.5	20.2	21.1	19.8
Malaysia	'000	77.5	90.9	86.5	47.4	38.1	56.5	33.6	18.4
Philippines	'000	97.4	113.1	74.5	46.7	20.9	13.1	20.3	10.8
Middle East									
Egypt	'000	203.2	143.9	7.6	0.0	7.0	0.0	0.0	0.0
Israel	'000	32.6	47.8	43.2	20.9	32.0	79.4	36.9	51.7
Jordan	'000	13.2	4.4	23.1	34.2	17.0	5.9	4.0	0.8
Saudi Arabia	'000	20.8	54.3	15.7	0.0	17.5	27.6	13.5	16.6
Total	'000	797.9	955.0	689.4	570.9	531.1	609.2	668.8	815.6
Breeding cattle	'000	24.6	16.8	84.9	66.8	41.7	25.1	50.7	52.9
Total live cattle	'000	822.5	971.9	774.2	637.7	572.8	634.3	719.5	868.5

a Fresh, chilled or frozen, in shipped weight. **b** Regarded as 15 countries to May 2004, 25 countries from June 2004, then 27 countries from January 2007.

Source: Department of Agriculture, Fisheries and Forestry, *Export Statistics, Livestock Exports,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

165 Value of Australian exports of beef and veal, and live cattle (fob)

	2001	2002	2003	2004	2005	2006	2007	2008
	$m	$m	$m	$m	$m	$m	$m	$m
Beef and veal								
Americas								
Canada	204.4	320.2	110.9	38.1	32.6	43.8	51.2	43.7
United States	1 699.7	1 593.6	1 332.3	1 374.4	1 186.4	1 180.7	1 136.3	1 039.2
Asia								
Chinese Taipei	132.6	152.3	126.7	124.2	148.3	134.6	117.4	123.8
Hong Kong, China	17.8	17.1	15.0	27.3	18.7	13.5	21.5	20.6
Indonesia	37.2	46.1	38.4	26.7	33.5	39.0	83.3	113.1
Japan	1 728.2	1 237.7	1 384.4	2 189.9	2 244.7	2 172.1	1 844.0	2 009.2
Korea, Rep. of	228.9	320.4	250.7	434.4	494.8	734.7	725.6	636.3
Malaysia	16.0	20.2	15.9	12.1	7.8	10.0	17.1	29.7
Philippines	55.8	36.1	23.0	4.3	5.9	3.7	7.2	46.4
Singapore	20.4	20.8	22.5	17.3	15.5	19.2	29.7	39.1
Europe								
European Union **a**	46.3	50.8	47.7	62.5	56.6	77.2	61.6	117.0
CIS	14.4	2.9	0.7	2.0	4.6	61.0	32.2	293.3
Eastern Europe	1.2	9.1	4.5	1.3	0.4	0.4	0.1	3.3
Middle East								
Kuwait	4.6	1.8	9.8	3.4	1.0	0.9	2.3	5.0
Saudi Arabia	23.0	11.6	7.8	3.1	1.7	4.5	3.0	14.0
United Arab Emirates	11.6	10.9	7.8	12.0	13.7	15.6	20.4	35.3
Oceania								
New Zealand	6.3	25.6	15.9	9.8	8.8	8.0	7.8	10.6
Pacific Isles	7.2	7.4	5.4	4.5	4.0	6.3	10.0	10.8
Papua New Guinea	11.5	9.8	4.9	5.2	4.3	5.8	7.6	12.0
Total beef and veal	4 357.3	4 002.6	3 475.4	4 390.3	4 346.6	4 604.0	4 258.1	4 782.7
Live cattle b								
Asia								
Indonesia	171.8	254.4	203.4	207.5	209.1	246.9	341.4	409.5
Japan	12.7	11.2	18.1	14.6	20.5	17.3	18.4	17.4
Malaysia	38.5	45.1	38.9	25.2	20.1	31.3	19.6	13.9
Philippines	58.4	65.8	39.1	30.1	11.6	7.7	14.0	7.5
Middle East								
Egypt	153.8	94.9	5.0	0.0	3.8	0.0	0.0	0.0
Israel	15.4	23.9	22.8	11.9	20.6	58.2	23.2	30.2
Jordan	6.7	2.4	12.9	15.3	10.2	4.3	2.1	0.5
Libya	0.0	0.0	0.0	0.0	0.0	0.0	4.5	19.3
Saudi Arabia	14.9	32.5	9.4	0.0	11.0	19.3	7.8	9.0
Total live cattle	514.4	583.6	382.7	359.4	337.1	407.9	443.6	526.4

a Regarded as 15 countries to May 2004, 25 countries from June 2004, then 27 countries from January 2007. **b** Excludes animals for breeding.
Source: Department of Agriculture, Fisheries and Forestry, *Export Statistics, Livestock Exports,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

166 World cattle numbers, by country a

	2001	2002	2003	2004	2005	2006	2007	2008
	million	million	million	million	million	million	million	million
Argentina	48.9	48.1	50.9	50.8	50.2	54.3	55.7	55.7
Australia **b**	27.6	27.7	27.9	26.7	27.5	28.2	28.4	28.0
Brazil	176.4	185.3	195.6	204.5	207.2	205.9	207.2	na
Canada	13.6	13.8	13.5	14.6	14.9	14.7	14.2	na
China **c**	106.1	105.7	108.3	112.5	115.6	119.2	116.9	na
European Union **d**	95.4	94.2	92.8	91.9	90.9	90.1	89.7	na
Japan	4.5	4.6	4.5	4.5	4.4	4.4	4.4	na
New Zealand	9.6	9.7	9.7	9.6	9.5	9.6	9.7	9.8
Russian Federation	27.3	27.1	26.5	24.9	23.0	21.5	21.5	na
South Africa	13.5	13.6	13.5	13.5	13.8	13.5	13.5	na
Ukraine	9.4	9.4	9.1	7.7	6.9	6.5	6.2	na
United States	97.3	96.7	96.1	94.9	95.4	96.7	97.0	na
Uruguay	10.6	11.3	11.7	12.0	12.0	11.7	12.0	na
World	1 320.3	1 334.5	1 350.0	1 361.8	1 372.5	1 381.7	1 389.6	na

a As close as possible to 1 January. Includes dairy cattle. **b** Includes livestock holdings on establishments with an estimated value of agricultural operations (EVAO) of $5 000 or more. **c** Excludes Hong Kong. **d** Regarded as 25 countries.
Sources: ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; FAO, *FAOSTAT Agriculture Database,* Rome; Meat and Wool Economic Service of New Zealand, *Annual Review of the New Zealand Sheep and Beef Industry,* Wellington; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; US Department of Agriculture, *Livestock and Poultry: World Markets and Trade,* Foreign Agricultural Service Circular, Washington DC.

167 World beef and veal production, by country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Argentina	2 640	2 700	2 800	3 130	3 200	3 100	3 300	3 150
Australia	2 079	2 090	1 998	2 113	2 090	2 188	2 180	2 161
Brazil	6 895	7 240	7 385	7 975	8 592	9 025	9 303	9 024
Canada	1 262	1 294	1 184	1 496	1 523	1 391	1 279	1 288
China **b**	5 086	5 219	5 425	5 604	5 681	5 767	6 134	6 132
European Union **c**	8 346	8 397	8 304	8 245	8 090	8 150	8 203	8 090
Japan	458	537	496	514	500	497	504	520
Mexico	1 925	1 725	1 950	1 900	1 725	1 550	1 600	1 600
New Zealand	591	576	660	710	643	623	635	635
Russian Federation	1 760	1 740	1 670	1 590	1 525	1 430	1 370	1 315
South Africa	665	645	613	655	679	725	680	678
United States	11 983	12 427	12 039	11 261	11 318	11 980	12 163	12 163
Uruguay	317	425	450	544	600	640	560	535
World	56 079	57 748	58 355	59 608	60 907	61 031	61 881	na

a Carcass weight equivalent. **b** Excludes Hong Kong. **c** Regarded as 25 countries.
Sources: ABS, *Livestock Products, Australia,* cat. no. 7215.0, Canberra; FAO, *FAOSTAT Agriculture Database,* Rome; Meat and Wool Economic Service of New Zealand, *Annual Review of the New Zealand Sheep and Beef Industry,* Wellington; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; US Department of Agriculture, *Livestock and Poultry: World Markets and Trade,* Foreign Agricultural Service Circular, Washington DC.

168 Volume of trade in beef and veal, by selected countries a

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Exports									
Argentina	354	168	345	382	616	754	552	534	422
Australia	1 329	1 407	1 362	1 246	1 357	1 343	1 408	1 387	1 411
Brazil	488	741	872	1 162	1 610	1 845	2 084	2 189	1 801
Canada	563	619	657	413	603	596	477	457	494
China **b**	47	53	37	36	52	76	85	81	58
European Union **c**	663	610	580	438	363	253	218	140	203
India	344	365	411	432	492	617	681	678	672
New Zealand	473	483	475	548	594	577	530	496	533
United States	1 120	1 029	1 110	1 142	209	316	519	650	856
Uruguay	236	145	225	282	354	417	460	385	361
Total	5 921	5 851	6 431	6 485	6 647	7 315	7 503	7 571	7 490
Imports									
Brazil	71	44	77	62	52	48	28	30	29
Canada	290	330	340	304	123	151	180	242	230
Chinese Taipei	85	80	91	101	82	95	104	102	103
Egypt	228	147	178	127	173	215	313	361	195
European Union **c**	429	417	532	549	641	711	717	642	465
Japan	1 045	982	697	833	634	686	678	686	659
Korea, Rep. of	333	253	442	457	224	250	298	308	295
Russian Federation	407	639	708	709	719	978	939	1 030	1 137
United States	1 375	1 435	1 459	1 363	1 669	1 632	1 399	1 384	1 151
Total	5 637	5 706	6 148	6 221	6 169	6 793	6 836	7 227	6 928

a Carcass weight. **b** Excludes Hong Kong. **c** Excludes intra-EU trade. Regarded as 27 countries. **na** Not available.

Sources: US Department of Agriculture, *Livestock and Poultry: World Markets and Trade,* Foreign Agricultural Service Circular, Washington DC; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; Department of Agriculture, Fisheries and Forestry, *Export Statistics,* Canberra.

169 Summary of Japanese beef and veal statistics

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Cattle numbers a									
Beef b	'000	2 806	2 838	2 805	2 788	2 747	2 755	2 755	2 806
Dairy c	'000	1 725	1 726	1 719	1 690	1 655	1 636	1 635	1 592
Total	'000	4 531	4 564	4 524	4 478	4 402	4 391	4 390	4 398
Cattle slaughterings									
Wagyu	'000	495.7	527.0	461.2	464.1	462.9	449.2	447.4	na
Dairy	'000	594.9	722.2	726.3	773.2	739.1	740.6	728.7	na
Calves	'000	5.4	4.8	7.8	10.1	9.3	7.1	8.2	na
Total	'000	1 103.5	1 262.8	1 201.7	1 255.7	1 220.9	1 209.1	1 198.3	na
Production d									
Wagyu beef	kt	205.5	217.1	188.4	190.9	192.5	190.9	194.5	na
Dairy beef	kt	247.9	313.6	300.5	313.7	297.8	296.8	298.6	na
Veal	kt	0.6	0.6	1.0	1.1	1.0	0.8	0.9	na
Total	kt	458.0	536.0	495.0	512.5	498.4	496.0	503.1	na
Imports									
Fresh or chilled beef and veal e									
Australia	kt	188.3	138.3	150.9	203.6	222.9	208.2	188.1	159.1
Canada	kt	5.9	3.9	2.3	0.0	0.0	1.7	2.2	2.0
New Zealand	kt	3.7	2.6	2.8	3.7	4.5	5.6	6.2	5.8
United States	kt	132.4	89.5	114.1	0.0	0.0	5.1	17.8	31.1
Other	kt	0.0	0.0	0.0	0.6	2.5	2.5	1.7	1.4
Total	kt	330.4	234.3	270.1	208.0	230.0	223.1	216.0	199.5
Frozen beef and veal e									
Australia	kt	135.2	92.1	132.7	190.5	188.5	197.4	205.7	199.1
Canada	kt	16.7	15.1	5.2	0.0	0.0	0.4	1.2	2.7
New Zealand	kt	12.7	7.7	14.2	29.8	33.4	32.3	27.5	25.0
United States	kt	178.6	137.0	153.2	1.3	0.0	2.2	16.3	23.0
Other	kt	0.6	0.3	0.6	2.3	8.0	5.2	6.9	8.8
Total	kt	343.7	252.4	305.9	223.8	229.9	237.5	257.6	258.5
Total beef and veal ef									
Australia	kt	323.5	230.4	283.7	394.1	411.3	405.6	394.0	358.7
Canada	kt	22.6	19.1	7.5	0.0	0.0	2.1	3.4	3.9
New Zealand	kt	16.4	10.3	17.0	33.5	37.9	37.9	33.7	30.8
United States	kt	311.0	226.5	267.3	1.3	0.0	7.3	34.1	54.1
Other	kt	0.6	0.4	0.6	2.9	10.6	7.7	8.7	10.3
Total	kt	674.1	486.7	576.0	431.7	459.9	460.6	474.0	458.6
Prices									
Wagyu steer g	¥/kg	1 677	1 561	1 462	1 848	2 002	2 074	2 079	1 984
Dairy steer h	¥/kg	836	698	482	689	857	898	915	808

a At 1 February. **b** Includes dairy steers. **c** Cows only. **d** Carcass weight. **e** Product weight. **f** Total includes cheek meat, head meat and cooked meat. **g** Prices for an average of A3–A4 type steers at Tokyo Central Wholesale Meat Market. **h** Prices for an average of B2–B3 type steers at Tokyo Central Wholesale Meat Market.

Sources: Japanese Ministry of Agriculture, Forestry and Fisheries, *Meat Statistics in Japan,* Tokyo; Agriculture and Livestock Industries Corporation, *Monthly Statistics,* Tokyo.

170 Summary of Korean beef and veal statistics

	Native cattle numbers a	Production b	Consumption: Imported beef and veal b	Consumption: Total beef and veal b	Average prices: Farm c	Average prices: Wholesale d	Average prices: Retail e
	'000	kt	'000	kt	won/kg	won/kg	won/kg
1970	1 284	na	na	37.3	na	na	658
1971	1 247	na	na	39.5	na	na	883
1972	1 333	na	0.3	40.2	na	na	1 013
1973	1 486	na	0.1	44.9	na	na	1 097
1974	1 778	na	0.0	51.5	na	na	1 315
1975	1 546	71.0	0.0	70.3	na	1 127	1 487
1976	1 451	103.0	1.0	75.5	na	1 707	2 123
1977	1 492	106.0	6.6	81.6	1 307	2 371	2 758
1978	1 624	102.0	2.2	114.7	1 712	2 729	3 460
1979	1 563	118.0	6.2	113.8	1 671	2 818	3 858
1980	1 390	127.0	10.6	100.0	1 963	3 577	4 820
1981	1 283	94.0	3.7	93.2	2 903	4 834	6 464
1982	1 526	83.0	4.5	106.5	3 539	5 437	7 432
1983	1 940	90.0	1.0	115.5	3 801	5 927	8 236
1984	2 318	122.0	1.8	106.6	3 577	5 723	8 316
1985	2 533	161.0	8.3	120.3	2 763	4 384	7 054
1986	2 370	208.0	3.6	147.9	2 487	3 875	6 234
1987	1 923	206.0	0.0	151.9	2 536	3 904	6 396
1988	1 589	175.0	14.2	141.5	3 511	5 500	8 276
1989	1 536	124.0	57.1	143.3	4 335	6 243	10 426
1990	1 622	131.0	81.9	177.0	4 811	6 629	11 450
1991	1 773	136.0	129.0	223.3	5 480	7 328	12 884
1992	2 019	137.0	127.3	226.9	6 007	7 634	14 170
1993	2 260	176.0	103.4	233.0	5 385	6 811	14 790
1994	2 393	200.0	122.5	269.8	5 835	7 244	15 438
1995	2 594	214.0	146.5	301.2	6 346	7 914	16 186
1996	2 844	236.0	149.2	322.9	5 696	6 971	16 236
1997	2 735	310.0	134.2	362.0	4 852	5 618	15 074
1998	2 383	348.0	87.1	345.5	4 014	5 438	13 822
1999	1 952	305.0	197.5	392.7	4 976	7 028	14 470
2000	1 590	278.0	237.8	402.4	5 504	7 414	17 418
2001	1 406	221.0	166.3	384.1	6 490	8 284	19 234
2002	1 410	192.0	292.2	402.7	7 854	9 127	29 478
2003	1 480	182.0	293.6	390.2	7 814	9 446	31 300
2004	1 666	186.0	132.9	327.8	7 094	8 703	30 392
2005	1 819	195.0	142.6	316.9	7 752	10 898	37 304
2006	2 020	200.0	179.4	330.6	8 502	10 915	37 921
2007	na	219.0	na	na	na	na	na
2008	na	246.0	na	na	na	na	na

a At 1 December. **b** Boneless weight. **c** Korean native cattle, 400 kilograms. From 1995, 500 kilograms, male. **d** Beef (carcass). **e** Beef (boneless), all cities. **na** Not available.

Source: Republic of Korea National Livestock Co-operatives Federation, *Materials on Price, Demand and Supply of Livestock Products,* Seoul; Korean Meat Trade Association; PS&D online.

171 Australian supply and use of pig and poultry meats

	Unit	2000	2001	2002	2003	2004	2005	2006	2007	2008
Pig meat										
Pig numbers **a**	'000	2 511	2 748	2 940	2 658	2 548	2 708	2 733	2 605	2 411
Breeding sows and gilts **a**	'000	293	293	332	356	352	318	348	352	340 **b**
Slaughterings	'000	5 014	5 172	5 603	5 723	5 440	5 372	5 320	5 350	4 842
Average slaughter weight **c**	kg	72.7	73.2	72.7	73.2	72.6	72.7	71.9	72.2	71.9
Production **c**	kt	364.4	378.5	407.3	418.9	394.8	390.3	382.7	386.1	348.0
Imports **cd**	kt	72.6	65.2	92.6	112.0	127.1	162.3	169.0	218.4	234.5
Exports **cd**	kt	55.9	77.3	91.5	88.3	70.4	64.7	67.2	60.8	55.3
Total consumption **ce**	kt	381.1	366.5	408.4	442.6	451.6	488.0	484.4	543.7	527.2
Consumption per person **cd**	kg	19.8	18.8	20.7	22.1	22.3	23.8	23.4	25.9	24.7
Poultry meat f										
Slaughterings	million	401.6	397.2	428.2	418.3	435.6	432.9	444.8	458.6	462.8
Average dressed weight **c**	kg	1.6	1.7	1.7	1.7	1.7	1.9	1.9	1.9	1.8
Production **c**	kt	657.5	662.0	736.6	719.3	758.5	802.7	840.1	855.9	838.9
Exports **c**	kt	23.7	30.7	28.1	27.1	24.6	29.0	26.8	37.3	40.3
Total consumption **e**	kt	633.8	631.3	708.5	692.2	733.9	773.7	813.3	818.5	798.6
Consumption per person	kg	32.9	32.3	35.8	34.6	36.2	37.7	39.3	38.9	37.4

a Livestock holdings on establishments with an estimated value of agricultural operations (EVAO) of $5 000. **b** Breeding sows only in 2008. **c** Carcass weight. **d** Includes preserved pig meat. **e** Apparent consumption. **f** Includes chicken, turkey and duck.
Sources: ABS, *Apparent Consumption of Foodstuffs,* cat. no. 4306.0, Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABARE.

172 Australian pig numbers, by state and territory **a**

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
	'000	'000	'000	'000	'000	'000	'000	'000	'000
1995	791	439	644	316	423	38	3	na	2 653
1996	791	439	644	316	423	38	3	na	2 526
1997	710	458	603	314	412	26	0	na	2 555
1998	729	485	600	297	417	24	2	na	2 768
1999	849	518	648	303	424	24	2	na	2 626
2000	778	521	621	277	406	22	2	na	2 511
2001	710	523	544	276	438	18	2	na	2 748
2002	845	557	597	286	438	22	2	na	2 940
2003	833	673	643	361	410	18	3	na	2 658
2004	729	555	663	381	309	19	3	na	2 548
2005	624	547	691	291	378	14	3	na	2 708
2006	781	559	711	284	358	13	2	na	2 733
2007	655	668	691	296	403	17	2	na	2 605
2008	741	463	695	326	360	19	na	na	2 411
2009	770	394	610	363	262	13	na	na	2 236 **s**

a At 31 March. From 2000, at 30 June. Livestock holdings on establishments with an estimated value of agricultural operations (EVAO) of $5 000 or more. **s** ABARE estimate **na** Not available.
Sources: ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra. ABARE.

173 World pig and poultry meat production in selected countries a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Pig meat								
Australia	379	407	419	395	390	383	386	348
Canada	1 731	1 858	1 882	1 936	1 920	1 898	1 894	1 941
China **b**	42 982	44 358	46 233	48 118	51 202	53 093	61 150	46 205
Denmark	1 716	1 759	1 762	1 810	1 793	1 749	1 750	na
France	2 315	2 346	2 339	2 293	2 018	2 011	1 982	na
Germany	4 074	4 110	4 239	4 323	4 500	4 662	4 670	na
Netherlands	1 432	1 377	1 253	1 289	1 297	1 270	1 296	na
Russian Federation	1 498	1 583	1 706	1 643	1 520	1 641	1 788	2 060
United States	8 691	8 929	9 056	9 312	9 392	9 559	9 962	10 599
Poultry meat								
Australia	662	737	719	758	803	840	856	839
Brazil	6 732	7 631	7 845	8 723	9 710	9 708	10 763	11 471
Canada	1 076	1 079	1 077	1 091	1 132	1 134	1 175	1 196
China **b**	9 283	9 562	9 902	10 002	10 204	10 354	11 359	11 845
France	2 214	2 104	2 014	1 975	1 696	1 557	1 473	na
Italy	1 139	1 173	952	1 001	1 013	919	947	na
Japan	1 074	1 107	1 127	1 124	1 166	1 227	1 250	1 255
Russian Federation	437	509	562	665	917	1 199	1 375	1 635
Thailand	1 230	1 275	1 340	900	950	1 100	1 050	1 170
United States	16 523	17 024	17 225	17 727	18 334	18 473	18 889	19 357

a Carcass weight equivalent. **b** Excludes Hong Kong. **na** Not available.

Sources: ABS, *Livestock Products, Australia*, cat.no. 7215.0, Canberra; US Department of Agriculture, *Livestock and Poultry: World Markets and Trade*, Foreign Agricultural Service Circular, Washington, DC; Meat and Livestock Commission, *European Handbook*, Milton Keynes, UK.

174 Volume of world pig meat trade for selected countries a

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Exports b									
Australia	56	77	92	88	70	65	67	61	55
Canada	660	728	864	975	972	1 084	1 081	1 033	1 129
China **c**	144	223	307	397	537	502	544	350	223
European Union **d**	1 334	970	993	1 140	1 302	1 143	1 284	1 286	1 726
United States	584	707	731	779	989	1 209	1 359	1 425	2 117
Imports b									
Australia	73	65	93	112	127	162	169	218	234
Hong Kong, China	212	224	237	260	285	263	277	302	346
Japan	947	1 022	1 108	1 091	1 269	1 314	1 154	1 210	1 267
European Union **d**	19	32	31	44	53	99	125	34	56
United States	438	431	486	538	499	464	449	439	377

a Carcass weight equivalent. **b** Excludes intra-EU trade. **c** Excludes Hong Kong. **d** Regarded as 27 countries.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; US Department of Agriculture, *Livestock and Poultry: World Markets and Trade*, Foreign Agricultural Service Circular, Washington DC.

175 Australian supply and use of mutton and lamb

	Slaughterings '000	Average weight a kg	Production a kt	Exports ab kt	Apparent Consumption a kt
Mutton					
1987	15 314	19.7	302.4	164.6	131.7
1988	13 130	19.9	261.3	153.0	111.8
1989	13 698	20.6	282.6	149.3	131.9
1990	17 254	20.7	358.0	212.8	122.6
1991	18 750	21.0	394.6	262.5	146.5
1992	18 186	20.7	376.6	251.4	124.7
1993	18 047	21.5	387.9	234.4	149.4
1994	17 991	20.9	375.3	242.3	154.2
1995	15 228	20.5	312.1	208.6	101.4
1996	14 447	21.1	304.1	198.4	108.6
1997	15 552	20.5	319.6	209.2	113.1
1998	15 316	20.6	316.2	208.9	108.1
1999	14 723	21.0	309.8	209.4	94.0
2000	16 379	21.1	345.7	235.5	110.2
2001	15 789	20.6	325.5	226.6	98.9
2002	14 873	20.0	296.7	217.6	82.2
2003	10 522	20.3	213.7	150.4	63.7
2004	11 145	20.9	233.0	169.7	53.4
2005	11 636	20.7	241.1	180.0	61.1
2006	13 113	20.5	269.4	204.7	64.7
2007	12 041	21.0	252.7	189.0	63.7
2008	12 017	21.3	255.7	200.9	54.8
Lamb					
1987	17 516	17.0	296.8	53.3	244.6
1988	16 675	17.4	289.9	47.2	244.1
1989	16 864	17.8	299.6	41.5	257.4
1990	16 549	17.5	289.0	43.5	243.8
1991	15 818	17.4	274.3	42.0	232.7
1992	15 595	17.6	274.7	45.5	230.5
1993	14 668	17.6	258.7	56.2	200.5
1994	15 718	17.9	281.3	64.5	220.1
1995	14 680	17.9	263.0	55.1	207.7
1996	14 069	18.5	260.8	62.6	197.2
1997	14 924	18.8	279.9	78.3	201.6
1998	15 659	19.2	300.8	88.1	212.2
1999	16 346	19.5	318.8	101.1	216.9
2000	18 507	19.9	368.2	125.2	243.0
2001	17 897	19.7	352.6	124.9	227.8
2002	17 086	19.8	337.6	116.1	221.6
2003	16 430	20.1	329.8	122.5	207.3
2004	16 675	20.4	340.2	131.3	208.9
2005	18 228	20.6	374.8	169.8	205.0
2006	19 483	20.5	399.8	175.9	223.8
2007	21 154	20.7	439.0	192.6	246.5
2008	20 342	20.3	413.7	179.3	234.4

a Carcass weight. **b** Excludes canned and miscellaneous product.

Sources: ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABS, *Livestock Products, Australia,* cat. no. 7215.0, Canberra; Department of Agriculture, Fisheries and Forestry, *Export Statistics,* Canberra; ABARE.

176 Australian sheep numbers, by state and territory a

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Australian Capital Territory	Australia
	million	million	million	million	million	million	million	million
Total sheep and lambs								
1989	59.907	29.387	15.184	17.779	37.335	5.196	0.119	164.908
1990	62.946	30.643	17.014	18.748	38.674	5.618	0.130	173.776
1991	60.571	28.789	17.795	17.513	36.708	5.059	0.128	166.566
1992	54.231	26.081	15.338	16.445	34.289	4.499	0.112	150.995
1993	48.906	24.430	13.495	16.009	33.195	4.403	0.106	140.542
1994	46.531	23.439	11.548	14.679	31.951	4.324	0.097	132.569
1995	40.515	21.371	11.577	13.249	30.217	3.853	0.078	120.862
1996	41.091	21.974	10.706	13.575	29.834	3.862	0.073	121.116
1997	42.388	22.325	10.528	13.106	27.821	3.977	0.084	120.228
1998	40.821	21.122	10.992	13.136	27.476	3.869	0.076	117.491
1999	40.583	20.994	10.556	13.065	26.378	3.801	0.080	115.456
2000	43.405	22.664	9.195	13.759	26.109	3.341	0.080	118.552
2001	40.887	22.272	8.660	12.585	23.129	3.284	0.110	110.928
2002	38.491	21.350	6.752	13.043	23.063	3.380	0.088	106.166
2003	33.706	20.388	4.815	13.060	23.887	3.299	0.098	99.252
2004	35.227	19.978	4.824	12.917	25.063	3.183	0.095	101.287
2005	34.802	20.851	5.016	12.643	25.936	3.146	0.088	100.602
2006	32.146	17.908	4.466	11.331	22.129	2.963	0.084	91.028
2007	28.607	17.174	4.378	11.641	21.136	2.717	0.058	85.711
2008	26.378	16.765	3.960	9.983	17.654	2.137	0.061	76.938
2009	25.021	14.785	4.100	10.060	15.516	2.027	0.055	71.564

a At 31 March. From 2000, as at 30 June. Livestock holdings on establishments with an estimated value of agricultural operations (EVAO) of $5 000 or more. **na** Not available.

Sources: ABS, Principal Agricultural Commodities, Australia, Preliminary, cat. no. 7111.0, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABARE.

177 Volume of Australian exports of sheep meat and live sheep, by destination

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Mutton ab									
Canada	kt	2.4	1.5	1.1	1.6	1.6	1.9	0.8	0.6
China	kt	0.7	3.4	1.3	1.7	3.3	3.3	4.5	7.9
Chinese Taipei	kt	12.1	14.7	10.2	13.1	11.3	9.4	7.9	7.8
CIS	kt	1.6	2.3	0.5	1.9	5.4	11.5	8.1	10.3
European Union c	kt	7.6	8.6	5.5	8.4	9.2	8.6	8.3	8.5
Japan	kt	10.4	10.4	6.6	9.0	8.3	7.0	6.9	6.9
Korea, Rep. of	kt	1.0	1.2	0.8	1.0	1.1	0.9	0.8	1.1
Malaysia	kt	7.3	7.1	5.2	6.6	5.9	7.7	6.4	7.1
Papua New Guinea	kt	5.5	5.5	4.6	5.9	3.9	3.2	4.3	4.4
Saudi Arabia	kt	29.8	24.5	22.5	19.5	22.7	23.9	23.2	20.6
Singapore	kt	7.6	6.6	6.2	6.4	5.6	6.0	5.9	6.2
South Africa	kt	24.7	15.7	9.3	12.6	15.0	19.9	15.3	13.5
United States	kt	18.8	20.9	20.1	14.6	16.1	18.8	16.5	13.4
Other	kt	55.5	54.0	31.6	38.6	42.2	48.5	50.6	60.1
Total	kt	184.2	172.7	124.1	139.2	148.4	167.1	155.0	160.5
Lamb a									
European Union c	kt	14.4	14.1	16.4	15.0	12.4	13.4	14.2	13.4
China	kt	4.1	6.3	6.1	9.5	13.6	12.3	16.4	16.4
Japan	kt	6.1	5.8	6.0	7.7	11.7	12.1	8.7	9.8
Papua New Guinea	kt	11.9	10.0	9.6	11.6	12.4	11.9	11.6	9.9
South Africa	kt	3.6	1.3	1.6	2.3	3.8	5.3	4.3	3.6
United Arab Emirates	kt	7.2	8.4	7.1	5.8	6.9	10.7	12.6	13.3
United States	kt	28.4	28.8	31.0	31.9	40.8	40.8	44.0	35.9
Other	kt	42.0	39.8	38.1	44.2	56.5	58.3	70.6	69.3
Total	kt	113.6	108.2	109.7	118.5	144.5	152.4	166.0	155.3
Live sheep									
Slaughter sheep	'000	6 699	6 024	4 738	3 394	4 184	4 163	3 772	4 213
Middle East	'000	6 596	5 931	4 634	3 356	4 144	4 137	3 744	4 153
Bahrain	'000	388	386	411	490	521	557	562	716
Egypt	'000	271	139	16	0	0	0	0	0
Jordan	'000	542	583	499	930	885	685	268	384
Kuwait	'000	1 540	1 570	1 499	1 260	891	962	930	956
Oman	'000	481	353	259	289	359	320	540	741
Qatar	'000	308	282	181	137	180	192	192	269
Saudi Arabia	'000	2 141	1 873	1 411	0	1 072	1 193	1 032	874
United Arab Emirates	'000	682	466	225	196	231	209	186	176
Other	'000	242	279	134	53	5	20	35	37
Singapore	'000	13	6	7	9	16	9	6	9
Other	'000	90	87	98	29	24	17	22	51
Breeding sheep	'000	112	39	4	3	1	4	1	2
Total	'000	6 812	6 063	4 742	3 397	4 185	4 167	3 773	4 215

a Shipped weight. **b** Includes young sheep and hoggets. **c** Regarded as 27 countries.
Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

178 Value of Australian exports of sheep meat and live sheep (fob)

	2001	2002	2003	2004	2005	2006	2007	2008
	$m	$m	$m	$m	$m	$m	$m	$m
Mutton a								
Canada	6.8	5.2	3.6	5.8	5.4	7.1	2.9	2.4
China	1.0	4.1	1.3	1.6	3.0	3.1	5.0	10.1
Chinese Taipei	36.9	48.9	32.2	41.9	34.8	29.8	23.2	23.3
CIS	3.7	5.4	1.3	5.8	13.5	33.1	23.5	33.8
European Union **b**	42.0	41.4	28.1	43.3	48.9	47.7	40.9	45.3
Japan	42.7	51.1	29.9	47.1	38.1	31.5	29.9	32.8
Korea, Rep. of	2.3	3.3	2.2	3.1	3.1	2.9	2.6	3.6
Malaysia	21.7	22.9	15.9	22.6	18.5	25.1	21.8	24.9
Papua New Guinea	7.4	6.6	6.1	5.1	5.2	4.2	6.5	7.4
Saudi Arabia	90.1	77.5	65.0	53.0	63.9	67.3	58.9	59.9
Singapore	23.4	23.2	20.4	22.0	18.6	19.5	19.3	21.8
South Africa	30.9	17.6	11.1	14.1	18.7	29.2	21.8	21.9
United States	56.4	64.7	67.9	48.6	44.4	50.2	43.2	39.2
Other	146.3	152.0	91.7	113.5	119.0	140.4	134.6	170.1
Total	510.6	519.7	375.3	426.0	432.0	487.9	429.2	486.2
Lamb								
European Union **b**	105.7	89.3	96.9	93.6	84.1	85.9	82.3	92.8
China	8.5	11.8	11.0	15.9	21.5	20.7	33.7	38.8
Japan	37.0	40.8	42.3	53.5	79.1	83.0	56.0	61.1
Papua New Guinea	18.0	15.7	14.4	17.3	19.4	20.0	23.8	22.1
South Africa	5.5	1.2	2.1	3.5	5.3	9.0	7.5	6.7
United Arab Emirates	27.4	31.6	29.9	27.0	32.8	47.1	56.4	65.6
United States	219.9	218.2	257.5	259.9	324.2	319.0	328.4	296.0
Other	165.7	169.5	159.8	184.6	232.9	229.1	267.9	289.3
Total	579.1	566.2	602.9	639.3	777.8	793.2	822.3	833.6
Live sheep c								
Middle East	349	395	330	223	275	287	259	316
Bahrain	20	25	29	33	35	38	38	56
Egypt	14	9	1	0	0	0	0	0
Jordan	28	39	35	58	53	47	18	26
Kuwait	79	101	105	84	60	64	59	68
Oman	26	24	19	20	25	23	40	57
Qatar	16	21	13	10	12	13	13	27
Saudi Arabia	120	127	104	0	74	88	76	68
United Arab Emirates	34	30	16	13	15	14	12	12
Other	5	7	8	3	4	2	2	5
Total	355	402	338	225	279	289	261	320

a Includes young sheep and hoggets. **b** Regarded as 27 countries. **c** Excludes animals for breeding.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

179 World sheep numbers, by country a

	2000 million	2001 million	2002 million	2003 million	2004 million	2005 million	2006 million	2007 million	2008 million
Argentina	13.6	13.5	12.4	12.5	12.5	12.5	12.4	12.5	15.2
Australia	118.6	110.9	106.2	99.3	101.3	100.6	91.0	91.0	76.9
China b	133.2	135.9	143.8	157.3	170.9	173.9	146.0	172.0	na
France	9.4	9.3	9.3	9.2	9.1	8.9	8.5	7.8	7.8
Greece	9.0	9.1	9.1	9.0	8.8	8.8	8.8	9.0	9.0
India	60.1	60.8	61.5	62.2	62.9	63.6	64.3	64.3	na
Iran	53.9	53.9	53.9	54.0	52.2	52.2	52.2	52.2	na
Iraq	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	na
Italy	6.8	8.3	8.1	8.0	8.1	8.0	8.2	8.2	8.2
Morocco	17.2	16.3	16.7	17.0	16.9	17.3	17.3	17.3	na
New Zealand	40.0	39.5	39.3	40.0	39.9	40.1	38.5	34.2	34.2
Romania	7.7	7.3	7.3	7.5	7.4	7.6	7.7	8.9	8.9
Russian Federation	12.6	13.0	13.7	14.7	15.5	16.1	17.5	17.5	na
South Africa	28.8	28.9	28.8	29.1	25.3	25.0	25.0	25.0	na
Spain	24.4	23.8	23.5	24.0	22.7	22.5	21.8	20.0	20.0
Turkey	28.5	27.0	25.2	25.0	25.2	25.3	25.4	25.4	na
United Kingdom	36.7	35.8	35.7	35.5	35.3	34.7	33.6	21.9	21.9
United States	7.0	6.6	6.3	6.1	6.1	6.2	6.2	7.3	7.3
Uruguay	12.1	10.8	10.0	9.8	10.8	11.1	11.0	11.0	na
Total	1 030.2	1 022.7	1 035.2	1 062.3	1 089.1	1 092.4	1 105.4	1 112.5	na

a Mostly at 1 December of year shown. Data for Australia are at 31 March to 1999, and from 2000 as at 30 June. **b** Excludes Hong Kong. **na** Not available.

Sources: ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; European Comission, EUROSTAT, Luxembourg; FAO, *FAOSTAT Agriculture Database,* Rome; Meat and Wool New Zealand, Statistical Information Service, Wellington; US Department of Agriculture, *Sheep and Goats Report,* Washington DC.

180 World mutton and lamb production, by country a

	2000 kt	2001 kt	2002 kt	2003 kt	2004 kt	2005 kt	2006 kt	2007 kt	2008 kt
Argentina	50	50	50	52	52	52	52	52	na
Australia	714	678	634	543	573	616	669	692	669
China b	1 440	1 540	1 680	1 892	2 240	2 420	2 540	2 600	na
France	133	134	128	129	102	99	99	119	110
Italy	65	62	58	58	59	59	59	59	57
New Zealand	533	562	521	546	509	520	542	573	598
Romania	49	48	51	62	67	49	42	57	58
Russian Federation	119	114	115	114	125	134	135	140	na
Spain	232	236	237	236	231	235	214	196	157
Ukraine	9	0	8	8	8	8	8	8	na
United Kingdom	383	267	307	306	314	310	330	325	326
United States	106	101	101	92	90	85	84	83	79
Uruguay	51	51	31	27	27	34	31	32	na
Total	7 552	7 599	7 672	7 822	8 178	8 499	8 735	8 893	na

a Carcass weight. **b** Excludes Hong Kong.

Sources: ABS, *Livestock Products, Australia,* cat. no. 7215.0, Canberra; European Commission, EUROSTAT, Luxembourg; FAO, *FAOSTAT Agriculture Database,* Rome; Meat and Wool New Zealand, Statistical Information Service, Wellington; Meat and Wool New Zealand, Annual Report,Wellington; US Department of Agriculture, *Livestock, Dairy and Poultry Outlook,* Washington DC.

181 Volume of trade in sheep meat, by selected countries [a]

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Exports								
Australia	298	281	234	258	293	320	321	316
New Zealand	346	341	378	367	381	390	420	442
Imports								
France	120	139	133	135	135	137	128	118
– from Australia	4	3	2	3	2	2	1	3
– from New Zealand	30	39	33	32	30	30	32	29
Germany	42	40	33	32	38	40	39	38
– from Australia	2	1	1	1	1	1	1	1
– from New Zealand	34	32	27	26	30	31	32	31
Saudi Arabia	45	45	54	52	60	52	58	na
– from Australia	23	26	24	20	26	26	25	na
– from New Zealand	13	11	15	13	14	13	21	na
United Kingdom	93	102	111	116	110	114	114	112
– from Australia	9	12	12	13	13	14	13	12
– from New Zealand	71	77	81	82	79	83	85	83
United States	61	74	78	74	75	79	84	83
– from Australia	44	46	51	47	54	59	63	51
– from New Zealand	17	21	26	27	21	20	21	32

a Shipped weight.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Meat and Wool New Zealand, Annual Report, Wellington; United Nations Commodity Trade Statistics Database.

182 Volume of New Zealand sheep meat exports, by destination a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Mutton								
Canada	0.3	0.3	0.4	0.7	0.9	2.0	2.3	2.1
European Union **b**	28.2	31.7	26.0	28.8	26.8	26.6	27.7	29.2
Japan	1.6	1.8	1.7	1.3	1.5	0.6	0.9	0.8
Korea, Rep. of	0.0	5.0	0.1	0.1	0.0	0.1	0.2	0.3
Papua New Guinea	1.4	1.6	0.9	1.7	1.1	1.9	na	na
Russian Federation	0.1	6.1	0.2	0.5	0.8	1.2	3.5	0.8
United States	1.0	1.2	3.2	1.1	0.9	1.2	6.4	2.8
Other	19.8	9.9	23.1	24.3	24.9	35.7	48.5	29.4
Total	52.4	57.5	58.4	60.4	56.9	69.5	95.9	66.6
Lamb								
Canada	9.5	10.7	9.7	9.0	9.1	10.7	10.2	10.3
Germany	23.9	26.9	20.5	21.5	23.0	22.3	22.9	19.0
Japan	7.9	8.9	11.3	11.0	13.1	6.3	0.0	0.0
Korea, Rep. of	0.5	0.6	1.1	1.2	0.7	0.9	7.0	7.5
Jordan	5.1	5.7	3.2	1.5	1.3	2.5	na	na
Papua New Guinea	4.9	5.5	7.5	7.6	7.9	8.4	na	na
Saudi Arabia	11.4	12.8	13.0	13.6	12.4	20.6	20.4	17.3
United Kingdom	61.5	69.3	69.8	68.3	75.4	77.6	71.7	73.3
United States	20.5	23.0	25.0	19.4	19.7	20.9	18.3	16.5
Other	144.0	132.9	131.9	147.0	148.8	160.7	107.8	99.0
Total	289.2	296.2	293.2	300.0	311.5	331.1	328.9	305.2

a For October–September year. Shipped weight. **b** Regarded as 12 countries to 2002-03, then 25 countries from 2003-04. **na** Not available.
Source: Meat and Wool New Zealand, *Annual Report,* Wellington; Meat and Wool New Zeand, Economic Service, Wellington.

183 Summary of Australian statistics for oilseeds [a]

	Area	Yield	Production	Exports [b]	Domestic use [c]
	'000 ha	t/ha	kt	kt	kt
1962-63	56	0.79	44	1	43
1963-64	74	0.80	59	6	53
1964-65	92	0.77	71	7	64
1965-66	58	0.76	44	0	44
1966-67	81	1.00	81	6	75
1967-68	93	0.63	59	9	50
1968-69	95	0.58	55	12	43
1969-70	161	0.96	155	6	149
1970-71	269	0.76	204	9	195
1971-72	528	0.70	371	103	268
1972-73	447	0.60	268	48	220
1973-74	306	0.84	258	17	241
1974-75	402	0.86	345	48	297
1975-76	292	0.83	243	82	161
1976-77	271	0.88	240	5	235
1977-78	444	0.94	416	8	408
1978-79	511	1.02	520	65	455
1979-80	497	0.97	484	141	343
1980-81	400	1.12	450	6	444
1981-82	411	1.24	509	26	483
1982-83	386	0.91	349	3	346
1983-84	529	1.04	549	20	529
1984-85	710	1.30	925	51	874
1985-86	686	1.27	872	183	689
1986-87	552	1.28	708	125	583
1987-88	633	1.35	856	91	765
1988-89	569	1.47	838	217	621
1989-90	458	1.67	763	172	590
1990-91	599	1.74	1 040	187	852
1991-92	638	1.78	1 136	231	905
1992-93	541	1.60	864	241	623
1993-94	708	1.49	1 055	288	768
1994-95	807	1.14	920	253	667
1995-96	861	1.56	1 342	523	818
1996-97	1 048	1.69	1 776	523	1 253
1997-98	1 300	1.52	1 980	909	1 071
1998-99	2 123	1.47	3 113	1 708	1 405
1999-00	2 666	1.45	3 867	2 449	1 419
2000-01	2 144	1.45	3 098	2 194	904
2001-02	1 915	1.56	2 982	1 920	1 063
2002-03	1 627	0.94	1 523	887	636
2003-04	1 553	1.55	2 409	1 235	1 174
2004-05	1 839	1.44	2 641	1 261	1 379
2005-06	1 475	1.68	2 480	1 107	1 373
2006-07	1 281	0.82	1 056	354	702
2007-08	1 406	1.12	1 577	548	1 030
2008-09	1 981	1.29	2 566	1 020	1 546

a Oilseeds are comprised of canola, cottonseed, linseed, peanuts, safflowerseed, soybeans and sunflowerseed. **b** Seed only. On a financial year basis. **c** Includes any imports of seed, stocks carried over to the next season, feed and seed use, and any processing, of which some may be exported.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; *ABS, Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; Australian Oilseeds Federation, *AOF Oilseeds,* Sydney; ABARE.

184 Australian oilseeds area, yield and production, by state and type

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia
Canola								
Area								
2002-03	'000 ha	490.0	248.0	0.0	349.0	210.0	0.5	1 298.0
2003-04	'000 ha	366.0	239.0	0.0	358.0	247.0	0.0	1 211.0
2004-05	'000 ha	434.0	284.0	0.0	428.0	230.0	1.0	1 377.0
2005-06	'000 ha	194.0	191.0	1.0	437.0	147.0	1.0	971.0
2006-07	'000 ha	283.0	179.0	2.0	411.0	177.0	1.0	1 052.0
2007-08	'000 ha	310.0	196.0	2.0	595.0	173.0	1.0	1 214.0
2008-09	'000 ha	331.0	251.0	4.0	892.0	191.0	2.0	1 670.0
Yield								
2002-03	t/ha	0.4	0.7	0.0	0.9	1.0	1.8	0.7
2003-04	t/ha	1.2	1.6	0.0	1.5	1.4	0.0	1.4
2004-05	t/ha	1.1	1.2	0.0	1.1	1.1	1.0	1.1
2005-06	t/ha	1.6	1.4	1.0	1.4	1.4	1.0	1.5
2006-07	t/ha	0.2	0.2	0.5	1.0	0.5	1.0	0.5
2007-08	t/ha	0.3	1.1	0.0	1.3	0.9	1.0	1.0
2008-09	t/ha	0.8	0.9	0.8	1.3	1.1	1.0	1.1
Production								
2002-03	kt	184.0	177.0	0.0	299.0	210.0	0.8	871.0
2003-04	kt	438.0	384.0	0.0	527.0	354.0	0.0	1 703.0
2004-05	kt	468.0	342.0	0.0	488.0	242.0	1.0	1 542.0
2005-06	kt	314.0	272.0	1.0	617.0	213.0	1.0	1 419.0
2006-07	kt	54.0	42.0	1.0	392.0	84.0	1.0	573.0
2007-08	kt	79.0	221.0	0.0	752.0	162.0	1.0	1 214.0
2008-09	kt	256.0	225.0	3.0	1 164.0	212.0	2.0	1 861.0
Cottonseed								
Area								
2002-03	'000 ha	165.2	0.0	59.3	0.0	0.0	0.0	224.5
2003-04	'000 ha	97.2	0.0	100.8	0.0	0.0	0.0	198.1
2004-05	'000 ha	162.8	0.0	158.1	0.0	0.0	0.0	320.9
2005-06	'000 ha	214.3	0.0	121.2	0.0	0.0	0.0	335.5
2006-07	'000 ha	108.7	0.0	34.9	0.0	0.0	0.0	143.6
2007-08	'000 ha	41.2	0.0	21.4	0.0	0.0	0.0	62.7
2008-09	'000 ha	88.0	0.0	76.0	0.0	0.0	0.0	164.0
Yield								
2002-03	t/ha	2.6	0.0	2.0	0.0	0.0	0.0	2.4
2003-04	t/ha	2.6	0.0	2.4	0.0	0.0	0.0	2.5
2004-05	t/ha	3.0	0.0	2.7	0.0	0.0	0.0	2.8
2005-06	t/ha	2.7	0.0	2.3	0.0	0.0	0.0	2.5
2006-07	t/ha	2.9	0.0	2.2	0.0	0.0	0.0	2.7
2007-08	t/ha	3.2	0.0	2.6	0.0	0.0	0.0	3.0
2008-09	t/ha	2.9	0.0	2.8	0.0	0.0	0.0	2.8
Production								
2002-03	kt	425.3	0.0	120.5	0.0	0.0	0.0	545.8
2003-04	kt	254.2	0.0	239.6	0.0	0.0	0.0	493.7
2004-05	kt	491.8	0.0	420.5	0.0	0.0	0.0	912.3
2005-06	kt	570.6	0.0	273.8	0.0	0.0	0.0	844.4
2006-07	kt	311.1	0.0	76.7	0.0	0.0	0.0	387.8
2007-08	kt	131.3	0.0	56.5	0.0	0.0	0.0	187.8
2008-09	kt	252.0	0.0	213.6	0.0	0.0	0.0	465.5

Continued

184 Australian oilseeds area, yield and production, by state and type continued

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia
Sunflowerseed								
Area								
2002-03	'000 ha	14.0	0.0	25.5	0.0	0.0	0.0	39.5
2003-04	'000 ha	21.2	0.0	25.0	0.0	0.0	0.0	46.2
2004-05	'000 ha	29.0	0.0	17.0	0.0	0.0	0.0	46.0
2005-06	'000 ha	74.6	0.0	4.4	0.0	0.0	0.0	79.0
2006-07	'000 ha	12.9	0.0	4.1	0.0	0.0	0.0	17.0
2007-08	'000 ha	28.3	0.0	20.1	0.0	0.0	0.0	48.4
2008-09	'000 ha	16.7	0.0	26.7	0.0	0.2	0.0	43.4
Yield								
2002-03	t/ha	0.8	0.0	0.5	0.0	0.0	0.0	0.6
2003-04	t/ha	1.5	0.0	1.1	0.0	0.0	0.0	1.3
2004-05	t/ha	1.6	0.0	0.9	0.0	0.0	0.0	1.3
2005-06	t/ha	1.2	0.0	1.0	0.0	0.0	0.0	1.2
2006-07	t/ha	1.2	0.0	0.7	0.0	0.0	0.0	1.1
2007-08	t/ha	1.5	0.0	1.6	0.0	0.0	0.0	1.5
2008-09	t/ha	1.7	0.0	1.6	0.0	0.1	0.0	1.7
Production								
2002-03	kt	11.5	0.0	13.0	0.0	0.0	0.0	24.5
2003-04	kt	31.7	0.0	26.3	0.0	0.0	0.0	58.0
2004-05	kt	47.0	0.0	15.0	0.0	0.0	0.0	62.0
2005-06	kt	93.2	0.0	4.5	0.0	0.0	0.0	97.6
2006-07	kt	15.0	0.0	3.0	0.0	0.0	0.0	18.0
2007-08	kt	41.1	0.0	32.0	0.0	0.0	0.0	73.0
2008-09	kt	29.0	0.0	42.7	0.0	0.0	0.0	71.7
Peanuts								
Area								
2002-03	'000 ha	0.3	0.0	10.0	0.0	0.0	0.0	10.5
2003-04	'000 ha	0.8	0.0	13.0	0.0	0.0	0.0	14.0
2004-05	'000 ha	0.2	0.0	14.0	0.0	0.0	0.0	14.0
2005-06	'000 ha	0.8	0.0	23.4	0.0	0.0	0.0	12.0
2006-07	'000 ha	0.7	0.0	19.1	0.0	0.0	0.0	12.0
2007-08	'000 ha	0.5	0.0	16.3	0.0	0.0	0.0	17.0
2008-09	'000 ha	0.6	na	18.5	0.0	na	na	16.0
Yield								
2002-03	t/ha	2.7	0.0	2.7	0.0	0.0	0.0	2.7
2003-04	t/ha	1.3	0.0	3.2	0.0	0.0	0.0	3.1
2004-05	t/ha	4.6	0.0	2.2	0.0	0.0	0.0	2.3
2005-06	t/ha	1.9	0.0	1.8	0.0	0.0	0.0	2.1
2006-07	t/ha	2.5	0.0	2.4	0.0	0.0	0.0	1.5
2007-08	t/ha	2.7	0.0	2.4	0.0	0.0	0.0	2.4
2008-09	t/ha	2.3	na	2.1	0.0	na	na	2.3
Production								
2002-03	kt	0.7	0.0	27.0	0.0	0.0	0.0	28.0
2003-04	kt	1.0	0.0	42.0	0.0	0.0	0.0	44.0
2004-05	kt	0.8	0.0	30.7	0.0	0.0	0.0	32.0
2005-06	kt	1.5	0.0	42.4	0.0	0.0	0.0	25.0
2006-07	kt	1.6	0.0	45.4	0.0	0.0	0.0	18.0
2007-08	kt	1.4	0.0	38.9	0.0	0.0	0.0	41.0
2008-09	kt	1.4	0.0	38.4	0.0	0.0	na	37.2

Continued

184 Australian oilseeds area, yield and production, by state and type continued

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia
Safflowerseed								
Area								
2002-03	'000 ha	12.0	14.4	4.0	0.0	4.6	0.0	35.0
2003-04	'000 ha	15.0	17.0	2.7	1.5	5.3	0.0	41.5
2004-05	'000 ha	19.7	16.4	2.6	0.4	5.9	0.0	45.0
2005-06	'000 ha	19.0	16.2	2.5	0.5	5.9	0.0	44.1
2006-07	'000 ha	15.1	12.8	2.0	0.4	4.7	0.0	35.0
2007-08	'000 ha	15.9	14.7	2.7	0.4	5.2	0.0	39.0
2008-09	'000 ha	14.8	13.7	2.5	0.4	4.8	0.0	33.8
Yield								
2002-03	t/ha	1.0	0.7	0.3	0.0	0.8	0.0	0.7
2003-04	t/ha	0.9	0.5	0.5	0.0	0.7	0.0	0.7
2004-05	t/ha	0.7	0.5	0.4	0.0	0.7	0.0	0.6
2005-06	t/ha	0.8	0.6	0.4	0.0	0.7	0.0	0.6
2006-07	t/ha	0.6	0.5	0.4	0.0	0.6	0.0	0.6
2007-08	t/ha	0.6	0.4	0.3	0.0	0.6	0.0	0.5
2008-09	t/ha							
Production								
2002-03	kt	11.6	9.4	1.2	0.0	3.8	0.0	26.0
2003-04	kt	13.6	9.2	1.4	0.0	3.8	0.0	28.0
2004-05	kt	14.1	8.9	0.9	0.0	4.1	0.0	28.0
2005-06	kt	14.4	9.0	1.0	0.0	4.2	0.0	28.5
2006-07	kt	9.6	6.6	0.8	0.0	3.0	0.0	20.0
2007-08	kt	9.4	6.3	0.8	0.0	2.9	0.0	19.0
2008-09	kt	10.1	6.8	0.9	0.0	3.1	0.0	21.0
Soybeans								
Area								
2002-03	'000 ha	7.3	0.1	3.0	0.0	0.0	0.0	10.3
2003-04	'000 ha	17.8	0.5	15.1	0.0	0.0	0.0	33.4
2004-05	'000 ha	17.0	1.2	8.0	0.0	0.0	0.0	26.2
2005-06	'000 ha	16.6	0.3	7.0	0.0	0.0	0.0	23.8
2006-07	'000 ha	8.5	0.0	5.1	0.0	0.0	0.0	13.6
2007-08	'000 ha	6.9	0.0	8.0	0.0	0.0	0.0	14.9
2008-09	'000 ha	22.6	0.0	22.0	0.0	0.0	0.0	44.7
Yield								
2002-03	t/ha	1.8	2.5	1.7	0.0	0.0	0.0	1.8
2003-04	t/ha	2.3	1.5	2.2	0.0	0.0	0.0	2.2
2004-05	t/ha	2.2	0.9	2.0	0.0	0.0	0.0	2.1
2005-06	t/ha	2.4	2.8	2.1	0.0	0.0	0.0	2.3
2006-07	t/ha	2.4	0.0	2.2	0.0	0.0	0.0	2.4
2007-08	t/ha	2.0	0.0	2.6	0.0	0.0	0.0	2.3
2008-09	t/ha							
Production								
2002-03	kt	13.2	0.1	4.9	0.0	0.0	0.0	18.3
2003-04	kt	40.1	0.8	32.7	0.0	0.0	0.0	73.7
2004-05	kt	37.6	1.1	15.6	0.0	0.0	0.0	54.4
2005-06	kt	39.9	0.9	14.7	0.0	0.0	0.0	55.5
2006-07	kt	20.8	0.0	11.1	0.0	0.0	0.0	31.9
2007-08	kt	13.8	0.0	20.9	0.0	0.0	0.0	34.7
2008-09	kt	48.0	1.2	52.3	0.0	0.0	0.0	101.5

Continued

184 Australian oilseeds area, yield and production, by state and type continued

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia a
Total oilseeds								
Area								
2002-03	'000 ha	688.8	262.7	101.7	349.0	214.6	0.5	1 626.8
2003-04	'000 ha	517.9	257.3	156.6	359.5	252.3	0.0	1 553.1
2004-05	'000 ha	662.7	301.7	199.6	428.4	235.9	1.0	1 839.1
2005-06	'000 ha	519.3	208.3	159.5	437.5	152.9	1.0	1 475.5
2006-07	'000 ha	428.8	192.5	67.1	411.4	181.7	1.0	1 281.1
2007-08	'000 ha	402.8	211.3	70.6	595.4	178.2	1.0	1 405.9
2008-09	'000 ha	473.7	265.3	149.7	892.4	196.0	2.0	1 981.4
Yield								
2002-03	t/ha	0.9	0.7	1.6	0.9	1.0	1.8	0.9
2003-04	t/ha	1.5	1.5	2.2	1.5	1.4	0.0	1.6
2004-05	t/ha	1.6	1.2	2.4	1.1	1.0	1.0	1.4
2005-06	t/ha	2.0	1.4	2.1	1.4	1.4	1.0	1.7
2006-07	t/ha	1.0	0.3	2.1	1.0	0.5	1.0	0.8
2007-08	t/ha	0.7	1.1	2.1	1.3	0.9	1.0	1.1
2008-09	t/ha	1.3	0.9	2.3	1.3	1.1	1.0	1.3
Production								
2002-03	kt	646.3	186.5	166.6	299.0	213.8	0.8	1 522.6
2003-04	kt	778.6	394.0	342.0	527.0	357.8	0.0	2 409.4
2004-05	kt	1 059.3	352.0	482.8	488.0	246.1	1.0	2 640.6
2005-06	kt	1 033.5	281.9	337.3	617.0	217.2	1.0	2 480.0
2006-07	kt	412.1	48.6	138.0	392.0	87.0	1.0	1 056.3
2007-08	kt	275.9	227.3	149.2	752.0	164.9	1.0	1 577.3
2008-09	kt	596.4	233.0	350.9	1 164.0	215.2	2.0	2 565.8

a Australian totals include some crops that are not divided by the states.

Sources: ABS, *Principal Agricultural Commodities, Australia, Preliminary*, cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia*, cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia*, cat no. 7121.0, Canberra; ABARE, *Australian Crop Report*, Canberra; Australian Oilseeds Federation, *AOF Oilseeds*, Sydney.

185 Australian exports of oilseeds, vegetable oils and meals, by type

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Oilseeds								
Canola	1 303.09	612.30	1 048.82	1 018.56	884.27	237.60	519.14	972.97
Cottonseed	593.65	258.57	166.57	214.35	204.44	104.08	17.84	37.09
Linseed	0.03	0.03	0.02	0.21	0.16	0.02	0.00	0.01
Peanuts	5.16	3.61	10.25	12.42	2.55	3.80	5.83	5.41
Safflowerseed	10.36	2.77	3.62	5.63	7.76	3.05	0.17	0.07
Soybeans	5.42	7.22	4.54	6.88	4.08	3.36	1.92	1.91
Sunflowerseed	1.98	2.25	1.39	3.17	3.46	2.52	2.76	2.46
Total **a**	1 919.68	886.75	1 235.20	1 261.23	1 106.72	354.43	547.66	1 019.92
(value, $m)	740.81	391.66	541.23	484.44	404.46	161.42	337.89	641.85
Oils								
Canola	31.31	31.38	46.91	47.19	34.42	28.33	56.82	76.33
Cottonseed	2.59	2.08	1.99	2.19	2.77	4.66	5.62	9.98
Linseed	0.30	0.01	0.02	0.01	0.10	0.01	0.01	0.00
Palm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peanut	0.59	0.12	0.53	0.26	0.19	0.57	0.11	0.13
Safflowerseed	0.13	0.01	0.00	0.02	0.00	0.00	0.00	0.00
Soybeans	2.21	1.45	1.74	0.16	0.57	1.65	0.96	2.19
Sunflowerseed	4.73	4.26	1.06	3.52	7.76	5.58	1.76	1.86
Olive	0.38	0.21	0.39	0.68	2.52	2.75	3.03	4.92
Total	50.15	51.57	62.64	63.06	61.03	59.71	93.37	112.01
(value, $m)	55.38	63.22	67.08	73.05	81.11	90.35	163.42	223.28
Oilseed meals								
Canola	0.02	0.00	0.01	0.01	0.02	0.01	2.04	1.29
Cottonseed and sunflowerseed	31.92	9.15	10.15	6.79	11.99	9.04	9.15	10.72
Linseed	0.74	0.19	0.00	0.01	0.00	0.00	0.00	0.00
Soybeans	5.70	5.18	4.66	10.30	3.79	3.97	2.98	1.38
Other **b**	1.82	1.39	1.18	5.83	5.55	6.67	4.73	6.25
Total	40.20	15.91	15.99	22.94	21.36	19.70	18.90	19.64
(value, $m)	31.10	11.42	17.93	37.26	28.46	26.02	872.69	567.18

a Excludes sesame seed and other oleaginous fruit. **b** Includes flour, meal of oilseeds, and oleaginous fruit. Excludes peanut meal.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

186 Volume of Australian exports of selected oilseeds products, by destination

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Oilseeds								
Canola								
Bangladesh	151.75	70.12	100.57	67.95	41.30	15.23	3.55	3.39
China	335.77	50.08	2.19	39.62	0.00	3.23	0.00	43.54
Japan	395.43	444.40	545.84	495.23	370.27	190.47	121.54	96.47
Pakistan	306.66	38.50	284.28	387.24	97.46	25.00	166.78	120.55
Other	113.48	9.20	115.94	28.53	375.24	3.67	227.27	709.03
Total [a]	1 303.09	612.30	1 048.82	1 018.56	884.27	237.60	519.14	972.97
Cottonseed								
Chinese Taipei	1.47	0.57	0.42	0.61	0.87	0.49	0.00	0.07
Japan	164.48	133.41	134.12	144.67	162.72	86.39	17.36	29.70
Korea, Rep. of	88.47	22.72	28.42	56.04	39.64	16.21	0.00	6.11
Saudi Arabia	8.50	0.00	0.00	10.58	0.00	0.00	0.00	0.72
United States	327.68	98.81	1.34	1.00	0.00	0.00	0.00	0.02
Other	3.05	3.05	2.26	1.47	1.20	1.00	0.49	0.47
Total [a]	593.65	258.57	166.57	214.35	204.44	104.08	17.84	37.09
Canola oil								
China	5.03	5.30	12.58	0.26	0.29	0.28	4.21	0.14
Japan	9.66	10.00	10.02	18.42	9.34	3.10	2.01	4.17
New Zealand	14.51	13.11	12.29	14.19	15.73	15.49	13.12	20.09
Other	2.11	2.96	12.02	14.33	9.07	9.47	37.49	51.94
Total	31.31	31.38	46.91	47.19	34.42	28.33	56.82	76.33
Cottonseed and sunflowerseed meal								
Korea, Rep. of	25.99	6.32	8.16	4.64	9.93	7.26	8.17	10.09
New Zealand	2.15	1.24	0.25	0.43	0.31	0.51	0.00	0.04
Other	3.77	1.59	1.74	1.72	1.75	1.28	0.97	0.60
Total	31.92	9.15	10.15	6.79	11.99	9.04	9.15	10.72

a Excludes sesame seed and other oleaginous fruit.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

187 Volume of Australian imports of oilseeds, vegetable oils and meals, by type

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Oilseeds								
Canola	0.09	0.21	0.23	0.11	0.14	57.27	0.28	0.44
Copra	0.09	0.06	0.05	1.17	1.11	5.65	7.51	11.95
Linseed	1.04	0.56	1.45	1.22	0.00	2.77	3.48	2.04
Peanuts	5.77	28.38	16.42	7.43	4.95	17.20	19.36	13.09
Soybeans	0.31	43.82	39.60	0.62	0.72	10.39	1.30	0.84
Sunflowerseed	0.80	0.73	1.07	1.85	1.84	25.16	2.78	2.26
Other **a**	6.80	6.51	7.84	7.06	7.03	8.25	8.21	6.01
Total	14.89	80.27	66.66	19.46	15.78	126.69	42.92	36.64
(value, $m)	20.80	61.45	50.05	26.69	20.94	79.21	50.45	52.99
Oils								
Canola	3.62	4.31	8.45	9.99	13.10	13.29	10.92	9.45
Cottonseed	0.64	0.71	6.91	3.16	2.14	11.79	6.54	18.37
Linseed	2.43	1.90	3.09	3.93	2.08	3.56	3.55	2.09
Maize	2.04	1.90	2.92	3.41	3.29	2.49	2.37	1.91
Peanut	0.35	1.46	2.87	0.94	1.21	0.36	0.14	0.52
Safflowerseed and sunflowerseed	16.64	24.86	31.19	29.71	24.81	36.61	34.76	31.42
Soybean	10.90	10.67	12.58	15.46	12.59	38.12	17.65	23.47
Castor	1.41	1.47	1.40	1.34	1.28	264.79	249.52	361.11
Coconut	12.18	15.23	14.16	11.77	10.56	12.63	14.45	10.72
Olive	24.69	32.75	29.41	29.76	30.81	40.97	32.22	24.24
Palm	82.98	90.48	87.14	86.70	104.07	112.12	107.02	110.42
Palm kernel	11.95	10.33	13.13	12.49	15.12	11.28	10.61	11.18
Palm olein	74.63	82.50	78.66	76.18	83.48	88.99	87.78	85.46
Palm stearin	29.54	22.08	25.94	21.34	20.78	20.65	19.71	24.51
Tung	0.19	0.31	0.25	0.32	0.27	0.29	0.27	0.18
Other **b**	35.58	217.74	73.36	34.87	38.83	242.35	230.25	129.23
Total oils	309.75	518.70	391.46	341.34	364.41	900.28	827.76	844.29
(value, $m)	325.16	413.77	412.68	425.30	466.02	581.47	622.51	760.59
Oilseed meals								
Soybeans	258.76	373.66	312.15	377.16	329.64	617.85	528.38	482.05
Other **c**	35.58	217.74	73.36	34.87	38.83	242.35	230.25	129.23
Total	294.35	591.41	385.50	412.02	368.47	860.20	758.63	611.28
(value, $m)	108.78	154.25	125.07	113.64	108.03	202.07	217.44	252.59

a Oilseeds, oleaginous fruit, used for extraction of vegetable oils, not elsewhere specified. **b** Includes fixed vegetable oils not elsewhere specified, including mixtures; boiled, oxidised and dehydrated vegetable oils not elsewhere specified; vegetable oils and fats not elsewhere specified. **c** Includes flours.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABARE.

188 Summary of world statistics for oilseeds a

	Area b	Production	Use c	Closing stocks World	Closing stocks Exporters d	Stocks to use ratio	Exports	Use per person	Price e
	million ha	Mt	Mt	Mt	Mt	%	Mt	kg	US$/t
1970-71	70.2	83.3	78.6	na	3.2	na	18.2	27.2	na
1971-72	73.9	109.4	82.6	4.3	3.2	5.2	18.3	28.4	na
1972-73	102.7	125.0	107.6	4.3	2.9	4.0	20.4	28.5	267.0
1973-74	107.9	118.2	120.4	7.5	5.7	6.2	22.0	30.7	260.0
1974-75	107.1	128.3	117.4	8.7	6.8	7.4	19.7	29.3	249.0
1975-76	106.9	118.7	125.6	11.3	8.7	9.0	23.8	30.8	215.0
1976-77	104.8	138.1	124.9	5.1	3.7	4.1	23.6	30.1	288.0
1977-78	115.4	145.3	136.5	8.4	6.1	6.1	26.9	32.3	259.0
1978-79	120.4	164.6	145.5	9.4	6.9	6.5	30.1	33.8	295.0
1979-80	127.8	150.7	156.4	16.7	13.6	10.7	35.2	35.8	278.0
1980-81	125.4	165.1	155.5	13.6	10.9	8.7	30.7	35.0	310.0
1981-82	128.8	172.4	167.0	12.2	9.2	7.3	35.5	36.9	253.0
1982-83	130.2	181.0	171.3	14.5	11.2	8.4	34.6	37.2	260.0
1983-84	130.3	168.6	165.4	9.1	5.6	5.5	32.5	35.3	301.1
1984-85	138.1	187.0	181.7	14.5	10.6	8.0	32.0	38.1	223.0
1985-86	137.0	196.0	187.1	20.1	16.8	10.8	33.8	38.6	210.8
1986-87	133.7	194.0	193.8	23.4	19.7	12.1	36.8	39.4	208.7
1987-88	140.9	211.0	204.6	24.6	19.9	12.0	39.2	40.9	282.3
1988-89	150.6	201.6	202.4	23.9	19.5	11.8	31.8	39.7	292.3
1989-90	151.3	212.2	209.0	25.2	20.7	12.1	36.3	40.3	246.9
1990-91	150.6	213.6	214.0	24.8	20.7	11.6	32.6	40.5	241.4
1991-92	157.0	222.6	224.6	23.2	19.2	10.3	37.4	41.8	237.4
1992-93	156.4	226.4	226.9	25.2	21.4	11.1	38.3	41.6	246.2
1993-94	159.9	227.3	231.1	22.2	18.2	9.6	38.4	41.7	258.8
1994-95	168.1	261.1	257.1	28.7	24.5	11.2	44.2	45.7	247.6
1995-96	174.3	258.0	263.1	23.9	18.8	9.1	41.6	46.7	304.0
1996-97	170.2	261.6	263.8	20.8	14.5	7.9	46.1	46.2	304.0
1997-98	177.5	286.7	275.3	31.4	23.4	11.4	49.2	47.6	257.0
1998-99	185.0	294.6	292.0	34.7	27.4	11.9	51.1	49.6	209.0
1999-00	188.8	304.2	300.3	38.4	29.0	12.8	59.2	50.7	210.0
2000-01	173.9	313.9	311.0	40.0	29.0	12.9	66.8	51.6	200.9
2001-02	177.2	324.8	324.0	42.3	33.4	13.0	62.2	53.1	201.0
2002-03	175.2	331.4	326.6	48.5	38.9	14.9	69.7	52.9	244.8
2003-04	191.2	335.9	337.0	45.3	36.6	13.4	66.8	53.8	320.6
2004-05	197.7	381.5	367.4	57.6	43.9	15.7	74.4	58.1	274.5
2005-06	198.9	391.5	383.8	65.0	50.6	16.9	75.8	59.1	260.9
2006-07	198.7	404.2	393.1	73.5	61.3	18.7	83.4	59.9	335.4
2007-08	194.4	391.6	400.2	62.3	50.9	15.6	92.7	60.3	549.4
2008-09	201.4	394.6	401.4	54.3	36.9	13.5	93.9	58.6	425.3

a October–September years, except where otherwise noted. Oilseeds comprise canola, copra, cottonseed, palm kernels, peanuts, soybeans and sunflowerseed. **b** Area for 2008-09 does not include copra or palm kennels **c** Consumption, includes losses etc. **d** Stocks are indicative for the year in question. Soybeans: United States, Brazil, Argentina; cottonseed: United States; peanuts: United States, China; sunflowerseed: United States, Argentina; canola: Canada; copra: the Philippines; palm kernels: Malaysia. **e** US soybeans, cif Rotterdam, marketing year October-September. **na** Not available.
Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; ISTA mielke GmbH, *Oil World Annual,* Hamburg, Germany.

189 World oilseeds production, by country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Africa								
South Africa	1 309	870	1 041	1 020	1 067	615	1 330	1 373
Americas								
Argentina	34 461	39 616	36 840	43 425	45 030	53 160	51 701	35 657
Brazil	45 012	53 712	53 576	55 683	59 133	62 009	64 123	59 474
Canada	6 756	6 671	9 184	10 830	12 910	12 610	12 350	16 012
Paraguay	3 666	4 643	4 144	4 265	3 875	6 606	7 276	4 246
United States	89 832	83 935	76 599	95 938	95 532	96 612	82 437	89 201
Asia								
China	52 194	52 676	50 847	57 974	56 797	55 230	53 350	57 800
India	24 787	20 187	29 682	29 392	30 701	29 916	33 879	33 699
Indonesia	5 926	6 131	6 623	7 238	7 690	7 918	8 231	9 012
Malaysia	3 342	3 610	3 595	4 073	4 083	3 973	4 561	4 644
Pakistan	3 994	3 759	3 755	5 530	5 052	5 253	4 570	5 007
Philippines	2 193	2 244	2 346	2 496	2 447	2 247	2 549	2 572
Turkey	1 904	2 361	2 062	2 105	2 012	2 262	1 950	1 645
Turkmenistan	339	275	370	360	380	470	510	530
Uzbekistan	2 150	2 000	1 800	2 250	2 500	2 300	2 400	1 800
Europe								
European Union b	17 406	16 905	16 439	21 061	23 458	24 341	24 391	26 993
Romania	912	1 187	1 741	1 620	1 641	1 861	na	na
Russian Federation	3 160	4 223	5 435	5 631	7 442	8 080	6 934	8 846
Ukraine	2 460	3 456	4 535	3 562	5 595	6 790	5 950	10 200
Oceania								
Australia	2 982	1 523	2 409	2 641	2 480	1 056	1 577	2 566
Other countries	20 034	21 408	22 869	24 442	21 628	20 867	21 565	23 330
Total	324 819	331 392	335 892	381 536	391 453	404 176	391 634	394 624

a Oilseeds comprise soybeans, cottonseed, peanuts, sunflowerseed, canola, palm kernels and copra. **b** Regarded as 27 countries. **na** Not available.
Sources: ABARE, *Australian Crop Report,* Canberra; ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

190 World oilseeds production, by type

	Castor-seed	Copra	Cotton-seed	Linseed	Palm kernels	Peanuts	Rape-seed a	Sesame seed	Soybeans	Sunflower-seed
	kt	kt	kt	kt	kt	kt	kt	kt	kt	kt
1961-62	570	3 079	17 767	3 265	795	9 537	3 556	1 413	26 945	7 085
1962-63	590	3 156	18 772	3 625	807	9 749	3 734	1 516	27 016	6 795
1963-64	675	3 423	20 163	3 525	823	10 611	2 924	1 546	28 121	6 466
1964-65	811	3 375	21 411	3 700	862	11 625	4 503	1 741	29 238	8 580
1965-66	784	3 528	22 085	3 675	847	10 956	5 042	1 572	31 700	8 110
1966-67	853	3 285	20 635	3 273	703	11 087	4 664	1 544	36 468	9 410
1967-68	909	3 335	20 163	2 738	762	11 849	5 724	1 727	37 773	9 791
1968-69	888	3 228	22 588	3 155	808	11 001	5 379	1 572	41 698	9 685
1969-70	866	3 203	20 148	3 995	885	10 705	5 264	1 624	42 478	10 155
1970-71	814	3 693	19 675	4 420	939	11 346	7 078	1 984	44 269	9 790
1971-72	854	4 291	21 631	3 024	906	11 777	7 661	1 827	47 184	10 019
1972-73	807	3 732	22 400	2 579	859	14 421	7 257	1 776	49 189	9 685
1973-74	997	3 204	22 862	2 763	993	16 251	7 098	1 873	62 377	12 175
1974-75	1 101	4 385	22 985	2 625	1 049	16 651	7 805	1 770	54 605	10 725
1975-76	800	5 020	19 888	2 873	1 078	18 468	8 385	1 671	65 543	9 959
1976-77	694	4 571	20 064	2 580	1 122	16 378	7 116	1 657	59 361	10 130
1977-78	773	4 745	22 685	3 392	1 157	16 735	7 820	1 779	72 114	12 822
1978-79	907	4 132	21 458	2 740	1 285	17 711	10 624	1 854	77 368	12 711
1979-80	875	4 287	23 248	3 089	1 415	17 183	9 933	1 852	93 339	15 162
1980-81	782	4 757	23 455	2 526	1 436	16 040	11 035	1 713	80 873	13 090
1981-82	914	4 508	26 348	2 459	1 708	19 581	12 253	2 069	86 050	14 664
1982-83	924	4 392	25 755	3 001	1 767	17 205	14 703	1 769	93 441	16 530
1983-84	970	3 693	24 211	2 640	1 975	18 510	14 259	1 951	83 092	15 328
1984-85	1 070	4 592	32 816	2 790	2 188	19 449	16 895	1 970	93 040	17 776
1985-86	1 180	5 231	29 415	3 010	2 467	19 784	18 536	1 960	96 958	19 331
1986-87	1 050	4 625	26 281	3 290	2 453	20 159	19 283	2 270	97 961	19 043
1987-88	830	4 299	30 206	2 790	2 609	20 656	23 192	2 230	103 310	20 674
1988-89	1 010	4 265	31 382	2 300	2 858	22 657	22 513	2 210	95 802	20 003
1989-90	1 110	5 022	29 785	2 450	3 256	21 670	21 891	2 140	107 148	21 584
1990-91	1 350	4 684	32 266	2 880	3 255	21 799	25 056	2 070	104 246	22 635
1991-92	1 170	4 665	35 492	2 460	3 343	21 974	28 223	2 350	107 298	21 684
1992-93	1 140	4 838	30 797	1 966	3 910	23 093	25 285	2 190	117 379	21 174
1993-94	1 100	4 890	28 929	2 181	4 137	24 318	26 664	2 300	117 772	20 621
1994-95	1 210	5 533	32 319	2 464	4 522	27 366	30 310	2 321	137 716	23 331
1995-96	1 210	5 136	35 147	2 539	4 868	27 467	34 435	2 540	125 033	25 742
1996-97	1 116	6 053	33 610	3 369	5 211	28 958	31 531	2 821	132 349	23 800
1997-98	1 181	5 412	34 354	2 371	5 045	27 289	33 234	2 652	158 191	23 211
1998-99	1 168	4 391	32 365	2 828	5 624	29 951	35 756	2 617	159 826	26 650
1999-00	1 261	5 434	32 982	2 868	6 418	29 417	42 481	2 704	160 349	27 177
2000-01	1 353	5 810	33 514	2 359	7 046	31 423	37 325	2 870	175 759	23 078
2001-02	1 043	5 157	36 425	2 159	7 195	33 816	36 010	3 236	184 815	21 413
2002-03	1 043	5 144	33 818	2 090	7 761	30 862	33 256	3 025	196 869	23 964
2003-04	1 107	5 373	36 248	2 261	8 433	32 834	39 428	3 239	186 638	26 923
2004-05	1 359	5 594	45 484	2 020	9 535	33 606	46 085	3 439	215 777	25 420
2005-06	1 440	5 585	43 467	2 936	9 965	33 218	48 504	3 479	220 670	30 035
2006-07	1 210	5 258	45 999	2 600	10 188	30 722	45 093	3 390	237 111	29 795
2007-08	1 310	5 701	45 935	2 000	11 106	32 388	48 294	3 400	221 133	27 024
2008-09	1 410	5 270	41 266	2 130	11 891	34 425	57 891	3 480	210 840	33 095

a Predominantly canola since the late 1980s.

Sources: ISTA Mielke GmbH, *Oil World Annual*, Hamburg, Germany; US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC.

191 Volume of world oilseeds trade, by type and country [a]

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Canola	4.95	4.03	5.15	5.02	6.71	6.92	7.67	12.12
China	0.78	0.05	0.42	0.32	0.68	0.96	0.81	2.87
European Union [b]	0.17	0.06	0.17	0.01	0.38	0.43	0.69	3.34
Japan	2.08	2.11	2.28	2.23	2.28	2.20	2.30	2.15
Copra	0.09	0.07	0.07	0.13	0.07	0.11	0.08	0.13
European Union [b]	0.04	0.02	0.04	0.04	0.03	0.01	0.00	0.00
Linseed	0.79	0.78	2.22	1.70	0.79	1.01	0.93	0.83
European Union [c]	0.62	0.60	0.62	0.49	0.55	0.71	0.59	0.56
Japan	0.05	0.02	0.02	0.02	0.02	0.02	0.01	0.01
Soybeans	54.39	62.92	54.00	63.49	64.05	69.05	78.86	75.24
China	10.39	21.42	16.93	25.80	28.32	28.73	37.81	40.70
European Union [b]	18.68	16.94	14.68	14.54	13.94	15.29	15.10	12.00
Japan	5.02	5.09	4.69	4.30	3.96	4.09	4.01	3.45
Mexico	4.51	4.23	3.80	3.64	3.67	3.84	3.65	3.10
Sunflowerseed	1.11	1.39	2.17	1.14	1.29	1.68	1.16	1.85
European Union [b]	0.76	0.71	1.07	0.41	0.63	0.57	0.32	0.59
Israel	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mexico	0.01	0.10	0.04	0.01	0.02	0.01	0.01	0.01
Turkey	0.17	0.23	0.66	0.53	0.35	0.44	0.53	0.42
Other oilseeds [d]	2.34	1.86	0.54	1.22	2.40	1.96	2.03	1.83
Total	63.67	71.04	64.15	72.70	75.31	80.73	90.73	92.00
Exports								
Canola	4.90	4.13	5.48	4.87	6.99	6.64	8.27	11.91
Australia	1.30	0.61	1.05	1.02	0.88	0.24	0.52	0.97
Canada	2.67	2.42	3.76	3.49	5.41	5.45	5.77	7.49
Copra	0.12	0.09	0.07	0.15	0.11	0.12	0.10	0.14
Papua New Guinea	0.03	0.02	0.02	0.03	0.01	0.02	0.02	0.04
Philippines	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Linseed	0.76	0.79	0.82	0.65	0.80	1.05	0.90	0.83
Canada	0.69	0.64	0.71	0.51	0.65	0.84	0.77	0.72
Soybeans	52.90	60.98	56.20	64.77	63.75	71.50	79.43	76.93
Argentina	5.96	8.62	6.74	9.57	7.25	9.56	13.78	5.89
Brazil	14.50	19.63	20.42	20.14	25.91	23.49	25.36	29.99
United States	28.95	28.42	24.13	29.86	25.58	30.39	31.60	34.84
Sunflowerseed	1.19	1.52	2.27	1.22	1.50	1.89	1.48	2.06
Argentina	0.36	0.21	0.05	0.11	0.05	0.06	0.10	0.07
Ukraine	0.10	0.33	0.93	0.01	0.22	0.34	0.08	0.76
United States	0.24	0.17	0.17	0.14	0.18	0.18	0.20	0.18
Other oilseeds [d]	2.38	2.20	1.97	2.75	2.65	2.16	2.52	2.08
Total	62.24	69.71	66.81	74.41	75.80	83.36	92.70	93.95

a Imports may not equal exports in any given period as a result of lags in shipping time. **b** Regarded as 27 countries; excludes intra-EU trade. **c** Regarded as 15 countries for all years, excludes intra-EU trade. **d** Cottonseed, palm kernels and peanuts.

Sources: ISTA Mielke GmbH, *Oil World Annual*, Hamburg, Germany; US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC.

192 Volume of world protein meals trade, by type and country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Copra meal	0.79	0.81	0.68	0.73	0.69	0.62	0.83	0.69
European Union **b**	0.40	0.28	0.14	0.08	0.05	0.02	0.03	0.02
Korea, Rep. of	0.35	0.37	0.40	0.43	0.45	0.34	0.52	0.45
Fish meal	3.25	2.84	3.11	3.62	2.92	2.68	2.94	3.03
China	0.96	0.80	1.13	1.58	0.98	0.97	1.20	1.40
Chinese Taipei	0.24	0.24	0.24	0.23	0.21	0.15	0.17	0.15
European Union **b**	0.77	0.76	0.60	0.65	0.57	0.53	0.47	0.50
Peanut meal	0.28	0.10	0.26	0.12	0.20	0.15	0.21	0.09
European Union **b**	0.13	0.06	0.03	0.00	0.03	0.06	0.04	0.01
Thailand	0.08	0.02	0.03	0.04	0.02	0.02	0.02	0.02
Soybean meal	40.51	42.54	45.02	46.20	51.43	52.49	54.94	51.63
European Union **b**	19.96	20.55	22.01	21.91	22.83	22.18	23.90	21.80
Indonesia	1.25	1.64	1.67	1.85	2.07	2.24	2.40	2.45
Korea, Rep. of	1.50	1.53	1.31	1.46	1.77	1.87	1.76	1.85
Philippines	1.51	1.45	1.16	1.38	1.37	1.36	1.45	1.32
Other meals **c**	6.67	7.32	8.75	8.93	9.93	10.60	11.27	12.09
Total	51.50	53.61	57.82	59.60	65.17	66.54	70.19	67.52
Exports								
Fish meal	3.06	2.87	3.21	3.65	2.73	2.59	2.72	2.83
European Union **b**	0.21	0.16	0.19	0.23	0.20	0.14	0.15	0.16
South America	2.05	2.02	2.32	2.76	1.93	1.85	1.95	2.11
Peanut meal	0.31	0.11	0.32	0.18	0.26	0.17	0.26	0.17
India	0.09	0.01	0.25	0.11	0.16	0.07	0.17	0.09
Senegal	0.09	0.04	0.02	0.00	0.03	0.05	0.03	0.04
Sudan	0.02	0.00	0.01	0.01	0.01	0.01	0.02	0.02
Soybean meal	41.69	42.76	45.66	46.84	51.72	54.27	55.31	52.37
Argentina	16.59	18.47	19.22	20.65	24.20	25.63	26.42	24.35
Brazil	11.86	13.66	14.79	14.26	12.90	12.72	12.14	13.00
European Union **b**	0.33	0.34	0.40	0.53	0.70	0.55	0.42	0.40
United States	7.27	5.73	4.69	6.66	7.30	7.99	8.35	7.80
Other meals **d**	7.74	8.03	9.49	10.82	11.06	11.09	12.93	13.46
Total	52.79	53.77	58.67	61.49	65.77	68.12	71.22	68.83

a Imports may not equal exports in any given period, as a result of lags in shipping time. **b** Regarded as 27 countries; includes intra-EU trade. **c** Canola, cottonseed, palm kernel and sunflowerseed. **d** Canola, copra, cottonseed, palm kernel and sunflowerseed.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

193 Volume of world vegetable oils trade, by type and country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Canola oil	1.12	0.89	1.36	1.20	1.46	2.20	1.95	2.33
European Union **b**	0.00	0.01	0.03	0.03	0.32	0.73	0.30	0.43
India	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coconut oil	1.83	1.89	1.68	1.87	1.99	1.89	1.86	1.59
European Union **b**	0.78	0.81	0.68	0.77	0.77	0.79	0.67	0.62
United States	0.50	0.39	0.36	0.42	0.51	0.41	0.49	0.40
Palm oil	16.93	19.61	21.32	23.94	26.16	27.40	29.56	33.29
European Union **b**	2.98	3.01	3.37	4.03	4.27	4.35	4.00	4.90
India	3.40	3.95	3.49	3.53	3.00	3.80	4.53	6.30
Pakistan	1.17	1.32	1.27	1.57	1.70	2.22	2.42	2.20
Singapore	0.27	0.31	0.32	0.31	0.32	0.32	0.33	0.33
Soybean oil	7.74	8.27	8.33	8.91	9.02	9.78	10.34	8.93
China	0.55	1.71	2.73	1.73	1.52	2.40	2.73	2.30
European Union **b**	0.06	0.03	0.06	0.18	0.71	0.98	0.95	0.82
India	1.48	1.20	0.91	2.03	1.73	1.40	0.70	1.00
Russian Federation	0.59	0.18	0.10	0.09	0.05	0.02	0.12	0.02
Sunflowerseed oil	1.76	2.00	1.92	2.17	3.24	3.33	2.76	4.03
European Union **b**	0.68	0.73	0.52	0.86	1.24	1.19	1.10	1.05
Other vegetable oils **c**	1.87	2.11	2.29	2.33	2.48	3.01	2.84	3.13
Total	31.25	34.77	36.90	40.41	44.35	47.61	49.31	53.29
Exports								
Canola oil	1.03	0.91	1.33	1.30	1.74	1.94	1.92	2.36
Canada	0.54	0.53	0.98	0.97	1.09	1.27	1.33	1.53
European Union **b**	0.28	0.25	0.14	0.10	0.09	0.05	0.13	0.14
Coconut oil	1.79	1.74	1.79	2.04	1.99	1.82	2.03	1.66
Philippines	1.07	1.07	1.06	1.00	1.20	0.84	1.02	0.80
Cottonseed oil	0.18	0.14	0.14	0.12	0.11	0.16	0.19	0.19
United States	0.07	0.05	0.05	0.03	0.03	0.06	0.08	0.09
Palm oil	17.63	19.61	21.61	24.55	26.85	26.91	30.37	33.92
Indonesia	5.98	6.42	7.86	9.63	11.70	11.45	13.51	14.65
Malaysia	10.50	11.65	11.60	12.68	12.93	12.90	14.22	15.70
Soybean oil	8.34	9.03	8.83	9.12	9.82	10.57	10.79	9.12
Argentina	3.63	3.92	4.24	4.76	5.60	5.97	5.67	4.79
Brazil	1.78	2.39	2.72	2.41	2.47	2.46	2.39	1.97
European Union **b**	0.89	0.71	0.56	0.53	0.27	0.24	0.34	0.35
United States	1.14	1.03	0.43	0.60	0.52	0.85	1.35	1.00
Sunflowerseed oil	1.92	2.25	2.67	2.63	3.88	3.86	3.54	4.58
Argentina	1.16	0.90	1.01	1.18	1.22	0.85	1.48	1.10
European Union **b**	0.09	0.15	0.23	0.18	0.13	0.15	0.12	0.12
Other vegetable oils **c**	2.17	2.08	2.47	2.76	2.86	3.32	3.25	3.05
Total	33.06	35.76	38.83	42.52	47.25	48.58	52.09	54.88

a Imports may not equal exports in any given period, as a result of lags in shipping time. **b** Regarded as 27 countries; excludes intra-EU trade. **c** Olive, palm kernel and peanut.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC.

194 Selected oilseed, oilseed meal and vegetable oil import price quotations, by country a

	Canola b	Palm oil c	Soybeans d	Soybean meal e	Soybean oil f
	US$/t	US$/t	US$/t	US$/t	US$/t
1974-75	na	na	249.0	163.0	616.0
1975-76	na	na	215.0	169.0	418.0
1976-77	na	na	288.0	237.0	570.0
1977-78	na	na	259.0	205.0	581.0
1978-79	na	na	295.0	238.0	655.0
1979-80	na	na	278.0	242.0	609.0
1980-81	308.0	na	310.0	273.0	545.0
1981-82	292.0	na	253.0	225.0	463.0
1982-83	303.0	406.0	260.0	224.0	463.0
1983-84	351.0	767.0	301.1	221.0	722.0
1984-85	303.0	569.0	223.0	155.0	625.0
1985-86	239.0	274.0	210.8	183.0	377.0
1986-87	180.0	310.0	208.7	191.0	324.0
1987-88	222.0	402.0	282.3	254.0	443.0
1988-89	218.5	357.7	292.3	262.8	435.0
1989-90	213.3	270.8	246.9	204.3	437.5
1990-91	199.3	317.6	241.4	198.3	454.4
1991-92	203.8	365.2	237.4	202.8	437.3
1992-93	234.1	382.3	246.2	207.3	453.3
1993-94	284.3	445.6	258.8	201.5	580.2
1994-95	288.9	659.7	247.6	183.6	641.8
1995-96	297.6	523.3	304.0	256.3	574.9
1996-97	284.4	525.1	304.0	277.7	535.6
1997-98	296.1	604.7	257.0	196.8	633.4
1998-99	227.3	484.0	209.0	149.7	482.9
1999-00	190.1	315.3	210.0	179.7	356.0
2000-01	202.0	243.8	200.9	187.9	335.9
2001-02	220.4	340.6	201.0	174.3	411.6
2002-03	284.0	420.0	244.8	191.0	537.0
2003-04	317.0	481.0	320.6	256.0	633.0
2004-05	262.0	392.0	274.5	212.0	545.0
2005-06	292.0	416.0	260.9	203.0	573.0
2006-07	375.0	654.0	335.4	264.0	771.0
2007-08	644.0	1 058.0	549.4	445.0	1 327.0
2008-09	393.0	633.0	425.3	349.0	794.0

a October–September average. **b** Cif Hamburg; Europe '00' rapeseed. **c** Malaysia fob; RBD. **d** Cif Rotterdam. **e** Cif Rotterdam; Arg. 44/45%. **f** Dutch fob; ex mill. **na** Not available.

Sources: UISTA mielke GmbH, *Oil World Annual*, Hamburg, Germany.

195 Summary of Australian statistics for pulses

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Lupins									
Area	'000 ha	1 139.0	1 024.5	851.0	845.0	809.0	736.0	752.0	578.0
Yield	t/ha	1.1	0.7	1.4	1.1	1.6	0.6	0.9	1.2
Production	kt	1 215.0	725.5	1 180.0	937.0	1 285.0	470.0	662.0	716.0
Exports **a**	kt	414.2	207.5	645.6	418.5	469.5	173.7	76.2	105.5
Value of exports **a**	$m	108.9	57.3	147.7	88.8	99.4	37.8	31.4	39.6
Average unit value	$/t	250.0	291.5	235.7	205.9	195.4	265.7	334.6	185.6
Gross value of production	$m	303.8	211.5	278.1	192.9	251.1	124.9	221.5	132.9
Field peas									
Area	'000 ha	337.0	380.0	354.0	413.0	366.0	384.0	292.5	279.3
Yield	t/ha	1.5	0.5	1.4	0.7	1.6	0.4	0.9	0.9
Production	kt	512.0	178.0	487.0	289.0	585.0	140.0	267.5	252.1
Exports **ab**	kt	459.1	107.6	209.3	116.1	156.1	247.7	142.0	118.2
Value of exports **ab**	$m	156.9	43.0	55.6	33.4	43.2	80.1	60.8	62.6
Average unit value	$/t	287.8	343.8	231.6	234.6	222.1	283.6	408.5	306.4
Gross value of production	$m	147.3	61.2	112.8	67.8	129.9	39.7	109.3	77.2
Chickpeas									
Area	'000 ha	195.0	201.0	151.5	113.3	105.3	244.1	306.0	312.6
Yield	t/ha	1.3	0.7	1.2	1.0	1.2	1.0	1.0	1.2
Production	kt	258.0	136.0	178.0	115.6	122.8	232.4	313.0	377.9
Exports **a**	kt	278.3	88.5	163.8	151.2	211.4	244.1	218.3	466.5
Value of exports **a**	$m	167.0	52.4	70.6	65.3	106.4	168.2	139.3	275.1
Average unit value	$/t	504.5	477.8	326.7	310.3	460.6	658.7	621.6	425.8
Gross value of production	$m	130.2	65.0	58.2	35.9	56.6	153.1	194.5	160.9
Total legumes c									
Area	'000 ha	2 086.0	2 034.3	1 700.1	1 764.0	1 650.8	1 738.7	1 677.7	1 451.2
Yield	t/ha	1.3	0.6	1.4	1.0	1.6	0.6	0.9	1.1
Production	kt	2 674.0	1 295.7	2 396.1	1 683.3	2 619.4	1 057.8	1 581.3	1 560.4
Exports **ad**	kt	2 134.7	947.6	2 041.7	1 328.7	1 706.9	1 146.7	692.2	1 014.9
Value of exports **ad**	$m	837.1	348.2	588.0	397.1	533.0	483.9	415.2	618.6
Average unit value	$/t	301.2	304.9	239.1	234.2	231.1	374.0	372.3	304.7
Gross value of production	$m	805.5	395.0	572.8	394.2	605.4	395.6	588.8	475.5

a Exports are on a financial year basis. **b** Includes only field peas and cow peas. **c** Lupins, field peas, chickpeas, faba beans, mung beans, navy beans, vetch and lentils. **d** Also includes cow peas, pigeon peas and some other minor legumes on a financial year basis.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, *Summary of Crops, Australia,* cat. no. 7330.0, Canberra; ABS, *Value of Agricultural Commodities Produced, Australia,* cat. no. 7503.0, Canberra; Pulse Australia, Sydney; ABARE, *Australian Crop Report,* Canberra.

196 Australian area sown, yields and production of selected pulses, by state

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Australia a
Lupins							
Area							
2002-03	'000 ha	100.0	40.0	0.0	795.0	89.0	1 024.5
2003-04	'000 ha	69.0	28.0	0.0	667.0	86.0	851.0
2004-05	'000 ha	63.0	35.0	0.3	677.0	69.0	845.0
2005-06	'000 ha	37.0	27.0	0.0	672.0	72.0	809.0
2006-07	'000 ha	74.0	43.0	0.0	530.0	89.0	736.0
2007-08	'000 ha	80.0	48.0	1.0	546.0	77.0	752.0
2008-09	'000 ha	47.0	33.0	0.0	441.0	57.0	578.0
Yield							
2002-03	t/ha	0.37	0.28	0.00	0.74	1.01	0.71
2003-04	t/ha	0.81	1.14	0.00	1.45	1.42	1.39
2004-05	t/ha	0.87	0.57	1.67	1.17	0.99	1.11
2005-06	t/ha	1.68	1.33	0.00	1.58	1.68	1.59
2006-07	t/ha	0.22	0.26	0.00	0.77	0.38	0.64
2007-08	t/ha	0.36	0.65	1.00	0.98	0.87	0.88
2008-09	t/ha	0.85	0.55	na	1.37	0.98	1.24
Production							
2002-03	kt	37.0	11.0	0.0	587.0	90.0	725.5
2003-04	kt	56.0	32.0	0.0	969.0	122.0	1 180.0
2004-05	kt	55.0	20.0	0.5	792.0	68.0	937.0
2005-06	kt	62.0	36.0	0.0	1 064.0	121.0	1 285.0
2006-07	kt	16.0	11.0	0.0	409.0	34.0	470.0
2007-08	kt	29.0	31.0	1.0	533.0	67.0	662.0
2008-09	kt	40.0	18.0	0.0	602.0	56.0	716.0
Field peas							
Area							
2002-03	'000 ha	19.0	132.0	0.0	71.2	157.0	380.0
2003-04	'000 ha	22.0	110.0	0.0	65.0	157.0	354.0
2004-05	'000 ha	28.0	142.0	0.0	99.0	143.0	413.0
2005-06	'000 ha	37.0	99.0	0.0	85.0	143.0	366.0
2006-07	'000 ha	42.0	102.0	1.0	75.0	163.0	384.0
2007-08	'000 ha	45.5	67.0	0.0	50.0	130.0	292.5
2008-09	'000 ha	39.2	54.0	0.0	56.0	130.0	279.3
Yield							
2002-03	t/ha	0.32	0.16	0.00	0.34	0.80	0.47
2003-04	t/ha	0.86	1.07	0.00	1.58	1.57	1.38
2004-05	t/ha	0.54	0.35	0.00	0.73	1.05	0.70
2005-06	t/ha	1.51	1.68	0.00	1.21	1.80	1.60
2006-07	t/ha	0.12	0.08	1.00	0.69	0.46	0.36
2007-08	t/ha	0.21	0.90	0.00	1.10	1.10	0.91
2008-09	t/ha	1.20	0.80	na	0.80	0.90	0.90
Production							
2002-03	kt	6.0	21.0	0.0	24.0	126.0	178.0
2003-04	kt	19.0	118.0	0.0	103.0	246.0	487.0
2004-05	kt	15.0	50.0	0.0	72.0	150.0	289.0
2005-06	kt	56.0	166.0	0.0	103.0	258.0	585.0
2006-07	kt	5.0	8.0	1.0	52.0	75.0	140.0
2007-08	kt	9.5	60.0	0.0	55.0	143.0	267.5
2008-09	kt	47.1	43.0	0.0	45.0	117.0	252.1

Continued

196 Australian area sown, yields and production of selected pulses, by state continued

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Australia a
Chickpeas							
Area							
2002-03	'000 ha	71.0	9.0	111.0	6.0	3.5	201.0
2003-04	'000 ha	61.0	5.5	76.0	6.0	3.0	151.5
2004-05	'000 ha	63.0	4.0	41.0	4.0	1.3	113.3
2005-06	'000 ha	46.0	16.0	36.0	6.0	1.3	105.3
2006-07	'000 ha	156.7	39.0	41.0	2.4	5.0	244.1
2007-08	'000 ha	214.5	17.0	66.0	0.8	7.7	306.0
2008-09	'000 ha	192.6	26.0	82.0	0.9	11.1	312.6
Yield							
2002-03	t/ha	0.71	0.03	0.73	0.25	0.77	0.68
2003-04	t/ha	1.20	1.09	1.20	0.83	1.00	1.17
2004-05	t/ha	1.37	1.00	0.51	0.88	0.88	1.02
2005-06	t/ha	1.33	1.50	0.86	0.83	1.44	1.17
2006-07	t/ha	1.12	0.26	1.05	0.38	0.52	0.95
2007-08	t/ha	0.94	1.12	1.26	0.25	1.20	1.02
2008-09	t/ha	1.23	0.65	1.39	1.61	0.73	1.21
Production							
2002-03	kt	50.5	0.3	81.0	1.5	2.7	136.0
2003-04	kt	73.0	6.0	91.0	5.0	3.0	178.0
2004-05	kt	86.0	4.0	21.0	3.5	1.1	115.6
2005-06	kt	61.0	24.0	31.0	5.0	1.8	122.8
2006-07	kt	175.9	10.0	43.0	0.9	2.6	232.4
2007-08	kt	201.5	19.0	83.0	0.2	9.3	313.0
2008-09	kt	237.2	17.0	114.2	1.5	8.1	377.9
Faba beans							
Area							
2002-03	'000 ha	17.0	50.0	0.0	7.0	83.0	157.0
2003-04	'000 ha	15.0	50.0	0.0	7.0	83.0	155.0
2004-05	'000 ha	40.0	60.0	0.0	7.5	87.0	194.5
2005-06	'000 ha	33.0	55.0	0.0	6.0	89.0	183.0
2006-07	'000 ha	35.1	40.0	0.0	4.0	74.0	153.1
2007-08	'000 ha	9.5	34.0	0.0	2.0	87.0	132.5
2008-09	'000 ha	23.7	24.5	1.5	1.0	61.0	111.7
Yield							
2002-03	t/ha	1.06	0.10	0.00	0.29	1.00	0.69
2003-04	t/ha	1.13	1.80	0.00	1.43	1.93	1.79
2004-05	t/ha	1.75	0.33	0.00	1.00	0.80	0.86
2005-06	t/ha	2.12	1.38	0.00	1.33	1.97	1.80
2006-07	t/ha	1.71	0.25	0.00	0.63	0.47	0.70
2007-08	t/ha	0.89	0.94	0.00	1.25	1.09	1.04
2008-09	t/ha	1.55	0.49	1.00	1.50	0.61	0.79
Production							
2002-03	kt	18.0	5.0	0.0	2.0	83.0	108.0
2003-04	kt	17.0	90.0	0.0	10.0	160.0	277.0
2004-05	kt	70.0	20.0	0.0	7.5	70.0	167.5
2005-06	kt	70.0	76.0	0.0	8.0	175.0	329.0
2006-07	kt	60.0	10.0	0.0	2.5	35.0	107.5
2007-08	kt	8.5	32.0	0.0	2.5	95.0	138.0
2008-09	kt	36.7	12.0	1.5	1.5	37.0	88.7

Continued

196 Australian area sown, yields and production of selected pulses, by state continued

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Australia a
Mung beans							
Area							
2002-03	'000 ha	20.0	0.0	24.0	0.0	0.0	44.0
2003-04	'000 ha	18.0	0.0	26.0	0.0	0.0	44.1
2004-05	'000 ha	25.0	0.0	25.0	0.0	0.0	49.8
2005-06	'000 ha	18.0	0.2	25.8	0.0	0.0	44.0
2006-07	'000 ha	15.9	0.2	24.2	0.0	0.0	40.0
2007-08	'000 ha	19.8	0.0	25.2	0.0	0.0	45.0
2008-09	'000 ha	19.4	0.0	24.6	0.0	0.0	50.0
Yield							
2002-03	t/ha	0.59	0.00	0.91	0.00	0.00	0.76
2003-04	t/ha	1.11	0.00	1.05	0.00	0.00	1.07
2004-05	t/ha	0.87	0.00	1.25	0.00	0.00	1.07
2005-06	t/ha	1.09	0.00	1.10	0.00	0.00	1.09
2006-07	t/ha	0.86	0.00	0.84	0.00	0.00	0.85
2007-08	t/ha	0.93	0.00	1.07	0.00	0.00	1.01
2008-09	t/ha	1.13	0.00	1.27	0.00	0.00	1.07
Production							
2002-03	kt	11.7	0.0	21.9	0.0	0.0	33.6
2003-04	kt	20.0	0.0	27.3	0.0	0.0	47.3
2004-05	kt	21.7	0.0	31.2	0.0	0.0	53.2
2005-06	kt	19.6	0.0	28.5	0.0	0.0	48.1
2006-07	kt	13.7	0.0	20.2	0.0	0.0	34.0
2007-08	kt	18.4	0.0	27.0	0.0	0.0	45.5
2008-09	kt	21.9	0.0	31.4	0.0	0.0	53.3
Total pulses b							
Area							
2002-03	'000 ha	231.2	339.0	135.0	886.6	440.6	2 034.3
2003-04	'000 ha	187.5	256.0	102.0	748.5	405.0	1 700.1
2004-05	'000 ha	223.0	303.5	66.3	791.5	378.3	1 764.0
2005-06	'000 ha	175.0	254.7	61.8	774.0	382.3	1 650.8
2006-07	'000 ha	326.5	311.9	66.2	614.7	418.8	1 738.7
2007-08	'000 ha	370.2	239.9	92.2	600.4	375.1	1 677.7
2008-09	'000 ha	323.0	192.9	108.1	500.9	328.1	1 451.2
Yield							
2002-03	t/ha	0.55	0.16	0.76	0.70	0.89	0.64
2003-04	t/ha	1.01	1.33	1.16	1.46	1.61	1.41
2004-05	t/ha	1.13	0.45	0.79	1.11	0.95	0.95
2005-06	t/ha	1.56	1.61	0.96	1.53	1.80	1.59
2006-07	t/ha	0.83	0.19	0.97	0.76	0.47	0.61
2007-08	t/ha	0.72	0.88	1.20	0.99	1.06	0.94
2008-09	t/ha	1.19	0.59	1.36	1.30	0.80	1.08
Production							
2002-03	kt	126.1	55.4	102.9	619.7	390.1	1 295.7
2003-04	kt	188.6	341.2	118.3	1 094.7	651.2	2 396.1
2004-05	kt	251.7	136.0	52.7	880.0	359.1	1 683.3
2005-06	kt	273.1	411.0	59.5	1 184.0	687.8	2 619.4
2006-07	kt	272.1	58.5	64.2	468.1	195.9	1 057.8
2007-08	kt	267.8	210.5	111.0	592.4	398.5	1 581.3
2008-09	kt	384.0	113.8	147.1	651.5	263.6	1 560.4

a Includes data for Tasmania and the Northern Territory. **b** Lupins, field peas, chickpeas, faba beans, mung beans, vetch and lentils.

Sources: ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, Agriculture, Australia, cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat no. 7121.0, Canberra; ABS, Crops and Pastures, Queensland, cat. no. 7321.3, Brisbane; ABS, *Summary of Crops, Australia,* cat. no. 7330, Canberra; Pulse Australia, Sydney; ABARE, *Australian Crop Report,* Canberra.

197 World pulses production, by region and country

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa								
Burundi	284	280	280	259	285	244	240	na
Egypt	516	492	426	413	365	334	394	na
Ethiopia	1 160	1 088	983	1 318	1 320	1 354	1 573	na
Nigeria	2 222	2 361	2 509	2 681	2 865	3 091	1 221	na
Uganda	668	695	693	626	652	602	618	na
Americas								
Brazil	2 466	3 082	3 321	2 992	3 040	3 477	3 189	na
Canada	3 366	2 191	2 840	4 298	4 590	3 764	4 181	na
Mexico	1 508	1 914	1 689	1 391	1 084	1 675	1 281	na
United States	1 242	1 719	1 425	1 559	2 171	2 082	2 104	na
Asia								
China	5 127	5 915	5 892	4 925	5 234	4 547	3 777	na
India	12 180	12 934	13 612	14 221	12 876	14 029	14 170	na
Myanmar	2 044	2 344	2 410	2 570	2 628	2 676	2 704	na
Pakistan	771	717	1 066	956	1 171	825	1 238	na
Thailand	294	274	295	215	213	192	193	na
Europe								
Denmark	113	150	125	96	53	32	25	na
France	1 877	2 033	1 943	2 091	1 754	1 347	891	na
Poland	211	229	238	268	255	236	281	na
Russian Federation	1 804	188	1 666	1 887	1 645	1 779	1 316	na
Ukraine	830	810	571	812	758	747	357	na
United Kingdom	957	924	934	876	866	795	740	na
Middle East								
Turkey	1 454	1 640	1 558	1 584	1 565	1 606	1 385	na
Oceania								
Australia **a**	2 241	2 674	1 296	2 396	1 683	2 619	1 058	1 581
Total **b**	55 493	57 126	59 454	59 934	60 107	59 465	61 341	na

a On a fiscal year basis, for example, 1992-93 = 1993. **b** Includes some unspecified countries. **na** Not available.

Sources: ABARE, *Australian Crop Report*, Canberra; ABS, *Selected Agricultural Commodities, Australia, Preliminary*, cat. no. 7112.0, Canberra; FAO, *Production Yearbook*, Rome; FAOSTAT database, FAO.

198 Volume of world pulses trade, by region and country

	2001	2002	2003	2004	2005	2006	2007
	kt	kt	kt	kt	kt	kt	kt
Imports							
Africa							
Algeria	175.5	167.2	172.8	157.7	196.9	163.6	187.9
Egypt	370.8	413.7	393.0	433.0	533.0	571.0	417.8
South Africa	45.9	69.9	122.9	77.4	74.6	97.4	118.4
Americas							
Brazil	169.8	115.7	137.5	113.5	138.4	112.3	143.7
Colombia	177.6	155.2	119.9	127.2	148.6	140.1	154.4
Cuba	210.3	114.3	213.9	217.4	202.4	245.4	236.2
Mexico	176.9	150.6	129.4	109.4	127.1	184.5	147.0
United States	213.1	255.1	249.9	255.0	252.4	262.7	272.3
Venezuela	114.8	93.2	86.9	83.7	70.4	100.3	123.7
Asia							
China	235.3	195.9	138.7	163.0	341.6	438.6	365.7
Hong Kong, China	11.7	12.8	12.3	11.1	10.4	9.9	10.0
India	2 320.9	2 165.3	1 953.9	1 471.9	1 870.0	2 490.6	2 951.8
Japan	163.4	157.6	158.9	162.2	141.7	144.1	146.7
Malaysia	62.1	64.0	68.9	77.4	82.5	81.1	87.7
Singapore	47.1	66.2	23.9	22.4	17.3	14.1	15.1
Europe							
France	144.6	124.6	121.2	100.1	110.3	100.5	125.8
Germany	107.9	80.7	80.8	135.9	64.4	80.7	91.1
Italy	420.7	429.3	436.9	420.8	430.7	449.7	290.6
Netherlands	228.0	194.3	324.0	262.0	253.7	209.0	149.8
Spain	767.7	431.8	419.3	939.5	1 256.7	877.2	247.5
United Kingdom	1 661.8	182.3	184.8	170.5	194.6	210.2	237.1
Middle East							
United Arab Emirates	47.9	140.3	105.9	86.5	90.9	228.8	215.7
Total **a**	9 494.9	8 752.5	8 863.4	8 735.6	10 127.5	10 657.6	10 442.3

Continued

198 Volume of world pulses trade, by region and country continued

	2001	2002	2003	2004	2005	2006	2007
	kt	kt	kt	kt	kt	kt	kt
Exports							
Americas							
Argentina	276.1	253.5	230.0	183.4	219.0	293.8	322.0
Canada	2 865.9	1 413.4	1 777.2	2 330.0	3 260.1	3 437.5	3 509.6
Chile	13.9	12.3	12.2	8.3	6.9	7.2	3.7
Mexico	212.1	155.6	158.6	102.3	102.7	155.9	113.4
United States	581.8	552.1	562.1	559.1	825.8	948.1	949.1
Asia							
China	719.2	860.8	1 041.5	795.8	868.3	801.9	860.1
Myanmar	1 077.0	1 147.0	1 073.6	902.8	357.1	706.2	630.9
Singapore	37.3	54.7	11.5	11.4	7.1	5.1	4.0
Thailand	34.2	41.9	37.2	25.6	29.7	42.5	40.7
Europe							
Denmark	43.6	77.4	33.5	45.1	19.5	18.2	15.7
France	633.2	986.0	747.2	773.6	656.7	696.6	555.7
Hungary	8.3	11.4	11.0	12.3	11.9	11.8	15.6
Netherlands	50.7	61.1	52.6	52.2	43.7	43.7	36.2
United Kingdom	165.5	303.3	498.0	422.1	375.8	301.8	216.3
Middle East							
Turkey	360.4	244.6	449.5	323.7	245.6	410.7	259.0
Oceania							
Australia **b**	2 475.2	2 134.7	947.6	2 041.7	1 328.7	1 706.9	1 146.7
New Zealand	23.6	18.9	22.2	19.5	18.3	na	na
Total **a**	9 413.8	8 825.1	8 488.3	9 033.2	9 615.3	na	na

a Includes some unspecified countries. **b** On a fiscal year basis: for example 1992-93 = 1993. **na** Not available.
Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; FAOSTAT database, FAO.

199 Summary of Australian statistics for rice a

	Area	Yield b	Production Volume b	Production Unit value c	Exports Volume d	Exports Unit value e	Apparent consumption f
	'000 ha	t/ha	kt	$/t	kt	$/t	kt
1968-69	33.7	7.4	248.2	57.8	107.0	146.7	29.1
1969-70	40.2	6.1	247.0	58.8	120.7	141.7	30.2
1970-71	40.7	7.4	299.8	45.8	95.9	137.6	32.6
1971-72	40.5	6.1	248.4	48.1	169.3	114.6	33.1
1972-73	45.2	6.8	308.6	81.0	152.0	139.5	29.0
1973-74	67.5	6.1	408.8	123.4	124.8	229.2	27.4
1974-75	75.6	5.1	386.7	92.8	159.8	268.5	32.2
1975-76	74.8	5.6	417.0	98.8	215.2	238.8	33.5
1976-77	92.0	5.8	529.8	112.0	254.4	224.4	33.3
1977-78	91.4	5.4	490.3	124.6	273.2	241.9	34.8
1978-79	110.2	6.3	692.2	141.2	239.4	276.1	35.5
1979-80	116.4	5.3	613.1	153.0	449.6	288.9	37.1
1980-81	103.9	7.3	759.8	181.9	276.0	362.3	43.0
1981-82	123.0	7.0	857.0	120.8	558.0	349.5	43.9
1982-83	84.8	6.1	519.8	170.1	384.0	312.5	46.3
1983-84	119.1	5.3	634.2	140.2	241.0	381.7	50.5
1984-85	121.8	7.1	864.1	142.5	327.0	357.8	57.1
1985-86	105.1	6.5	687.5	117.1	464.6	398.2	58.6
1986-87	94.9	5.8	549.2	154.8	394.0	352.8	60.0
1987-88	105.4	7.2	761.1	152.0	314.6	391.0	80.2
1988-89	97.0	8.3	805.0	182.1	160.6	452.5	89.4
1989-90	105.0	8.8	924.0	152.6	149.8	486.7	97.6
1990-91	89.0	8.8	787.0	176.0	223.5	427.4	103.0
1991-92	127.0	8.8	1 122.0	164.0	449.3	461.6	90.6
1992-93	125.0	7.6	955.0	172.0	484.5	477.6	86.9
1993-94	132.7	8.2	1 082.0	241.7	533.8	506.5	98.7
1994-95	129.2	8.8	1 137.0	190.1	584.4	585.4	108.5
1995-96	149.7	6.4	951.2	237.6	606.0	554.9	118.2
1996-97	166.7	8.3	1 388.0	223.6	520.3	559.9	133.7
1997-98	141.2	9.4	1 330.9	255.9	680.9	582.8	135.5
1998-99	151.7	9.2	1 389.8	259.4	581.9	667.5	133.0
1999-00	133.3	8.2	1 096.0	263.9	672.1	616.4	136.4
2000-01	177.0	9.3	1 643.0	213.2	601.8	636.4	140.0
2001-02	144.0	8.3	1 192.0	274.2	580.3	583.9	144.1
2002-03	46.0	9.5	438.0	348.2	664.4	644.8	147.9
2003-04	66.0	8.4	553.0	325.1	216.5	620.4	151.8
2004-05	51.4	6.6	339.0	296.8	298.8	634.6	155.8
2005-06	102.0	9.8	1 002.6	283.3	167.3	653.2	160.2
2006-07	20.0	8.2	163.0	346.0	598.2	698.4	153.0
2007-08	2.2	8.2	17.6	414.4	92.3	876.7	157.0
2008-09	8.1	7.7	63.0	517.8	22.7	958.8	164.0

a Based on rice industry figures calculated on a crop year basis. For example, the 1985-86 data are for the Queensland summer crop harvested from December 1985, the New South Wales crop harvested from April 1986, and the Queensland winter crop harvested from June 1986. **b** Paddy. **c** Unit gross value of production. **d** Based on ABS data; April–March marketing year basis; generally exports of the crop harvested in the previous year – that is, 1998-99 exports are sourced from the 1997-98 crop harvest. Milled. Includes ABARE estimates from 2000 as confidentiality restrictions apply. **e** Unit gross value of exports. Between 1952-53 and 1987-88, calculated from financial year total export values. From 1988-89, calculated from marketing year (April–March) total export values. **f** Table rice only. Excludes rice used for feed, breakfast cereals and rice used for other purposes; includes imports. Financial year basis. From 1999-00 ABARE estimate.

Sources: ABS, *Apparent Consumption of Foodstuffs and Nutrients Australia,* cat. no. 4306.0, Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Value of Australian Commodities Produced,* Cat. no. 7503.0, Canberra; Rice Marketing Board for the State of New South Wales, *Annual Report,* Leeton; ABARE.

200 Australian rice trade and payments to growers

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Exports a									
Quantity	kt	580	664	216	299	167	598	92	23
Total export value b	$m	339	428	134	190	109	418	81	22
Imports ac									
Quantity	kt	55	61	80	91	103	107	141	171
Total import value	$m	43	46	56	59	69	78	106	201
Indicator price									
Thai white rice d	US$/t	191.67	199.42	220.33	278.33	301.42	320.17	551.25	608.50
Australian price e	A$/t	365.86	341.10	309.49	370.19	404.28	408.09	615.31	813.76
Average returns to growers f									
Avg. medium grain return	$/t	193.4	243.7	313.1	279.5	284.1	265.0	404.0	550.0

a Milled equivalent; marketing year (April–March) basis. Includes ABARE estimates from 2000 as confidentiality restrictions apply. **b** Free on board (fob). **c** Excludes broken rice. **d** US Department of Agriculture sourced nominal quote for Thai white rice,100 per cent, grade B/2nd grade, fob Bangkok (August–July basis). **e** Derived. **f** For paddy rice from harvest in year indicated. Returns to New South Wales and Queensland growers include bonuses paid by respective rice growers cooperatives. For New South Wales growers, returns take into account a deduction for grower equity in storage facilities made by the Rice Marketing Board, New South Wales.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Queensland Rice Marketing Board, *Annual Report,* Home Hill; Rice Marketing Board, New South Wales, *Annual Report,* Leeton; Ricegrowers Co-operative Mills Ltd; US Department of Agriculture, *Rice News,* Little Rock, Arkansas; Sunrice, *Annual Report;* ABARE.

201 Summary of world statistics for rice [a]

	Area harvested	Production [b]	Total use	Closing stocks [bc]	Stocks to use ratio	Trade [d]	Export price [e]
	million ha	Mt	Mt	Mt	%	Mt	US$/t
1966-67	126	179	179	19	10	8	181.67
1967-68	127	189	186	21	11	7	220.17
1968-69	129	195	192	25	13	7	186.75
1969-70	131	201	199	26	13	8	161.33
1970-71	133	213	211	29	14	9	131.83
1971-72	135	216	217	28	13	9	134.17
1972-73	133	209	213	24	11	8	187.12 [f]
1973-74	136	228	223	29	13	8	593.51 [g]
1974-75	138	226	226	28	12	7	439.12
1975-76	143	243	232	39	17	8	302.84
1976-77	141	236	237	38	16	11	274.66
1977-78	143	251	244	44	18	10	360.92
1978-79	144	262	252	54	21	12	339.83
1979-80	141	257	257	54	21	13	409.83
1980-81	144	270	275	53	19	13	492.58
1981-82	144	278	283	51	18	11	379.83
1982-83	141	285	285	57	20	12	280.42
1983-84	145	307	303	69	23	12	278.33
1984-85	144	317	309	88	28	12	211.29
1985-86	145	318	319	98	31	12	191.13
1986-87	145	316	320	103	32	13	189.66
1987-88	142	315	321	105	33	12	272.63
1988-89	146	331	327	111	34	15	292.44
1989-90	147	344	338	119	35	13	292.06
1990-91	147	351	343	127	37	12	296.09
1991-92	147	353	351	127	36	14	287.30
1992-93	147	354	356	123	35	15	244.25
1993-94	145	355	360	119	33	16	293.98
1994-95	147	364	364	118	33	21	289.76
1995-96	148	369	366	118	32	20	362.42
1996-97	150	381	376	121	32	19	337.83
1997-98	151	387	377	128	34	27	302.25
1998-99	153	395	388	134	35	23	283.75
1999-00	155	409	396	145	37	24	230.58
2000-01	152	399	394	147	37	26	184.17
2001-02	151	400	413	133	32	26	191.67
2002-03	146	379	406	103	25	27	199.42
2003-04	149	392	412	81	20	29	220.33
2004-05	151	402	407	73	18	29	278.33
2005-06	153	418	413	76	18	32	301.42
2006-07	154	421	418	75	18	28	320.17
2007-08	155	433	426	80	19	26	551.25
2008-09	156	446	435	91	21	28	608.50

a Based on US Department of Agriculture data. **b** Milled. **c** Closing stocks data are based on an aggregate of different local marketing years and should not be taken as representing world stock levels at a particular point in time. Stocks data do not include some major stockholders – for example, China and Burma – for which official information is not available. **d** Calendar year basis, 1960-61 =1961; includes intra-EU trade. **e** Thai white rice, 100 per cent, 2nd grade/grade B, fob Bangkok (August–July basis). From 1960-61 to 1983-84, prices are quoted from Thailand Board of Trade. From 1984-85, prices are nominal quotes from the US Department of Agriculture. **f** August–March average. **g** January–July average.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; US Department of Agriculture, *Rice Market News,* Arkansas; US Department of Agriculture, Rice Outlook, (http://usda.mannlib.cornell.edu/reports/erssor/field/rcs-bb/); ABARE.

202 World rice production, by country or region a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Australia	1.2	0.4	0.6	0.3	1.0	0.2	0.0	0.1
Bangladesh	36.5	37.8	39.2	38.4	43.1	43.5	43.2	46.5
Brazil	10.4	10.4	12.8	13.2	11.6	11.3	12.1	12.6
China	177.6	174.5	160.7	179.1	180.6	181.7	185.5	191.9
European Union **b**	2.6	2.7	2.7	2.9	2.7	2.7	2.8	2.6
India	140.0	107.7	132.8	124.7	137.7	140.0	145.1	148.7
Indonesia	51.1	51.8	54.3	54.0	54.2	54.7	57.4	59.4
Japan	11.3	11.1	9.7	10.9	11.3	10.7	10.9	11.0
Korea, Rep. of	7.4	6.7	6.2	6.7	6.4	6.3	6.0	6.5
Myanmar	18.0	18.6	18.5	16.5	18.0	18.3	18.5	17.5
Pakistan	5.8	6.7	7.3	7.5	8.3	8.2	8.6	9.5
Philippines	13.0	13.0	14.2	14.5	15.1	15.5	16.6	17.1
Thailand	26.5	26.1	27.3	26.3	27.6	27.7	29.2	29.4
United States	9.8	9.6	9.1	10.5	10.1	8.8	9.0	9.2
Viet Nam	31.9	32.6	33.5	34.4	34.5	34.7	36.9	37.0
World	594.1	563.8	585.5	597.8	623.3	627.3	646.6	664.9

a Crop year (paddy basis). **b** Regarded as 27 countries.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; ABARE.

203 Volume of world rice trade, by country [a]

	2001	2002	2003	2004	2005	2006	2007	2008
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Bangladesh	0.31	1.11	0.80	0.79	0.53	1.57	1.66	0.50
Brazil	0.56	1.31	0.83	0.55	0.69	0.68	0.42	0.47
China	0.30	0.26	1.12	0.61	0.65	0.47	0.30	0.33
European Union [b]	1.29	1.04	1.18	1.09	1.22	1.34	1.52	1.35
India	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Indonesia	3.50	2.75	0.65	0.50	0.54	2.00	0.35	0.25
Iran	0.96	0.90	0.95	1.20	1.50	1.50	1.50	1.70
Iraq	1.18	0.67	0.89	0.79	1.31	0.61	0.98	1.00
Japan	0.62	0.65	0.71	0.79	0.68	0.64	0.55	0.70
Malaysia	0.48	0.50	0.70	0.75	0.89	0.80	1.02	0.83
Nigeria	1.90	1.45	1.37	1.78	1.60	1.55	1.60	1.60
Philippines	1.25	1.30	1.10	1.89	1.79	1.90	2.50	2.00
Russian Federation	0.41	0.39	0.35	0.35	0.36	0.22	0.24	0.20
Saudi Arabia	0.94	1.15	1.50	1.36	0.96	0.96	1.36	1.37
World [c]	25.95	25.94	27.25	28.93	29.12	31.84	28.23	26.23
Exports								
Australia	0.57	0.63	0.35	0.28	0.20	0.48	0.24	0.04
China	1.96	2.58	0.88	0.66	1.22	1.34	0.97	0.80
European Union [b]	0.36	0.22	0.19	0.20	0.14	0.14	0.16	0.14
India	6.65	4.42	3.17	4.69	4.54	6.30	3.38	2.00
Myanmar	1.00	0.39	0.13	0.19	0.05	0.03	0.54	1.00
Pakistan	1.60	1.96	1.99	3.03	3.58	2.70	3.00	3.00
Thailand	7.25	7.55	10.14	7.27	7.38	9.56	10.01	8.50
United States	3.30	3.83	3.09	3.86	3.31	3.03	3.27	3.10
Viet Nam	3.25	3.80	4.30	5.17	4.71	4.52	4.65	5.70
World [c]	25.95	25.94	27.25	28.93	29.12	31.84	28.23	26.23

a Milled basis. **b** Regarded as 27 countries. Includes intra-EU trade. **c** Includes intra-EU trade.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC; ABARE.

204 US rice supply and disposal a

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Area harvested	million ha	1.34	1.30	1.21	1.35	1.36	1.14	1.11	1.20
Yield	t/ha	7.28	7.36	7.50	7.81	7.43	7.73	8.09	7.68
Opening stocks **b**	Mt	0.89	1.22	0.83	0.76	1.21	1.37	1.27	0.94
Production **b**	Mt	6.71	6.54	6.42	7.46	7.11	6.27	6.34	6.52
Total supply **c**	Mt	8.02	8.22	7.73	8.64	8.87	8.26	8.34	8.07
Exports	Mt	4.30	5.65	4.67	4.94	5.21	4.12	4.75	4.25
Long grain	Mt	3.35	4.51	3.66	3.81	4.18	3.27	3.59	2.95
Medium–short grain	Mt	0.95	1.14	1.01	1.13	1.03	0.85	1.17	1.29
Domestic and residual use	Mt	3.85	3.53	3.66	3.93	3.83	4.10	4.08	4.10
Total use	Mt	8.02	8.22	7.73	8.64	8.87	8.26	8.34	8.07
Target price **d**	US$/t	na	231	231	231	231	231	231	231
Statutory loan rate	US$/t	143	143	143	143	143	143	143	143
Farm price	US$/t	94	99	178	162	169	220	282	370

a August–July marketing year. **b** Milled basis. **c** Includes imports. **d** Authorised under the Food Security and Rural Investment Act of 2002.
Sources: US Department of Agriculture, *Rice Outlook,* Washington DC; US Department of Agriculture, *Rice Situation and Outlook Report,* Washington DC; US Department of Agriculture, *World Grain Situation and Outlook: Foreign Agriculture Circular,* Washington DC; ABARE.

205 Rice export price quotations, by country a

	Thailand Nominal price quote-US b	Arkansas c	California d
	US$/t	US$/t	US$/t
1984-85	211.29	397.45	336.20
1985-86	191.13	355.77	345.46
1986-87	189.66	259.68	286.41
1987-88	272.63	441.47	371.11
1988-89	292.44	344.65	368.26
1989-90	292.06	354.85	357.51
1990-91	296.09	344.84	354.67
1991-92	287.30	368.17	396.09
1992-93	244.25	312.04	395.17
1993-94	293.98	442.48	486.35
1994-95	289.76	317.91	391.51
1995-96	362.42	420.07	464.80
1996-97	337.83	458.22	432.27
1997-98	302.25	419.83	412.52
1998-99	283.75	373.83	483.96
1999-00	230.58	283.06	474.55
2000-01	184.17	280.28	338.09
2001-02	191.67	220.16	293.60
2002-03	199.42	221.83	326.83
2003-04	220.33	359.83	532.83
2004-05	278.33	312.17	404.42
2005-06	301.42	334.00	484.17
2006-07	320.17	407.42	537.83
2007-08	551.25	620.50	693.83
2008-09	608.50	610.33	1 118.67
2008			
January	384.00	518.00	590.00
February	474.00	565.00	595.00
March	615.00	664.00	595.00
April	929.00	816.00	758.00
May	949.00	926.00	926.00
June	789.00	878.00	963.00
July	756.00	854.00	1 036.00
August	709.00	802.00	1 061.00
September	701.00	791.00	1 119.00
October	634.00	717.00	1 113.00
November	574.00	664.00	1 102.00
December	543.00	632.00	1 102.00
2009			
January	598.00	592.00	1 102.00
February	615.00	562.00	1 075.00
March	615.00	513.00	1 123.00
April	572.00	534.00	1 208.00
May	547.00	513.00	1 202.00
June	592.00	502.00	1 150.00
July	602.00	502.00	1 067.00
August	550.00	528.00	948.00

a Key prices from major markets (August–July years) that are used as world indicators. **b** Thai white rice, 100 per cent 2nd grade, fob Bangkok, nominal price quote, USDA. Prior to 1984-85 quoted form Thailand Board of Trade. **c** US no. 2 long grain milled. **d** US no.1 medium grain milled.
Sources: US Department of Agriculture, *Rice Market News,* Little Rock, Arkansas; US Department of Agriculture, *Rice Outlook;* (http://www.ers.usda.gov); ABARE.

206 Rice supply and disposal in major exporting countries a

	Area harvested	Yield	Production b	Domestic use	Exports c	Closing stocks d
	million ha	t/ha	Mt	Mt	Mt	Mt
China						
2003-04	26.51	6.06	160.66	132.10	0.66	43.92
2004-05	28.38	6.31	179.09	130.30	1.22	38.93
2005-06	28.85	6.26	180.59	128.00	1.34	36.78
2006-07	28.94	6.28	181.71	127.20	0.97	35.92
2007-08	28.92	6.41	185.50	127.45	0.80	37.64
2008-09	29.40	6.53	191.90	129.30	0.80	42.20
Viet Nam						
2003-04	7.47	4.48	33.46	18.23	5.17	1.03
2004-05	7.45	4.62	34.42	17.60	4.71	1.29
2005-06	7.31	4.72	34.50	18.39	4.52	1.32
2006-07	7.20	4.82	34.73	18.78	4.65	1.39
2007-08	7.41	4.98	36.93	19.40	5.70	2.02
2008-09	7.39	5.01	37.02	19.15	5.70	2.10
Pakistan						
2003-04	2.46	2.96	7.27	2.60	3.03	0.64
2004-05	2.52	2.99	7.54	2.55	3.58	0.31
2005-06	2.62	3.18	8.32	1.90	2.70	0.30
2006-07	2.58	3.18	8.18	2.21	3.00	0.70
2007-08	2.55	3.35	8.55	2.45	3.00	0.95
2008-09	2.90	3.26	9.45	3.40	3.00	0.85
Thailand						
2003-04	10.32	2.64	27.29	9.47	7.27	1.71
2004-05	10.00	2.63	26.30	9.48	7.38	2.31
2005-06	10.22	2.70	27.58	9.54	9.56	3.59
2006-07	10.27	2.69	27.65	9.78	10.01	2.51
2007-08	10.60	2.76	29.24	9.60	8.50	2.21
2008-09	10.68	2.75	29.39	10.29	8.50	3.12
United States						
2003-04	1.21	7.50	9.07	3.66	3.86	0.76
2004-05	1.35	7.81	10.54	3.93	3.31	1.21
2005-06	1.36	7.43	10.11	3.83	3.03	1.37
2006-07	1.14	7.73	8.83	4.10	3.27	1.27
2007-08	1.11	8.09	9.00	4.08	3.10	0.94
2008-09	1.20	7.68	9.24	4.10	3.10	0.97
World						
2003-04	148.83	3.93	585.48	412.19	28.93	81.06
2004-05	151.22	3.95	597.83	407.25	29.12	73.39
2005-06	153.22	4.07	623.26	412.52	31.84	75.99
2006-07	154.01	4.07	627.32	418.28	28.23	75.10
2007-08	154.73	4.18	646.59	426.23	26.23	80.30
2008-09	156.50	4.25	664.87	434.54	28.21	90.71

a Simple aggregation of different crop years. The marketing period in each country is: United States, August–July; Thailand, August–July; China, December–November; Pakistan, October–September; Viet Nam, July–June. **b** Paddy. **c** On a calendar year basis: 1999-00 =2000; includes intra-EU trade. **d** Closing stocks are based on an aggregate of different local marketing years and should not be taken as representing world stock levels at a particular point in time.

Sources: US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC; US Department of Agriculture, *World Grain Situation and Outlook: Foreign Agriculture Circular,* Washington DC; US Department of Agriculture, *World Agricultural Production,* Washington DC; ABARE.

207 Summary of Australian statistics for sugar

	Area harvested	Cane crushed	Sugar production a	No. 1 pool price	Exports
	'000 ha	kt	kt	$/t	kt
1962-63	163	12 940	1 823	104.5	1 164
1963-64	169	12 313	1 699	120.7	1 134
1964-65	190	15 312	1 921	96.8	1 290
1965-66	204	14 382	1 924	85.7	1 273
1966-67	226	16 953	2 307	76.0	1 664
1967-68	224	17 025	2 300	83.1	1 622
1968-69	230	18 708	2 684	88.2	2 062
1969-70	213	15 784	2 146	100.3	1 386
1970-71	221	17 645	2 448	102.8	1 571
1971-72	234	19 391	2 708	111.8	2 008
1972-73	242	18 928	2 732	118.7	2 084
1973-74	226	19 278	2 449	129.9	1 781
1974-75	253	20 418	2 761	252.7	1 996
1975-76	257	21 959	2 769	232.2	2 000
1976-77	288	23 344	3 194	214.1	2 556
1977-78	295	23 493	3 240	196.4	2 478
1978-79	252	21 457	2 812	213.2	1 840
1979-80	267	21 151	2 871	281.7	2 201
1980-81	288	23 976	3 227	376.0	2 558
1981-82	316	25 094	3 329	275.0	2 498
1982-83	318	24 817	3 428	223.0	2 548
1983-84	307	24 190	3 073	259.0	2 357
1984-85	313	25 512	3 439	226.0	2 524
1985-86	304	24 414	3 275	223.3	2 799
1986-87	310	25 413	3 268	275.0	2 471
1987-88	317	25 669	3 334	287.0	2 776
1988-89	313	28 073	3 566	333.0	2 824
1989-90	332	27 622	3 681	370.0	2 799
1990-91	339	25 200	3 407	341.0	2 649
1991-92	341	21 367	3 016	303.4	2 276
1992-93	339	29 461	4 133	301.0	3 127
1993-94	340	32 008	4 234	345.0	3 415
1994-95	365	34 943	4 931	382.0	4 111
1995-96	377	35 889	4 837	371.0	3 979
1996-97	390	38 633	5 301	335.0	4 309
1997-98	415	39 531	5 567	335.0	4 670
1998-99	402	38 534	4 998	352.0	4 098
1999-00	428	38 165	5 448	255.0	4 131
2000-01	403	28 117	4 162	253.0	3 087
2001-02	426	31 424	4 987	331.6	3 644
2002-03	448	36 995	5 398	276.7	4 167
2003-04	448	36 993	5 045	231.9	4 060
2004-05	434	37 822	5 234	255.8	4 153
2005-06	398	37 128	5 063	322.2	3 883
2006-07	409	36 397	5 026	368.0	3 719
2007-08	381	32 621	4 763	275.8	3 493
2008-09	367	30 284	4 634	331.0	3 244

a Raw tonnes actual.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* Cat. No. 7121.0, Canberra; ABS, *Crops and Pastures, Australia,* cat. no. 7321.0, Canberra; Australian Sugar Milling Council, *Annual Review,* Brisbane; Queensland Sugar Limited, *Annual Report,* Brisbane; Rural Press Ltd, *Australian Sugar Year Book,* Brisbane; ABARE.

208 Australian cane and sugar production

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Area harvested for crushing	'000 ha	448	448	434	398	409	381	367
Cane yield	t/ha harvested	82.6	82.6	87.1	93.3	89.0	85.6	82.5
Cane crushed	kt	36 995	36 993	37 822	37 128	36 397	32 621	30 284
Commercial cane sugar	%	14.10	13.49	13.90	13.39	13.70	13.80	13.82
Sugar production **a**	kt	5 398	5 045	5 234	5 063	5 026	4 763	4 634
Sugar yield	t/ha harvested	12.1	11.3	12.1	12.7	12.3	12.5	12.6
Cane to sugar ratio		6.85	7.33	7.23	7.33	7.24	6.85	6.54
Gross value of sugarcane cut for crushing	$m	1 019	854	980	1 032	1 221	861	942

a Raw tonnes actual.

Sources: ABS, *Value of Agricultural Commodities Produced, Australia,* Cat. No. 7503.0, Canberra; Australian Sugar Milling Council, *Annual Review,* Brisbane; Rural Press Ltd, *Australian Sugar Year Book,* Brisbane; ABARE.

209 Volume of Australian exports of sugar, by destination

	2001-02 kt	2002-03 kt	2003-04 kt	2004-05 kt	2005-06 kt	2006-07 kt	2007-08 kt	2008-09 kt p
Raw sugar in bulk								
Canada	477.5	329.3	381.2	332.9	110.0	50.0	0.0	35.0
China	230.0	367.7	99.8	179.0	192.9	59.8	43.0	40.0
Chinese Taipei	122.7	157.5	133.6	279.0	306.0	238.0	209.8	205.0
Indonesia	66.6	163.7	152.3	362.2	529.8	536.9	758.5	590.0
Iran	0.0	84.0	0.0	0.0	227.5	0.0	0.0	0.0
Japan	762.6	729.0	518.1	434.7	493.2	610.5	480.0	510.0
Korea, Rep. of	569.8	795.4	980.3	1 003.5	1 066.5	1 004.5	1 038.3	1 029.0
Malaysia	771.1	798.8	1 015.6	1 026.9	469.0	520.0	402.5	429.0
New Zealand	245.6	218.6	220.4	243.6	192.2	220.6	218.4	220.0
Philippines	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Saudi Arabia	169.3	212.0	219.5	132.0	132.0	132.0	0.0	0.0
United States	83.2	88.0	108.3	83.5	126.7	130.0	86.1	90.0
Other countries	0.5	0.8	102.8	76.1	50.1	17.8	35.2	41.3
Total	3 499	3 975	3 932	4 153	3 896	3 520	3 272	3 189
Raw sugar in bags	6.3	7.0	7.0	3.7	1.9	2.4	2.1	6.4
Refined sugar	138.5	185.6	121.6	113.7	169.5	196.1	219.0	198.3
Total	3 644	4 167	4 061	4 271	4 067	3 719	3 493	3 394
(value, $m)	1 430	1 220	982	1 140	1 597	1 510	1 006	1 217

p Preliminary.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Queensland Sugar Limited, *Annual Report,* Brisbane; ABARE.

210 World sugar supplies, consumption, trade and prices a

	Production	Total supply	Consumption	Closing stocks	Ratio b	Trade c	World price d US terms	World price d Australian terms
	Mt	Mt	Mt	Mt	%	Mt	USc/lb	A$/t e
1966-67	65.6	84.8	na	na	na	na	na	na
1967-68	97.9	87.0	na	na	na	na	na	na
1968-69	68.4	89.0	na	na	na	na	na	na
1969-70	74.2	93.8	na	na	na	na	na	na
1970-71	71.0	92.0	72.8	18.8	(25.8)	na	3.3	84.7
1971-72	72.2	91.0	74.3	16.9	(22.7)	na	6.2	115.7
1972-73	75.6	92.5	76.4	16.4	(21.5)	na	8.7	143.1
1973-74	78.5	94.9	78.3	16.2	(20.7)	na	18.5	274.6
1974-75	78.0	94.2	75.9	17.7	(23.3)	na	30.3	499.5
1975-76	81.1	98.8	78.5	20.6	(26.2)	na	13.6	239.7
1976-77	86.7	107.3	81.3	25.1	(30.9)	na	8.3	162.0
1977-78	91.2	116.3	85.2	30.5	(35.8)	na	7.5	146.1
1978-79	91.0	121.5	89.3	31.7	(35.5)	na	8.2	159.9
1979-80	85.1	116.8	90.1	25.9	(28.7)	na	21.0	412.5
1980-81	88.7	114.6	89.8	25.6	(28.5)	28.6	22.7	433.5
1981-82	100.9	126.5	92.2	33.3	(36.1)	31.6	9.9	205.5
1982-83	100.6	133.9	94.4	38.7	(41.0)	29.6	7.9	190.5
1983-84	98.0	136.7	96.3	39.5	(41.0)	29.6	6.3	155.1
1984-85	100.4	139.9	98.0	42.0	(42.9)	29.2	3.8	112.9
1985-86	98.6	140.6	100.0	39.0	(39.0)	28.8	5.9	193.2
1986-87	104.2	143.2	105.9	35.8	(33.8)	28.7	6.3	203.8
1987-88	104.7	140.5	107.2	33.4	(31.1)	27.9	9.4	275.8
1988-89	104.6	138.0	107.0	31.1	(29.0)	35.2	11.9	326.5
1989-90	109.1	140.2	109.5	30.6	(28.0)	34.7	13.7	386.7
1990-91	115.7	146.3	110.4	35.0	(31.8)	34.4	9.2	261.5
1991-92	116.9	151.9	111.0	40.0	(36.0)	32.2	9.2	268.2
1992-93	112.7	152.7	111.9	39.8	(35.6)	32.6	9.6	306.7
1993-94	111.4	151.2	112.2	37.6	(33.5)	34.1	11.2	351.1
1994-95	116.1	153.7	114.7	38.2	(33.3)	35.5	13.7	408.9
1995-96	125.7	163.9	119.2	40.4	(33.9)	36.1	12.3	351.9
1996-97	123.7	164.1	122.1	41.9	(34.3)	35.6	11.3	319.2
1997-98	127.8	169.7	125.1	44.7	(35.7)	36.9	9.9	339.6
1998-99	135.3	180.0	125.6	54.3	(43.3)	39.3	6.6	228.5
1999-00	131.7	186.0	127.4	58.7	(46.0)	37.1	7.2	260.8
2000-01	130.7	189.4	131.1	58.6	(44.5)	44.2	9.3	393.3
2001-02	137.3	195.6	135.6	56.9	(44.2)	48.1	6.8	281.8
2002-03	148.3	208.3	140.8	49.4	(46.9)	43.7	7.5	270.4
2003-04	142.2	209.1	144.5	63.8	(44.7)	45.0	6.6	201.4
2004-05	140.8	209.0	146.9	58.0	(41.6)	48.1	9.0	258.8
2005-06	150.2	220.7	152.6	55.5	(40.2)	48.1	14.7	439.2
2006-07	166.0	222.6	156.9	64.5	(38.3)	48.9	10.4	284.8
2007-08	167.1	225.4	160.7	72.0	(37.0)	48.3	12.4	333.7
2008-09	153.0	228.7	164.3	60.7	(36.0)	49.8	15.4	474.3

a Raw sugar equivalent; October–September years. **b** Figures in parentheses show closing stocks as a percentage of consumption. **c** Trade is defined as world gross exports including those exports made under special arrangements, such as between Comecon countries and through the Lomé Convention. Individual countries of the former Soviet Union are treated as separate trading entities from 1983-84. **d** Average of monthly averages of International Sugar Agreement (ISA) price; fob and stowed Caribbean ports basis, in bulk. **e** Australian currency equivalents of ISA price. **na** Not available.

Sources: International Sugar Organisation, *Statistical Bulletin*, London; F.O. Licht, *International Sugar and Sweetener Report, World Sugar Balances*, Ratzeburg, Germany; F.O. Licht, *International Sugar and Sweetener Report*, Ratzeburg, Germany; ABARE.

211 World sugar production, by region and country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Europe	26.08	27.99	27.12	29.72	29.22	27.48	26.78	24.81
Eastern Europe	4.39	4.35	4.79	5.58	6.16	7.77	6.84	6.89
Russian Federation	1.72	1.86	2.19	2.45	2.83	3.52	3.42	3.80
Ukraine	1.83	1.55	1.68	1.95	2.06	2.70	2.03	1.70
Other	0.84	0.94	0.92	1.18	1.28	1.55	1.40	1.39
Western Europe	20.00	21.62	20.26	24.14	23.05	19.57	19.94	17.92
European Union b	16.58	17.79	16.83	22.11	20.60	17.41	17.83	15.47
Turkey	1.86	2.27	1.98	2.03	2.23	1.96	1.84	2.18
Other	1.57	1.56	1.45	0.24	0.22	0.20	0.26	0.28
Africa	9.40	9.36	9.44	9.79	9.70	11.11	9.67	12.32
Mauritius	0.58	0.55	0.55	0.59	0.54	0.47	0.45	0.54
South Africa	2.45	2.55	2.30	2.40	2.25	2.37	2.39	2.40
Other	6.38	6.26	6.59	6.79	6.90	6.95	6.83	9.38
Americas	50.96	52.71	55.00	57.60	58.20	59.29	58.19	63.58
Brazil	22.72	25.19	25.92	28.08	31.96	31.65	30.69	38.91
Colombia	2.50	2.64	2.72	2.63	2.42	2.34	2.16	2.40
Cuba	3.70	2.25	2.50	1.42	1.25	1.20	1.45	1.40
Guatemala	1.95	1.85	2.00	2.18	1.91	2.28	2.16	2.28
Mexico	5.17	5.34	5.36	6.10	5.50	5.55	5.78	5.20
United States	7.17	7.63	7.85	7.17	6.71	7.67	7.39	6.87
Other	7.75	7.66	7.89	8.16	8.44	8.60	8.57	8.83
Asia	45.92	52.47	45.30	41.96	45.95	62.32	66.23	47.15
China	9.30	11.35	10.78	9.95	9.59	13.04	16.13	13.51
India	19.56	21.73	14.70	13.95	20.94	30.70	28.88	16.10
Indonesia	1.90	1.83	2.01	2.30	2.45	2.65	2.85	3.05
Pakistan	3.20	3.83	4.30	3.30	3.21	3.88	5.10	3.80
Philippines	1.95	2.23	2.41	2.25	2.23	2.28	2.55	2.13
Thailand	6.50	7.67	6.94	5.43	5.08	7.01	8.06	7.48
Other	3.53	3.84	4.17	4.18	2.46	2.77	2.67	1.09
Oceania	4.92	5.78	6.19	5.36	5.62	5.24	5.08	5.15
Australia	4.58	5.40	5.81	4.98	5.29	4.90	4.83	4.80
Fiji	0.29	0.33	0.32	0.33	0.29	0.31	0.21	0.31
Other	0.05	0.05	0.06	0.05	0.04	0.04	0.03	0.04
Total	137.28	148.32	142.20	140.80	150.16	165.97	167.08	152.98

a Raw sugar equivalent, October-September year. **b** 27 countries.

Source: International Sugar Organization, *Quarterly Market Outlook*, London

212 Volume of world sugar trade, by country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Exports								
Australia	3.96	3.81	3.85	4.30	3.87	3.82	3.34	3.45
Brazil	13.47	13.16	15.98	19.15	16.87	21.53	18.85	23.98
China	0.44	0.10	0.04	0.32	0.20	0.12	0.06	0.09
Colombia	1.15	1.32	1.26	1.17	0.89	0.95	0.63	0.66
Cuba	3.07	1.80	1.94	0.77	0.73	0.80	0.88	0.73
Dominican Republic	0.18	0.18	0.18	0.18	0.19	0.21	0.17	0.20
European Union **b**	7.11	9.27	8.04	9.47	12.54	6.21	6.91	6.55
Fiji	0.25	0.28	0.26	0.32	0.27	0.24	0.23	0.19
Guatemala	1.33	1.26	1.51	1.10	1.55	1.32	1.19	1.47
Guyana	0.28	0.30	0.32	0.26	0.24	0.24	0.22	0.22
India	1.35	1.21	0.49	0.08	1.46	2.66	6.10	0.29
Korea, Rep. of	0.32	0.32	0.35	0.32	0.32	0.40	0.33	0.31
Mauritius	0.63	0.54	0.59	0.57	0.54	0.45	0.46	0.47
Mexico	0.58	0.17	0.10	0.28	0.87	0.18	0.70	1.36
South Africa	1.25	1.04	0.97	1.05	1.14	0.69	0.93	0.83
Swaziland	0.48	0.55	0.56	0.70	0.63	0.62	0.62	0.62
Thailand	4.47	5.01	5.11	3.39	2.13	4.56	4.93	4.99
Ukraine	0.13	0.36	0.31	0.05	0.03	0.01	0.00	0.04
United States	0.11	0.13	0.13	0.21	0.20	0.38	0.28	0.14
Other countries	8.10	8.52	9.86	10.27	11.42	11.23	9.77	10.07
Total **c**	48.72	49.78	52.35	53.98	56.08	56.61	56.60	56.66
Imports								
Algeria	0.10	1.10	1.04	1.13	1.13	1.11	1.10	1.24
Canada	1.24	1.33	1.41	1.35	1.24	1.19	1.42	1.35
China	1.33	0.81	1.20	1.32	1.20	1.43	0.95	1.05
Egypt	0.18	1.02	1.18	1.21	1.03	0.82	1.17	1.15
European Union **b**	6.49	7.06	7.52	7.50	9.52	7.84	8.07	8.62
Indonesia	2.23	2.07	2.31	1.86	1.64	2.78	1.90	2.04
Iran	1.01	0.95	0.61	0.59	1.45	1.75	0.85	0.75
Israel	0.54	0.60	0.62	0.61	0.64	0.64	0.69	0.70
Japan	1.47	1.55	1.43	1.33	1.39	1.41	1.44	1.28
Korea, Rep. of	1.52	1.54	1.62	1.61	1.55	1.49	1.60	1.65
Malaysia	1.39	1.38	1.52	1.47	1.38	1.76	1.36	1.50
Morocco	0.52	0.61	0.59	0.63	0.66	0.72	0.75	0.89
Nigeria	1.42	1.51	1.36	1.40	1.38	1.26	1.47	1.36
Pakistan	0.11	0.04	0.07	0.85	1.98	0.65	0.23	0.33
Russian Federation	5.16	5.24	4.14	3.80	3.37	3.20	2.80	1.86
Saudi Arabia	0.93	0.95	1.13	1.24	1.26	1.29	1.62	1.47
Syria	1.05	1.12	1.16	1.12	1.09	0.95	0.86	1.06
Ukraine	0.32	1.50	0.55	0.35	0.07	0.02	0.08	0.09
United States	1.32	1.57	1.54	1.82	3.17	1.94	2.38	2.88
Other countries	15.46	14.70	16.76	19.88	19.09	19.25	20.04	22.61
Total **c**	45.09	48.55	49.28	51.05	54.25	51.49	50.78	53.84

a Includes both raw and white sugar measured in raw sugar equivalents, October-September years. **b** 27 countries. **c** Totals for exports and imports may not be equal as a result of losses in transit, sugar being at sea at the end of each year, and discrepancies in the official statistics of individual countries.
Source: F.O. Licht, *International Sugar and Sweetener Report, World Sugar Balances,* Ratzeburg, Germany.

213 Summary of Australian statistics for wheat [a]

			Production		Exports [b]			
	Area [c]	Yield	Volume [c]	Unit value	Volume	Unit value [d]	Domestic use [ef]	Closing stocks [fg]
	'000 ha	t/ha	kt	$/t	kt	$/t	kt	kt
1970-71	6 478	1.22	7 890	51.1	9 049	48.0	2 654	3 404
1971-72	7 137	1.19	8 510	54.4	7 760	50.0	2 703	1 451
1972-73	7 604	0.87	6 590	54.1	4 137	51.0	3 426	478
1973-74	8 948	1.34	11 987	109.4	7 418	102.0	3 165	1 882
1974-75	8 307	1.37	11 357	110.6	8 550	132.0	3 031	1 658
1975-76	8 555	1.40	11 982	104.3	8 233	122.0	2 742	2 665
1976-77	8 956	1.30	11 667	90.1	9 763	109.0	2 432	2 137
1977-78	9 955	0.94	9 370	99.8	8 098	93.0	2 629	780
1978-79	10 249	1.77	18 090	126.9	11 693	116.0	2 531	4 646
1979-80	11 152	1.45	16 188	153.1	13 197	146.0	3 369	4 268
1980-81	11 283	0.96	10 856	155.1	9 614	164.0	3 466	2 044
1981-82	11 885	1.38	16 360	158.9	11 068	158.0	2 457	4 879
1982-83	11 520	0.77	8 876	176.5	7 280	168.0	4 190	2 285
1983-84	12 800	1.72	22 016	163.8	14 159	172.0	2 641	7 501
1984-85	12 045	1.55	18 665	171.6	14 659	183.0	3 081	8 426
1985-86	11 736	1.39	16 259	165.7	16 331	185.0	2 526	5 828
1986-87	11 135	1.46	16 308	145.9	15 658	147.0	2 763	3 715
1987-88	9 005	1.37	12 368	161.9	9 993	145.0	3 367	2 723
1988-89	8 827	1.59	14 061	209.8	11 427	214.4	2 888	2 469
1989-90	9 004	1.58	14 214	195.2	10 993	213.0	2 416	3 274
1990-91	9 218	1.63	15 066	132.0	12 002	136.5	3 239	3 099
1991-92	7 183	1.47	10 557	200.2	7 136	202.4	4 095	2 426
1992-93	9 101	1.78	16 184	165.9	10 359	206.8	4 186	4 065
1993-94	8 383	1.97	16 479	174.0	13 818	174.7	3 900	2 826
1994-95	7 891	1.14	8 972	237.1	6 351	234.1	3 916	1 531
1995-96	9 221	1.79	16 504	260.8	13 319	286.4	4 111	604
1996-97	10 936	2.10	22 924	212.8	19 224	226.9	3 559	745
1997-98	10 439	1.84	19 224	197.7	15 725	240.9	4 111	132
1998-99	11 543	1.86	21 464	186.9	16 450	203.3	4 449	698
1999-00	12 168	2.03	24 758	195.1	17 838	205.4	4 786	2 832
2000-01	12 141	1.82	22 108	232.1	16 142	267.9	4 887	3 911
2001-02	11 529	2.11	24 298	261.6	16 318	277.9	5 018	6 873
2002-03	11 170	0.91	10 132	265.7	9 107	283.1	5 515	2 384
2003-04	13 067	2.00	26 132	215.7	17 868	231.1	5 738	4 910
2004-05	13 399	1.63	21 905	197.1	14 675	213.7	6 024	6 116
2005-06	12 443	2.02	25 150	202.8	15 969	221.6	6 623	8 675
2006-07	11 798	0.92	10 822	242.0	8 685	266.5	7 404	3 407
2007-08	12 578	1.08	13 569	390.0	7 444	450.6	6 532	2 989
2008-09	13 151	1.59	20 938	339.4	14 708	347.9	6 153	3 066

a Crop years: up to and including 1981-82: 1 December to 30 November; 1982-83 and subsequent years: 1 October to 30 September. **b** For wheat including flour, in wheat equivalent (conversion 1:1.29). **c** Details for establishments with an estimated value of agricultural operations (EVAO) of $2 500 or more until 1985-86; EVAO of $5 000 or more from 1986-87 to 1988-89; EVAO of $20 000 or more from 1989-90 to 1990-91; EVAO of $22 500 or more from 1991-92 to 1992-93; and EVAO of $5 000 or more from 1993-94. **d** Export unit value based on financial year exports until 1987-88 and crop year exports thereafter. **e** Calculated as production less exports plus net change in stocks. Includes wastage. **f** Some ABARE estimates have been revised based on additional industry information. ABARE is continuing to investigate data. **g** Includes AWB Limited Pool and Trading Division closing stocks.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABS, *Value of Australian Commodities Produced,* Cat. no. 7503.0, Canberra; ABARE.

214 Australian wheat area, yield and production, by state

	Unit	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia a
Area b								
1995-96	'000 ha	2 328	853	627	3 892	1 519	1	9 221
1996-97	'000 ha	3 192	963	980	4 264	1 535	2	10 936
1997-98	'000 ha	2 936	857	999	4 205	1 439	3	10 439
1998-99	'000 ha	3 174	949	1 139	4 515	1 762	4	11 543
1999-00	'000 ha	3 425	1 235	1 096	4 556	1 850	6	12 168
2000-01	'000 ha	3 671	1 143	885	4 460	1 976	7	12 141
2001-02	'000 ha	3 446	1 136	604	4 350	1 987	6	11 529
2002-03	'000 ha	2 996	1 239	514	4 458	1 957	7	11 170
2003-04	'000 ha	3 983	1 409	790	4 917	1 960	8	13 067
2004-05	'000 ha	4 256	1 327	711	5 118	1 979	7	13 399
2005-06	'000 ha	3 554	1 315	778	4 753	2 035	8	12 443
2006-07	'000 ha	3 596	1 347	638	4 037	2 173	7	11 798
2007-08	'000 ha	4 009	1 514	669	4 258	2 121	7	12 578
2008-09	'000 ha	4 195	1 490	893	4 496	2 068	9	13 151
Yield								
1995-96	t/ha	1.94	2.25	0.83	1.75	1.79	3.86	1.79
1996-97	t/ha	2.62	2.35	2.02	1.76	1.82	4.00	2.10
1997-98	t/ha	2.01	1.75	1.39	1.84	1.87	4.00	1.84
1998-99	t/ha	2.07	1.54	1.70	1.81	1.88	4.38	1.86
1999-00	t/ha	2.51	2.14	1.74	1.98	1.40	3.14	2.03
2000-01	t/ha	2.14	2.69	1.31	1.30	2.11	3.71	1.82
2001-02	t/ha	2.33	2.46	1.49	1.78	2.40	4.17	2.11
2002-03	t/ha	0.83	0.72	1.17	0.91	1.06	3.57	0.91
2003-04	t/ha	1.83	2.23	1.41	2.25	1.78	3.19	2.00
2004-05	t/ha	1.77	1.45	1.65	1.68	1.32	4.29	1.63
2005-06	t/ha	2.26	2.21	1.57	1.91	1.89	4.10	2.02
2006-07	t/ha	0.71	0.65	1.22	1.27	0.67	2.57	0.92
2007-08	t/ha	0.62	1.32	1.43	1.37	1.08	3.86	1.08
2008-09	t/ha	1.64	1.16	1.99	1.82	1.15	3.89	1.59
Production b								
1995-96	kt	4 508	1 921	519	6 827	2 724	4	16 504
1996-97	kt	8 363	2 262	1 980	7 516	2 795	8	22 924
1997-98	kt	5 906	1 503	1 389	7 725	2 689	12	19 224
1998-99	kt	6 563	1 462	1 941	8 170	3 310	18	21 464
1999-00	kt	8 602	2 642	1 904	9 004	2 586	20	24 758
2000-01	kt	7 867	3 080	1 157	5 814	4 162	26	22 108
2001-02	kt	8 043	2 791	901	7 760	4 778	25	24 298
2002-03	kt	2 497	890	601	4 047	2 072	25	10 132
2003-04	kt	7 288	3 145	1 110	11 070	3 490	26	26 132
2004-05	kt	7 537	1 927	1 170	8 619	2 621	30	21 905
2005-06	kt	8 049	2 909	1 218	9 088	3 853	34	25 150
2006-07	kt	2 568	879	777	5 134	1 446	18	10 822
2007-08	kt	2 477	1 995	954	5 820	2 296	27	13 569
2008-09	kt	6 861	1 724	1 781	8 161	2 376	35	20 938

a Includes data for the Australian Capital Territory and the Northern Territory. State totals may not add to Australian totals as a result of rounding. **b** Excludes establishments with an EVAO less than $5 000.

Sources: ABS, *Principal Agricultural Commodities, Australia, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agriculture Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABARE.

215 Volume of Australian exports of wheat and flour, by destination [a]

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Africa								
Egypt	1 680	602	2 534	752	1 818	251	284	449
Ethiopia	10	24	29	0	8	0	0	5
South Africa	98	48	247	183	85	0	0	77
Asia								
Bangladesh	133	130	141	162	179	3	65	337
China	46	38	755	1 893	303	183	2	231
India	0	0	4	0	93	1 593	9	1
Indonesia	2 097	1 686	2 647	2 720	3 016	2 574	1 608	2 728
Japan	1 195	1 134	1 250	1 171	1 106	1 114	878	791
Korea, Rep. of	953	1 014	1 065	1 213	1 002	989	694	712
Malaysia	682	370	737	888	780	629	623	793
Pakistan	0	9	140	653	146	0	0	0
Singapore	95	65	48	118	68	70	75	85
Sri Lanka	209	117	132	66	46	0	5	50
Thailand	285	291	422	478	545	192	255	336
Middle East								
Bahrain	0	0	6	3	0	5	0	23
Iran	2 420	1 064	0	0	425	41	0	1 577
Iraq	2 245	1 037	1 111	1 550	715	362	198	531
Kuwait	230	175	259	305	341	250	233	251
Oman	114	27	91	63	86	0	0	42
Qatar	0	0	0	0	61	64	72	42
United Arab Emirates	226	142	196	241	525	99	144	256
Yemen	450	412	198	314	499	385	408	714
Oceania								
Fiji	102	120	122	134	131	146	132	123
New Zealand	305	308	314	339	313	350	275	266
Papua New Guinea	110	130	99	134	155	148	153	135
Total	16 465	10 845	15 074	15 780	15 168	11 196	7 408	13 410
(value, $m)	4 612	3 109	3 475	3 488	3 296	2 765	2 990	5 028

a July-June year. Exports are of wheat (including spelt, groats, meal and pellets) and meslin (mixed grain, especially rye mixed with wheat), plus plain white flour, wholemeal flour and self-raising white flour in wheat equivalent (conversion 1:1.29).

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

216 Australian wheat supply and disposal a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Opening stocks	3 911	6 873	2 384	4 910	6 116	8 675	3 396	2 989
Production	24 298	10 132	26 132	21 905	25 150	10 822	13 569	20 938
Availability	28 209	17 005	28 516	26 815	31 266	19 497	16 965	23 927
Total domestic use **b**	5 018	5 515	5 738	6 024	6 623	7 404	6 532	6 153
Food	2 415	2 427	2 518	2 342	2 361	2 287	2 354	2 401
Feed **c**	2 100	2 500	2 550	3 060	3 672	4 500	3 500	3 738
Seed	503	588	670	622	590	617	678	689
Exports								
Wheat	16 075	8 926	17 582	14 349	15 670	8 406	7 197	14 568
Flour **d**	242	180	286	325	298	279	247	140
Total	16 318	9 107	17 868	14 675	15 969	8 685	7 444	14 708
Closing stocks **b**	6 873	2 384	4 910	6 116	8 675	3 407	2 989	3 066

a 1 October to 30 September. **b** Some ABARE estimates have been revised based on additional industry information. ABARE is continuing to investigate data. **c** Calculated as residual: production less exports less other domestic uses plus net change in stocks. **d** Wheat equivalent (conversion 1:1.29).
Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Principal Agricultural Commodities, Australia,* Preliminary, cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia,* cat. no. 7121.0, Canberra; ABARE.

217 Australian wheat prices a

	AWB Limited export quote a		Stock feed wheat b	Unit GVP
	US$/t	A$/t	A$/t	A$/t
1967-68	na	na	60.81	57.70
1968-69	na	na	62.83	49.40
1969-70	na	na	63.38	50.36
1970-71	na	51.00	63.93	51.15
1971-72	na	49.00	54.75	54.35
1972-73	90.00	70.00	56.97	54.11
1973-74	195.00	132.00	71.00	109.45
1974-75	167.00	122.00	83.40	110.63
1975-76	146.00	116.00	99.32	104.26
1976-77	114.00	99.00	105.40	90.06
1977-78	118.00	105.00	111.60	99.77
1978-79	143.00	126.00	116.61	126.91
1979-80	169.00	152.00	140.50	153.07
1980-81	180.00	155.00	151.37	155.13
1981-82	165.00	149.00	149.78	158.89
1982-83	164.00	175.00	184.11	176.45
1983-84	154.00	170.00	175.24	163.77
1984-85	150.00	194.00	204.36	171.60
1985-86	133.00	190.00	193.82	165.67
1986-87	110.00	166.00	170.12	145.90
1987-88	125.00	172.00	189.54	161.93
1988-89	172.00	212.00	221.84	209.82
1989-90	168.00	218.00	169.08	195.24
1990-91	126.58	161.07	132.33	131.96
1991-92	160.33	208.77	159.67	200.16
1992-93	155.67	222.97	143.50	165.94
1993-94	153.75	223.70	137.58	173.97
1994-95	175.08	236.97	232.75	237.09
1995-96	230.42	304.56	236.24	260.83
1996-97	206.67	264.92	188.38	212.79
1997-98	167.00	246.22	185.93	197.75
1998-99	146.91	234.65	155.38	186.87
1999-00	136.42	216.66	153.63	195.14
2000-01	153.97	285.88	171.83	232.06
2001-02	157.58	301.02	211.97	261.60
2002-03	185.03	316.46	309.69	265.68
2003-04	183.56	257.71	220.74	215.67
2004-05	175.43	233.55	194.77	197.06
2005-06	195.08	261.64	191.84	202.75
2006-07	231.90	295.95	286.76	241.96
2007-08	380.52	425.02	425.49	390.00
2008-09	267.92	360.31	314.47	339.39

a Average of daily asking prices for Australian standard white wheat fob eastern states for the relevant financial year. AWB ceased quoting the Australian standard white wheat price as at September 2007. **b** Administered pricing of domestic wheat ceased after the 1988-89 season. Sydney cash price, ASW (July–June average) from 1989-90. **na** Not available.

Sources: International Grains Council, *Grain Market Report,* London; ABARE.

218 Summary of world statistics for wheat

	Area	Production	Use	Closing stocks World a	Closing stocks Exporters b	Stocks to use ratio	Trade c	Use per person	Price d
	million ha	Mt	Mt	Mt	Mt	%	Mt	kg	US$/t
1962-63	206	258	248	83	55	33	43	80	64.00
1963-64	209	241	252	72	46	29	56	79	66.00
1964-65	217	276	262	86	46	33	51	81	64.00
1965-66	219	265	284	67	34	24	62	85	58.00
1966-67	219	311	286	92	35	32	56	84	66.00
1967-68	223	300	294	98	43	33	51	85	62.00
1968-69	227	332	308	122	62	40	46	87	63.00
1969-70	220	315	329	108	65	33	51	91	52.00
1970-71	210	319	342	85	51	25	54	93	60.00
1971-72	215	354	349	90	49	26	52	93	60.00
1972-73	213	348	367	71	28	19	68	96	91.00
1973-74	221	376	360	87	26	24	63	93	177.00
1974-75	223	364	368	83	30	23	63	93	164.00
1975-76	227	359	362	80	38	22	66	90	152.00
1976-77	234	425	384	121	56	32	62	93	113.00
1977-78	228	386	409	98	53	24	72	98	116.00
1978-79	230	451	429	120	56	28	72	101	141.00
1979-80	229	429	448	101	49	23	86	103	175.00
1980-81	237	445	449	97	47	22	94	101	183.00
1981-82	240	454	447	104	59	23	101	99	170.00
1982-83	239	482	465	121	70	26	96	101	160.00
1983-84	231	494	483	132	66	27	100	104	154.00
1984-85	232	513	503	147	73	29	103	105	148.00
1985-86	231	500	495	157	85	32	84	103	128.00
1986-87	229	531	529	176	83	33	90	108	110.50
1987-88	221	505	537	150	61	28	107	108	123.40
1988-89	220	500	538	116	39	22	98	106	165.75
1989-90	226	537	532	120	36	23	95	102	160.83
1990-91	230	592	562	145	55	26	92	106	117.94
1991-92	221	543	556	133	48	24	108	103	150.96
1992-93	221	562	550	145	55	26	105	101	141.33
1993-94	220	557	562	142	45	25	93	101	141.52
1994-95	215	524	549	170	31	31	92	97	156.42
1995-96	219	541	549	162	29	30	96	97	215.33
1996-97	231	582	577	168	36	29	99	99	178.50
1997-98	228	610	582	195	52	33	99	99	141.75
1998-99	225	586	579	202	54	35	99	98	119.08
1999-00	217	585	582	205	52	35	109	97	113.17
2000-01	218	582	584	204	53	35	102	97	128.50
2001-02	213	581	585	200	47	34	107	96	127.51
2002-03	213	566	601	165	44	28	106	97	160.46
2003-04	208	557	596	126	41	21	103	95	160.49
2004-05	217	628	615	139	56	23	110	97	153.87
2005-06	217	621	625	136	55	22	110	97	176.28
2006-07	211	598	611	123	39	20	111	94	211.91
2007-08	216	609	614	118	28	19	110	94	362.08
2008-09	223	687	641	163	45	25	136	97	270.78

a Sum of individual closing stocks at the end of respective national crop years. China not included before 1983-84. **b** United States, European Union, Canada, Australia and Argentina. **c** July–June year. Excludes intra-EU trade. **d** For US hard red winter wheat, (Ord.), fob Gulf.

Sources: International Grains Council, *Grain Market Report,* London; International Grains Council, *World Grain Statistics,* London; ABARE.

219 World wheat production, by country

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Africa								
Algeria	2.0	1.5	3.0	2.7	2.4	2.7	2.8	1.3
Egypt	6.3	6.8	6.8	7.2	8.1	8.3	7.4	7.9
Morocco	3.3	3.4	5.1	5.5	3.0	6.3	1.6	3.7
South Africa	2.5	2.4	1.5	1.7	1.9	2.1	1.9	2.1
Americas								
Argentina	15.3	12.3	14.6	16.0	12.6	14.5	16.3	8.3
Brazil	3.2	2.9	5.9	6.0	4.9	2.2	3.8	6.0
Canada	20.6	16.2	23.6	25.9	26.8	25.3	20.1	28.6
Mexico	3.3	3.3	2.9	2.9	3.0	3.4	3.5	4.0
United States	53.0	43.7	58.7	57.3	49.3	49.3	55.8	68.0
Asia								
China	93.9	90.3	86.5	92.0	97.5	108.5	109.3	112.5
India	69.7	71.8	65.1	72.1	68.6	69.4	75.8	78.6
Japan	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Kazakhstan	12.7	12.8	11.5	9.9	11.0	12.5	16.6	13.0
Pakistan	19.0	18.2	19.2	19.5	21.7	21.7	23.3	21.5
Uzbekistan	3.2	4.8	5.4	4.7	6.1	5.8	6.2	6.0
Europe								
Bulgaria	3.1	3.5	1.7	3.6	3.5	3.2	2.3	4.4
Czech Republic	4.5	3.8	2.6	5.0	4.1	3.5	4.0	4.7
European Union **a**	90.5	103.2	90.8	136.1	122.7	125.1	119.7	151.2
France	31.4	39.0	30.5	39.7	37.0	35.4	32.8	39.5
Germany	22.8	20.8	19.3	25.4	23.7	22.4	20.8	26.0
Italy	6.2	7.5	6.2	8.6	7.3	6.5	7.3	9.0
Spain	4.7	6.3	6.1	6.8	3.3	5.6	6.3	6.7
Sweden	2.3	2.1	2.3	2.4	2.3	2.0	2.3	2.2
United Kingdom	11.6	16.1	14.3	15.5	14.9	14.7	13.1	17.3
Hungary	5.2	3.9	2.9	6.0	5.1	4.4	4.0	5.7
Poland	9.3	9.3	7.9	9.9	8.8	7.1	8.3	9.3
Romania	7.7	4.4	2.5	7.8	7.6	5.0	2.9	7.8
Russian Federation	46.9	50.6	34.1	45.4	47.7	45.0	49.4	63.7
Serbia and Montenegro	2.5	2.2	1.4	2.8	2.0	1.9	2.0	2.1
Slovakia	1.8	1.6	0.9	1.7	1.6	1.4	1.5	1.8
Ukraine	21.0	19.8	3.6	16.5	18.7	13.8	13.9	25.9
Middle East								
Iran	7.5	12.5	13.5	14.0	14.5	14.8	15.0	10.0
Saudi Arabia	2.0	2.0	2.0	2.1	2.2	2.7	2.6	1.8
Syria	4.7	4.5	4.7	4.5	4.7	4.9	4.1	2.1
Turkey	15.5	17.3	18.5	18.5	18.0	17.5	15.5	17.0
Oceania								
Australia	24.3	10.1	26.1	21.9	25.2	10.8	13.6	20.9
Total **b**	581.3	566.2	557.0	628.0	621.0	598.0	609.0	686.8

a Regarded as 15 countries to 2002-03, 25 countries from 2003-04, then 27 countries from 2005-06. Production totals for individual EU countries sourced from International Grains Council. **b** Includes some unspecified countries.

Sources: ABS, *Principal Agricultural Commodities, Australia, Preliminary*, cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia*, cat. no. 7113.0, Canberra; ABS, *Summary of Crops, Australia*, cat. no. 7330.0, Canberra; US Department of Agriculture, *Production, Supply and Distribution Database*, Washington DC; International Grains Council, *Grain Market Report*, London; ABARE.

220 Volume of world wheat trade, by country a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Imports								
Africa								
Algeria	4.6	6.1	3.9	5.3	5.4	4.9	5.8	6.4
Egypt	6.9	6.4	7.3	7.9	7.7	7.1	7.6	9.9
Morocco	3.1	2.7	2.4	2.3	2.4	1.8	4.1	3.7
Nigeria	2.4	2.3	2.4	3.1	3.7	3.2	2.6	3.6
Tunisia	1.3	2.2	0.8	1.0	1.0	1.4	2.3	1.8
Americas								
Brazil	7.0	6.7	5.7	5.5	6.2	7.9	7.1	6.1
Cuba	1.1	0.8	0.7	0.8	0.8	0.7	0.9	0.8
Mexico	3.2	3.2	3.6	3.6	3.4	3.6	3.1	3.4
Peru	1.4	1.2	1.5	1.4	1.7	1.4	1.4	1.4
Venezuela	1.4	1.0	1.5	1.5	1.6	1.8	1.4	1.5
Asia								
Bangladesh	1.6	1.3	2.0	1.8	2.0	1.7	1.4	2.8
China	1.1	0.4	3.7	6.8	1.0	0.4	0.2	0.6
Chinese Taipei	1.0	1.0	1.2	1.1	1.2	1.1	1.3	1.1
India	0.0	0.0	0.0	0.0	0.1	6.7	2.0	0.0
Indonesia	3.7	4.0	4.8	4.8	5.1	5.8	5.2	5.5
Japan	5.8	5.6	5.8	5.4	5.4	5.6	5.7	5.1
Korea, Rep. of	4.0	4.1	3.4	3.6	3.8	3.2	3.0	3.3
Pakistan	0.2	0.2	0.2	1.4	0.9	0.1	1.5	3.0
Philippines	2.9	3.2	3.0	2.5	2.9	2.7	2.3	3.2
Europe								
European Union **b**	10.7	13.9	5.6	7.1	7.0	5.3	6.4	8.0
Russian Federation	0.6	1.0	1.0	1.1	1.3	0.8	0.3	0.1
Ukraine	0.0	0.8	3.4	0.0	0.1	0.1	0.3	0.1
Middle East								
Iran	5.3	2.1	0.2	0.2	1.0	0.3	0.1	8.8
Iraq	2.8	1.6	1.9	3.1	4.9	3.0	3.5	3.8
Turkey	1.0	1.2	1.1	0.4	0.1	1.8	2.2	3.7
Yemen	1.8	1.8	1.6	2.0	2.3	2.5	2.0	2.7
Exports								
Americas								
Argentina	10.1	6.1	7.4	13.2	8.1	11.9	10.0	8.5
Canada	16.3	9.2	15.6	15.4	15.5	19.4	16.4	18.3
United States	32.4	23.7	32.2	28.2	27.2	25.0	34.3	27.0
Europe								
European Union **b**	11.5	15.5	10.3	13.6	14.0	12.8	11.2	24.7
Russian Federation	4.6	13.0	4.0	7.9	10.6	10.9	12.1	18.3
Ukraine	5.5	6.7	0.1	4.3	6.5	3.3	1.2	13.0
Asia								
China	1.3	1.4	2.4	0.8	1.0	2.4	2.4	0.2
India	3.1	5.4	5.4	1.7	0.4	0.1	0.1	0.0
Japan	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4
Kazakhstan	3.8	5.6	4.6	3.0	3.8	8.1	8.2	5.8
Turkey	0.7	0.8	0.7	2.1	2.5	2.0	1.5	2.2
Oceania								
Australia **c**	16.5	10.8	15.1	15.8	15.2	11.2	7.4	13.4
Total **d**	108.5	105.9	102.7	110.2	109.9	110.8	110.3	136.0

a Local marketing years; wheat equivalent. **b** Regarded as 15 countries to 2002-03, 25 countries from 2003-04, then 27 countries from 2005-06. Excludes intra – EU trade. **c** Fiscal year. **d** Includes some unspecified countries.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; International Grains Council; US Department of Agriculture, *Production, Supply and Distribution Database,* Washington DC.

221 US wheat supply and disposal a

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09 b
Area									
– planted	million ha	24.1	24.4	24.3	23.3	23.3	23.2	24.5	25.5
– harvested	million ha	19.7	18.5	20.3	20.4	19.0	18.9	20.6	22.5
Yield	t/ha	2.69	2.36	2.89	2.81	2.59	2.60	2.70	3.02
Production	Mt	53.0	43.7	58.7	57.3	49.3	49.3	55.8	68.0
Opening stocks	Mt	23.8	21.2	13.4	14.9	14.7	15.5	12.4	8.3
Imports	Mt	2.9	2.1	1.7	1.9	2.2	3.3	3.1	3.5
Availability	Mt	79.8	67.0	73.8	74.1	66.2	68.1	71.3	79.8
Domestic use	Mt	32.4	30.4	32.5	31.9	31.3	31.0	28.6	34.3
– food	Mt	25.2	25.0	24.8	24.8	25.0	25.5	25.8	25.2
– feed	Mt	5.0	3.1	5.5	5.0	4.3	3.2	0.4	7.1
– seed	Mt	2.3	2.3	2.2	2.1	2.1	2.2	2.4	2.1
Exports	Mt	26.2	23.1	31.5	29.0	27.3	24.7	34.4	27.6
Closing stocks	Mt	21.2	13.4	14.9	14.7	15.5	12.4	8.3	17.9
– Commodity Credit Corporation	Mt	2.7	1.8	1.7	1.5	1.2	1.1	0.0	0.0
– Free	Mt	18.5	11.6	13.2	13.2	14.3	11.3	8.3	17.9
Farm price	US$/bus	2.78	3.56	3.40	3.40	3.42	4.26	6.48	6.78
Loan rate	US$/bus	2.58	2.80	2.80	2.75	2.75	2.75	2.75	2.75
Export price c	US$/t	127.51	160.46	160.49	153.87	176.28	211.91	362.08	270.78

a June–May year. **b** US Department of Agriculture estimate. **c** US hard red winter wheat (ordinary), fob Gulf; July–June average.
Sources: US Department of Agriculture, *World Agricultural Supply and Demand Estimates,* Washington DC; US Department of Agriculture, *Agricultural Outlook,* Washington DC; US Department of Agriculture, *Wheat Yearbook,* Washington DC; ABARE.

222 Wheat export price quotations, by country and category

	Australian prime hard 14% (eastern states)	Canadian no. 1 western red spring 12.5% (Vancouver) a	Australian standard white (eastern states)	US no. 2 hard red winter (Gulf)	Argentinean bread wheat	EU standard (Rouen)	US no. 2 soft red winter (Gulf)
	US$/t	US$/t	US$/t	US$/t	US$/t	US$/t	US$/t
1985-86	159.00	180.00	132.50	128.00	102.00	111.00	125.00
1986-87	131.00	148.00	110.00	110.50	84.00	83.00	113.00
1987-88	145.00	164.00	125.11	123.40	101.00	84.00	120.00
1988-89	193.75	224.92	171.90	165.75	151.17	146.75	161.42
1989-90	183.58	193.75	167.60	160.83	138.58	142.17	152.83
1990-91	148.58	160.67	126.73	117.94	86.75	89.92	112.67
1991-92	201.50	188.42	160.25	150.96	117.67	119.00	147.08
1992-93	191.42	192.83	157.05	141.33	124.17	132.83	142.17
1993-94	240.58	222.25	153.25	141.52	117.50	95.58	133.83
1994-95	218.86	209.17	174.37	156.42	132.83	128.11	146.75
1995-96	272.03	254.83	232.39	215.33	215.92	212.30	180.17
1996-97	224.00	216.58	207.47	178.50	153.33	169.55	159.00
1997-98	203.06	197.28	167.50	141.75	134.31	133.80	130.91
1998-99	194.10	180.78	147.43	119.08	114.15	102.08	102.93
1999-00	190.17	176.33	136.44	113.17	111.17	101.18	98.83
2000-01	192.00	183.91	153.57	128.50	125.04	109.21	102.94
2001-02	185.73	166.45	157.09	127.51	116.71	110.85	116.10
2002-03	205.79	211.80	185.97	160.46	144.54	113.50	140.16
2003-04	207.79	203.39	183.56	160.49	153.50	174.23	152.45
2004-05	200.71	205.83	175.70	153.87	123.82	138.66	142.30
2005-06	222.78	216.25	194.60	176.28	138.75	132.18	142.02
2006-07	256.69	237.99	231.66	211.91	187.75	198.73	180.55
2007-08	na	460.59	302.01	362.08	325.97	361.45	328.38
2008-09	na	341.15	226.24	270.78	232.70	214.03	209.83
2008							
January	na	518.75	na	385.50	331.25	379.25	361.50
February	na	735.80	na	446.00	367.00	411.40	409.20
March	na	594.75	na	453.75	395.00	441.50	415.25
April	na	551.00	na	388.00	na	367.00	338.50
May	na	483.60	na	346.40	na	322.20	264.00
June	na	429.50	na	368.75	362.75	321.50	273.25
July	na	405.00	na	346.25	329.25	307.50	262.25
August	na	399.00	na	342.60	306.60	294.80	260.40
September	na	366.25	na	309.75	280.00	254.75	233.25
October	na	319.60	na	253.40	228.00	199.80	193.40
November	na	326.75	266.33	243.50	183.75	176.75	188.00
December	na	329.50	214.03	236.25	176.00	176.50	185.75
2009							
January	na	343.80	209.64	257.40	211.40	196.00	204.20
February	na	316.25	209.72	240.50	215.00	187.25	188.00
March	na	308.25	216.52	242.75	215.25	180.75	191.50
April	na	316.25	220.60	247.00	210.50	187.25	191.25
May	na	337.40	240.57	269.20	210.00	205.80	212.00
June	na	325.75	264.20	260.75	226.67	201.25	208.00
July	na	288.00	245.19	233.20	237.40	191.80	183.60
August	na	262.75	222.84	211.50	222.50	180.25	165.00

a Prior to October 1994 export price quotation for Canadian no. 1 western red spring wheat 13.5 per cent (Vancouver). **na** Not available.

Sources: International Grains Council, *World Grains Statistics,* London; International Grains Council, *Grain Market Report,* London; US Department of Agriculture, *Wheat Yearbook,* Washington DC; ABARE.

223 Wheat supply and disposal in major exporting countries a

	Area	Yield	Production	Domestic use	Exports b	Closing stocks
	million ha	t/ha	Mt	Mt	Mt	Mt
United States (June–May)						
2003-04	20.3	2.89	58.7	32.5	32.2	14.9
2004-05	20.4	2.81	57.3	31.9	28.2	14.7
2005-06	19.0	2.59	49.3	31.3	27.2	15.5
2006-07	18.9	2.60	49.3	31.0	25.0	12.4
2007-08	20.6	2.70	55.8	28.6	34.3	8.3
2008-09	22.5	3.02	68.0	34.3	27.0	17.9
Canada (August–July)						
2003-04	10.5	2.25	23.6	7.5	15.7	6.1
2004-05	9.8	2.64	25.9	9.2	14.8	7.9
2005-06	9.8	2.73	26.8	9.3	15.8	9.7
2006-07	9.7	2.61	25.3	8.8	19.4	6.8
2007-08	8.6	2.34	20.1	6.5	15.9	4.6
2008-09	10.0	2.85	28.6	8.6	18.1	6.5
Argentina (December–November)						
2003-04	6.0	2.42	14.6	4.9	9.4	3.9
2004-05	6.1	2.62	16.0	4.8	11.4	3.8
2005-06	5.2	2.42	12.6	4.8	9.3	2.4
2006-07	5.5	2.63	14.5	4.7	10.5	1.7
2007-08	5.9	2.75	16.3	4.9	10.9	2.2
2008-09	4.2	1.98	8.3	4.8	5.5	0.3
Australia (October–September)						
2003-04	13.1	2.00	26.1	5.7	17.9	4.9
2004-05	13.4	1.63	21.9	6.0	14.7	6.1
2005-06	12.4	2.02	25.2	6.6	16.0	8.7
2006-07	11.8	0.92	10.8	7.4	8.7	3.4
2007-08	12.6	1.08	13.6	6.5	7.4	3.0
2008-09	13.2	1.59	20.9	6.2	14.7	3.1
European Union (July–June) c						
2003-04	22.1	4.11	90.8	91.9	11.6	10.0
2004-05	23.0	5.92	136.1	116.7	15.2	23.0
2005-06	23.0	5.34	122.7	119.6	15.7	17.6
2006-07	24.7	5.06	125.1	123.6	14.3	14.0
2007-08	25.1	4.78	119.7	117.6	12.6	10.0
2008-09	26.7	5.65	151.2	126.6	26.3	16.3
Total cd						
2003-04	72.0	2.97	213.8	142.5	85.5	40.6
2004-05	72.7	3.54	257.2	168.6	82.7	56.0
2005-06	69.4	3.41	236.6	171.6	82.3	55.0
2006-07	70.7	3.19	225.1	175.6	76.4	39.0
2007-08	72.8	3.10	225.5	164.1	79.7	28.0
2008-09	76.7	3.61	277.0	180.4	90.0	45.0

a The marketing period in each country is shown in parentheses. **b** Includes wheat equivalent of flour and other wheat products. **c** Regarded as 15 countries from 1998-99, 25 countries from 2004-05, then 27 countries from 2006-07. Excludes intra-EU trade. EU stock figures include intervention stocks. **d** Simple aggregation of different crop years.

Sources: ABS, *Principal Agricultural Commodities Australia,* Preliminary, cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities, Australia, Preliminary,* cat. no. 7121.0, Canberra; ABS, *Summary of Crops,* cat. no. 7330.0, Canberra; International Grains Council, *World Grain Statistics,* London; US Department of Agriculture, *World Agricultural Supply and Demand Estimates,* Washington DC; US Department of Agriculture, *Agricultural Outlook,* Washington DC; US Department of Agriculture, *Wheat Yearbook,* Washington DC; International Grains Council, *Grain Market Report,* London; ABARE.

224 Summary of Australian statistics for wool

	Sheep numbers ab	Wool production (greasy) c Shorn	Wool production (greasy) c Total	Clean yield ac	Closing stocks (at 30 June) d	Closing stocks (at 30 June) d	Average price Eastern market indicator (clean) e	Average price Auction (greasy)
	million	kt	kt	%	'000 bales	kt	c/kg	c/kg
1972-73	134.1	643.6	735.2	58.8	205.8	29.6	na	183.8
1973-74	139.5	644.3	700.9	60.3	176.5	26.0	361.2	181.2
1974-75	145.8	725.3	793.5	62.3	1 616.2	239.2	252.8	127.0
1975-76	144.1	681.4	754.3	62.5	1 326.7	197.4	271.8	143.3
1976-77	131.3	623.9	702.7	61.8	1 094.1	162.6	348.0	182.7
1977-78	127.5	605.5	677.0	62.3	896.6	137.7	354.7	187.1
1978-79	130.5	643.6	705.7	62.9	353.8	55.8	391.7	205.2
1979-80	132.7	642.4	708.5	62.9	208.5	33.2	462.0	243.6
1980-81	131.4	637.9	701.2	62.8	188.3	30.3	478.8	256.0
1981-82	135.0	661.0	717.2	63.0	509.3	81.5	501.9	264.7
1982-83	130.5	581.3	641.5	62.3	928.1	150.0	516.3	269.9
1983-84	135.1	614.8	671.2	63.2	1 233.9	207.0	540.3	293.8
1984-85	145.7	691.1	752.7	64.2	979.6	168.1	586.0	317.8
1985-86	150.4	694.2	762.1	64.3	924.3	159.1	594.9	342.1
1986-87	153.2	740.5	813.7	64.4	381.5	65.7	697.4	395.5
1987-88	156.5	771.4	842.7	64.9	9.2	1.5	1 117.4	632.7
1988-89	164.9	838.8	898.9	65.3	188.3	31.8	1 091.7	647.3
1989-90	173.8	959.8	1 030.9	65.8	3 064.7	542.0	969.2	555.3
1990-91	166.6	912.3	989.2	65.6	4 607.4	820.1	699.6	413.8
1991-92	151.0	727.5	801.2	65.1	4 068.8	724.3	592.6	358.8
1992-93	140.5	760.8	815.1	66.0	3 950.1	703.0	519.2	313.5
1993-94	132.6	775.8	828.3	65.8	3 667.0	653.0	547.0	330.1
1994-95	120.9	679.4	727.9	64.6	3 113.7	557.0	788.0	504.4
1995-96	121.1	640.9	684.9	65.7	3 226.4	573.6	658.1	386.7
1996-97	120.2	685.1	731.4	65.9	2 556.6	452.3	669.8	403.0
1997-98	117.5	639.8	689.6	65.6	2 173.1	383.7	733.2	444.3
1998-99	115.5	639.9	687.6	65.5	2 104.0	375.6	550.2	323.4
1999-00	118.6	642.3	666.0	65.6	1 476.4	263.4	627.0	357.3
2000-01	110.9	589.9	645.1	65.8	796.5	141.4	764.0	512.0
2001-02	106.2	536.9	587.2	66.1	429.8	81.0	841.0	526.7
2002-03	99.3	503.0	551.1	64.8	123.9	105.0	1 049.0	682.0
2003-04	101.3	467.6	509.5	64.4	707.7	156.3	820.0	533.0
2004-05	100.6	465.7	519.7	64.2	888.3	157.0	766.6	484.9
2005-06	91.0	472.5	519.9	64.1	896.7	157.6	713.3	463.7
2006-07	85.7	450.5	502.3	62.9	na	na	864.1	543.5
2007-08	76.9	407.9	458.7	62.6	na	na	945.0	599.1
2008-09	71.6	370.6	404.3	62.8	na	na	793.8	499.3

a Sheep and lambs. **b** Before 1982, includes livestock holdings on establishments with an estimated value of agricultural operations (EVAO) of $1 500 or more. Between 1982 and 1986, includes livestock holdings on establishments with an EVAO of $2 500 or more and from 1987, an EVAO of $5 000. **c** July–June years. **d** No official stocks of wool were held between 1951-52 and 1969-70. Australian wool held by the Australian Wool Board in 1970-71 and 1971-72, by the Australian Wool Corporation from 1972-73 to 1990-91 and by the Australian Wool Realisation Commission from 1 July 1991 to December 1993. Also includes stocks of wool held under the Price Averaging Plan in 1970-71 to 1972-73. From July 1993 to 2004, includes stocks held on farms and unsold wool held in brokers' stores. From 2005, stocks held on farms is unavailable therfore the value is derived. **e** Wool International eastern market indicator from 1973-74 to 1994-95. Australian Wool Exchange eastern market indicator from 1995-96 onward. (Original market indicators for the period 1991-92 to 1993-94 can be calculated by dividing by 1.064. For the years between 1983-84 to 1990-91, divide by 1.114. For 1982-83 and earlier years, divide by 1.136). **na** Not available.

Sources: ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Principal Agricultural Commodities, Preliminary,* cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Livestock, Australia,* cat. no. 7203.0, Canberra; ABS, *Livestock and Livestock Products, Australia,* cat. no. 7221.0, Canberra; National Council of Wool Selling Brokers of Australia, *Statistics,* Melbourne; Australian Wool Exchange, Melbourne; ABARE.

225 Australian shorn wool production, by state

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia a
Number of sheep shorn (million)							
1998-99	40.81	34.42	11.16	33.06	18.81	4.32	144.41
1999-00	41.67	32.91	9.67	32.95	19.16	4.22	139.60
2000-01	48.80	24.15	10.84	27.94	14.89	3.89	127.00
2001-02	42.83	27.08	8.92	25.06	14.77	3.92	117.50
2002-03	43.77	24.42	5.38	24.86	14.28	3.97	117.50
2003-04	36.34	22.49	4.50	24.51	13.71	3.52	105.12
2004-05	38.91	24.23	5.84	23.88	12.70	2.89	105.26
2005-06	37.09	23.06	5.48	27.90	13.88	3.85	106.94 s
2006-07	34.19	24.99	5.33	26.25	15.68	4.21	110.15 s
2007-08	30.60	19.50	4.20	22.72	13.08	2.70	94.86
2008-09	26.90 s	22.23 s	2.68 s	20.37 s	12.07 s	2.83 s	86.79 s
Average cut per head (kg greasy)							
1998-99	4.45	4.51	4.65	4.40	4.76	3.76	4.32
1999-00	4.59	4.65	4.72	4.34	4.79	4.20	4.30
2000-01	4.50	4.58	4.51	4.33	5.09	3.61	4.31
2001-02	4.51	4.15	4.01	4.33	4.84	4.01	4.38
2002-03	4.35	4.16	3.84	4.43	4.50	3.74	4.28
2003-04	4.49	4.17	4.12	4.51	4.84	3.93	4.45
2004-05	4.26	4.11	4.40	4.51	5.03	4.17	4.42
2005-06	4.25	4.07	4.28	4.27	4.59	3.68	4.42
2006-07	4.07	3.82	4.23	4.03	4.73	3.13	4.09
2007-08	4.53	4.19	4.61	4.06	4.45	3.67	4.30
2008-09	4.44 s	4.10 s	4.04 s	4.23 s	4.46 s	3.26 s	4.27 s
Shorn wool production (kt greasy)							
1998-99	181.71	155.11	51.88	145.52	89.45	16.23	639.90
1999-00	191.26	152.89	45.66	142.99	91.80	17.71	642.31
2000-01	219.35	110.54	48.82	120.91	75.79	14.04	589.86
2001-02	193.00	112.50	35.80	108.39	71.45	15.73	536.87
2002-03	190.48	101.47	20.68	110.04	64.30	14.83	503.02
2003-04	163.10	93.79	18.55	110.61	66.41	13.87	467.58
2004-05	165.83	99.55	25.67	107.80	63.90	12.04	465.70
2005-06	157.58	93.90	23.45	119.22	63.77	14.17	472.53
2006-07	139.17	95.45	22.56	105.80	74.16	13.19	450.53
2007-08	138.60	81.70	19.35	92.25	58.20	9.90	407.88
2008-09	119.43	91.14	10.83	86.15	53.82	9.24	370.60
Clean yield (%)							
1998-99	66.30	67.30	64.00	63.80	63.30	70.60	65.50
1999-00	66.70	67.40	63.70	64.10	62.50	70.70	65.60
2000-01	67.60	67.50	65.00	62.40	63.40	70.20	65.80
2001-02	67.20	67.70	65.30	61.90	63.00	71.10	66.10
2002-03	65.40	66.30	63.00	61.00	61.80	70.80	64.80
2003-04	63.90	65.80	61.60	62.90	62.70	71.00	64.40
2004-05	63.50	65.90	62.30	62.00	62.00	70.60	64.20
2005-06	63.60	65.70	61.30	63.90	61.20	70.20	64.10
2006-07	62.60	64.20	61.00	61.50	61.70	69.60	62.90
2007-08	62.90	64.10	61.40	60.60	60.90	68.40	62.60
2008-09	63.20	63.70	62.60	61.70	60.50	67.20	62.80

a Includes the Northern Territory and the Australian Capital Territory. **s** ABARE estimate. **na** Not available.

Sources: ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Agricultural Commodities Australia,* Cat. no. 7121.0, Canberra; ABS, *Livestock and Livestock Products, Australia,* cat. no. 7221.0, Canberra; Australian Wool Testing Authority, *Key Test Data Summary;* ABARE.

226 Australian sheep disposal and wool production

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Sheep disposal								
Opening number **a**	million	106.2	99.3	101.3	100.6	91.0	85.7	76.9
Lambs marked	million	33.9	36.3	37.2	35.1	34.1	33.1	32.0
Lambs slaughtered **b**	million	16.9	16.6	17.3	18.7	20.2	20.9	20.8
Sheep slaughtered **b**	million	13.7	10.4	11.4	11.8	13.3	11.9	11.3
Live sheep exports	million	5.8	3.8	3.2	4.2	4.1	4.1	4.1
Sheep deaths **c**	million	4.5	3.5	5.9	9.9	1.8	5.0	1.2
Closing number **d**	million	99.3	101.3	100.6	91.0	85.7	76.9	71.6
Wool production								
Number shorn	million	117.5	105.1	105.3	106.9	110.2	94.9	86.8 **s**
Cut per head	kg	4.28	4.45	4.42	4.42	4.09	4.30	4.27 **s**
Wool production (greasy)								
– shorn	kt	503.0	467.6	465.7	472.5	450.5	407.9	370.6 **s**
– on skins	kt	48.1	41.9	54.0	47.4	51.8	50.9	33.7 **s**
– total	kt	551.1	509.5	519.7	519.9	502.3	458.7	404.3
– clean yield	%	64.8	64.4	64.2	64.1	62.9	62.6	62.8

a Sheep and lambs at 1 July on enterprises with estimated value of agricultural operations (EVAO) of $5 000 or more. **b** For human consumption only, but excludes slaughterings on farms. **c** Calculated residually. **d** Sheep and lambs at 30 June on enterprises with an EVAO of $5 000 or more. **s** ABARE estimate. **na** Not available.

Sources: ABS, *Selected Agricultural Commodities, Australia, Preliminary,* cat. no. 7112.0, Canberra; ABS, *Principal Agricultural Commodities, Preliminary*, cat. no. 7111.0, Canberra; ABS, *Agriculture, Australia,* cat. no. 7113.0, Canberra; ABS, *Livestock and Livestock Products, Australia,* cat. no. 7221.0, Canberra; ABARE.

227 Average prices for greasy wool in principal exporting countries

	Australia a	New Zealand ab	South Africa ac
	c/kg	c/kg	c/kg
1970-71	na	73.25	na
1971-72	na	na	na
1972-73	na	na	na
1973-74	361.20	na	na
1974-75	252.80	na	na
1975-76	271.80	180.01	na
1976-77	348.00	na	na
1977-78	354.70	na	na
1978-79	391.70	na	na
1979-80	462.00	na	na
1980-81	478.80	279.85	na
1981-82	501.90	na	na
1982-83	516.30	na	na
1983-84	540.30	na	na
1984-85	586.00	na	na
1985-86	594.90	358.09	na
1986-87	697.40	450.29	na
1987-88	1 117.40	532.70	na
1988-89	1 091.70	522.89	na
1989-90	969.20	467.83	na
1990-91	699.60	321.35	na
1991-92	592.60	313.76	na
1992-93	519.20	329.13	474.02
1993-94	547.00	338.13	507.48
1994-95	788.00	474.14	761.09
1995-96	658.05	433.23	592.35
1996-97	669.81	394.43	629.34
1997-98	733.15	389.82	666.87
1998-99	550.25	344.35	466.18
1999-00	627.00	352.11	487.54
2000-01	764.00	410.75	560.82
2001-02	841.00	418.87	627.20
2002-03	1 049.00	490.43	822.57
2003-04	820.00	413.23	629.95
2004-05	766.58	373.92	549.98
2005-06	713.33	326.12	513.18
2006-07	864.14	325.98	638.71
2007-08	945.00	325.40	948.23
2008-09	793.80	319.30	741.52

a Clean equivalent. Annual average prices for July–June years, converted to Australian cents using average exchange rates. **b** Average weighted price of private and auction sales. **c** SA market indicator price. **na** Not available.

Sources: Australian Wool Exchange, Melbourne; Meat and Wool New Zealand Economics Service, Wellington; International Wool Textile Organisation, *Market Information,* London; Reserve Bank of Australia; Cape Wools, Port Elizabeth; Ministry of Agriculture and Fisheries, Wellington.

228 Average world prices for synthetic fibres

	US polyester price a	Chinese Taipei polyester price bc	Chinese Taipei acrylic price bd
	USc/lb	USc/lb	USc/lb
1983-84	78.00	na	79.00
1984-85	72.00	na	80.00
1985-86	64.00	na	82.00
1986-87	62.00	na	83.00
1987-88	70.00	55.14	82.80
1988-89	79.00	75.39	77.00
1989-90	88.00	61.90	72.65
1990-91	77.00	50.54	70.76
1991-92	73.00	46.95	77.00
1992-93	73.00	47.07	74.68
1993-94	72.00	55.08	68.06
1994-95	81.70	76.85	93.20
1995-96	88.00	71.64	88.00
1996-97	72.00	57.24	78.00
1997-98	69.00	43.69	70.00
1998-99	53.00	35.27	54.00
1999-00	54.00	43.09	57.00
2000-01	59.75	40.99	59.00
2001-02	60.25	37.76	54.00
2002-03	62.20	42.00	na
2003-04	60.08	44.57	na
2004-05	66.25	50.78	na
2005-06	66.58	55.18	na
2006-07	73.17	58.76	na
2007-08	74.00	71.81	na
2008-09	na	61.98	na

a Reported average market price for 1.5 denier polyester staple for cotton blending, landed group B mill points fob producing plants. Simple averages of weekly prices. **b** Simple averages of monthly prices. **c** Chinese Taipei staple, 1.5 denier. **d** Chinese Taipei staple, 3 denier. **na** Not available.
Sources: Osaka Senken Ltd, *JTN Weekly*, Osaka; US Department of Agriculture, *Cotton and Wool*, Situation and Outlook Report, Washington DC.

229 Australian wool exports, by destination, recorded trade basis

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Volume (kt greasy equivalent)								
China	280	207	211	266	320	376	304	317
Chinese Taipei	37	27	21	21	17	11	0	3
European Union **a**								
Czech Republic	14	9	14	13	19	15	18	9
France	25	21	19	11	1	0	0	0
Germany	22	17	16	10	7	3	2	1
Italy	109	80	62	63	47	41	37	23
United Kingdom	4	3	3	2	2	1	0	1
Other	22	14	10	12	8	5	1	1
Total	196	146	124	110	85	67	59	35
India	32	25	27	31	34	30	24	25
Japan	19	13	11	7	7	8	4	4
Korea, Rep. of	49	34	10	9	8	7	6	8
Thailand	12	13	13	11	8	5	5	3
Turkey	17	15	14	6	6	5	3	2
United States	7	5	3	4	4	4	2	1
Other	53	46	69	84	55	52	70	42
Total	701	532	502	547	543	566	477	439
Value ($m)								
China	1 451	1 423	1 175	1 382	1 485	2 031	1 748	1 654
Chinese Taipei	181	178	108	93	73	66	1	12
European Union **a**								
Czech Republic	70	57	69	55	81	68	97	38
France	138	149	114	53	5	1	2	0
Germany	124	119	82	42	27	14	12	5
Italy	596	547	347	342	257	260	285	175
United Kingdom	17	18	16	11	8	7	2	3
Other	103	117	75	81	71	31	14	6
Total	1 049	1 007	703	584	450	381	412	227
India	167	177	154	154	156	162	144	131
Japan	99	88	59	34	33	42	22	17
Korea, Rep. of	275	225	60	47	34	28	30	37
Thailand	75	100	80	63	45	37	32	17
Turkey	99	104	81	29	27	22	14	8
United States	34	36	18	22	21	19	11	8
Other	252	240	340	410	206	272	383	209
Total	3 682	3 578	2 777	2 817	2 531	3 059	2 798	2 319

a Regarded as 25 countries.

Source: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

230 Volume of Australian exports of semi-processed shorn wool

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Scoured								
China	5.6	5.9	4.2	1.9	2.0	3.1	0.0	3.8
India	5.8	4.1	3.6	3.1	3.0	2.9	0.0	1.3
Italy	7.5	5.2	4.7	5.8	3.0	2.2	1.2	1.1
Japan	5.6	4.3	4.3	2.4	2.5	3.0	1.4	1.0
Korea, Rep. of	6.8	2.3	1.2	0.6	0.1	0.0	0.0	0.0
Malaysia	1.6	2.1	1.4	3.1	5.2	3.0	0.0	0.3
Thailand	7.7	8.5	8.1	6.2	5.2	3.5	2.5	0.7
Total	51.5	38.9	33.3	30.7	29.8	25.7	21.9	20.9
Carbonised								
China	6.7	6.4	7.0	6.8	5.5	4.1	2.0	3.5
Hong Kong	1.2	0.7	0.1	0.2	0.1	0.0	0.0	0.0
Italy	3.5	1.7	2.8	3.7	2.8	3.0	0.5	0.9
Japan	2.0	1.4	1.4	0.9	0.8	0.9	0.2	0.2
Korea, Rep. of	8.5	7.1	2.9	3.9	3.9	3.9	3.3	4.6
Turkey	0.8	0.9	1.3	1.3	1.1	1.1	0.9	0.3
Total	27.1	22.4	18.7	19.0	16.0	15.9	10.5	12.6
Tops and sliver								
China	9.2	6.6	1.1	0.2	0.2	0.1	1.1	0.6
Chinese Taipei	0.9	0.6	0.2	0.0	0.0	0.0	0.0	0.0
Italy	12.8	8.4	1.0	0.1	0.1	0.2	1.3	1.2
Iran	1.5	0.9	0.1	0.0	0.0	0.0	0.0	0.0
Japan	2.4	1.5	0.3	0.0	0.1	0.1	0.1	0.0
Korea, Rep. of	9.5	7.2	0.7	0.0	0.0	0.0	0.3	0.4
Mexico	1.5	1.0	0.2	0.0	0.0	0.0	0.0	0.3
No country detail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	47.1	32.7	20.3	16.4	8.3	7.1	7.2	3.8
Noils and waste								
China	0.2	0.1	0.2	0.2	0.0	0.0	0.1	0.0
France	0.4	0.4	0.1	0.9	0.4	0.3	0.1	0.0
Germany	0.0	0.7	0.5	0.0	0.0	0.0	0.0	0.0
Italy	5.0	3.0	1.9	0.6	1.0	0.8	0.8	0.6
Japan	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Korea, Rep. of	0.8	0.4	0.1	0.0	0.0	0.0	0.0	0.0
United Kingdom	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total	7.3	5.3	3.5	2.1	1.5	1.4	1.0	0.7

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra.

231 World wool production, by country and type

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	kt	kt	kt	kt	kt	kt	kt	kt
Greasy								
Country or region								
Afghanistan	14	14	11	11	11	11	na	na
Algeria	20	20	19	19	19	19	na	na
Argentina	63	68	76	80	78	71	65	54
Australia	587	551	509	520	520	502	459	404 **s**
Chile	16	15	15	14	14	14	na	na
China **a**	308	338	374	393	395	399	365	na
Ethiopia	11	11	11	11	12	12	na	na
France	17	17	17	17	17	17	na	na
Greece	14	14	14	13	13	13	na	na
India	48	48	48	45	45	45	na	na
Iran	54	54	54	54	54	54	na	na
Ireland	26	26	18	16	16	22	na	na
Italy	11	11	11	11	11	9	na	na
Mongolia	19	15	15	15	15	15	na	na
Morocco	38	38	38	38	38	38	na	na
New Zealand	229	228	218	215	224	217	206	154
Pakistan	39	40	40	40	40	40	na	na
Peru	na	12	12	11	11	11	na	na
Romania	17	17	18	18	18	18	na	na
Russian Federation	135	141	146	148	145	145	na	na
Azerbaijan	12	12	12	13	14	14	na	na
Kazakhstan	25	27	28	30	32	34	na	na
Kyrgyzstan	11	11	10	10	11	11	na	na
Russia	41	43	46	48	49	51	na	na
Turkmenistan	18	18	18	18	18	18	na	na
Uzbekistan	17	17	19	20	21	23	na	na
Other CIS	12	12	13	13	13	13	na	na
South Africa **b**	48	44	46	46	46	47	48 **s**	48 **s**
Spain	39	36	36	36	36	36	na	na
Sudan	45	45	45	45	45	45	na	na
Syria	22	22	22	22	22	22	na	na
Turkey	56	54	54	46	46	46	na	na
United Kingdom	49	44	43	43	43	37	na	na
United States	22	20	19	19	19	18	na	na
Uruguay	49	41	37	38	46	47	43	39
Other producers	158	157	154	151	150	154	na	na
World	2 177	2 135	2 132	2 144	2 156	2 122	na	na
Clean								
Wool type								
Fine wool (<=24.5um)	473	470	464	466	469	444	na	na
Medium wool (24.6-32.5um)	275	260	260	260	263	264	na	na
Coarse wool (>32.5um)	486	491	496	493	502	495	na	na
World	1 233	1 220	1 220	1 218	1 234	1 202	1 170 **s**	1 055 **s**

a Includes Manchuria, Sinkiang and Tibet. **b** Excluding Lesotho and Namibia. **s** ABARE estimate. **na** Not available.

Sources: Argentine Wool Federation; International Wool Textile Organisation, *Market Information*, London; Meat and Wool New Zealand, Economic Service, Wellington; Uruguayan Wool Secretariat; ABARE.

232 Volume of raw wool exports, by main producing countries a

	Australia	New Zealand	Argentina b	Uruguay c	South Africa	Total
	kt	kt	kt	kt	kt	kt
1987-88	925	331	116	91	80	1 543
1988-89	872	329	85	80	83	1 448
1989-90	752	257	104	103	72	1 288
1990-91	715	254	94	107	86	1 256
1991-92	929	302	81	109	89	1 510
1992-93	867	240	81	92	66	1 346
1993-94	912	299	109	115	66	1 500
1994-95	814	291	95	68	63	1 331
1995-96	772	186	77	82	29	1 147
1996-97	860	200	83	17	19	1 178
1997-98	799	192	25	9	24	1 049
1998-99	683	171	24	10	25	913
1999-00	802	182	30	14	21	1 048
2000-01	854	179	21	12	17	1 084
2001-02	701	163	22	10	21	917
2002-03	532	148	24	10	21	735
2003-04	502	153	18	9	24	706
2004-05	547	144	20	8	28	747
2005-06	543	161	12	19	28	763
2006-07	566	155	15	25	31	791
2007-08	477	147	28	25	31	709
2008-09	439	na	16	13	32	654

a Greasy equivalent. Includes raw, semiprocessed and wool on skins. For New Zealand and South Africa, does not include wool exported on skins. **b** October–September years to 1993-94; July–June years from 1994-95. **c** October–September years. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Banco Central del Uruguay; Cape Wools SA, South Africa; Commonwealth Secretariat, *Wool Quarterly,* London; Federation Lanera Argentina, *Informe Mensual Estadistico,* Buenos Aires; International Wool Textile Organisation, *International Wool Textile Overview,* London; Ministry of Agriculture, *Situation and Outlook for New Zealand Agriculture,* Wellington; New Zealand Wool Board, *Statistical Handbook,* Wellington; Secretario Uruguayo de la Lana based on Banco de la Republica Oriental del Uruguay data; South African Wool Board, *Statistical Review of the Wool Season,* South Africa; Woolmark.

233 Market prices for Australian wool, by category a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	c/kg	c/kg	c/kg	c/kg	c/kg	c/kg	c/kg	c/kg
19 micron	1 068.0	1 206.0	966.3	951.7	888.0	1 057.0	1 180.0	994.2
20 micron	850.0	1 150.9	913.4	839.8	776.0	955.0	1 033.0	809.5
21 micron	826.0	1 143.0	887.8	779.1	723.0	900.0	965.0	774.4
22 micron	824.0	1 133.9	865.1	742.5	702.0	861.0	924.0	759.2
23 micron	820.0	1 119.3	841.6	715.4	689.0	832.0	890.0	747.4
24 micron	815.0	1 096.2	811.4	673.8	669.0	766.0	828.0	719.7
25 micron	790.0	1 035.7	762.7	620.8	615.0	656.0	693.0	599.7
30 micron	585.0	595.6	430.9	451.7	426.0	415.0	359.0	414.2
Eastern market indicator	841.0	1 049.0	820.0	766.6	713.3	864.1	945.0	793.8
Western market indicator	835.8	1 051.2	821.3	746.5	691.7	855.9	946.9	761.7

a Clean basis. Micron prices are averages of the Australian Wool Exchange northern and southern region indicators from 1998-99.

Sources: Wool International, *Wool Market Weekly,* Annual Price Summary, Melbourne; Australian Wool Exchange, *Weekly Wool Market Review,* Melbourne.

Minerals and energy commodities

2009

234 Summary of Australian statistics for bauxite and alumina

	Production		Alumina exports a		
	Bauxite	Alumina	Volume	Value	Unit value b
	kt	kt	kt	$m	$/t
1961	16	30	na	na	na
1962	30	34	na	na	na
1963	360	47	na	na	na
1964	797	161	na	na	na
1965	1 186	202	na	na	na
1966	1 827	307	na	7	na
1967	4 244	854	na	29	na
1968	4 955	1 310	na	60	na
1969	7 921	1 931	na	72	na
1970	9 256	2 152	na	97	na
1971	12 733	2 713	2 148	115	53.5
1972	14 437	3 068	2 646	135	51.0
1973	17 596	4 089	3 507	181	51.6
1974	19 994	4 900	4 705	251	53.3
1975	21 033	5 129	4 514	344	76.2
1976	24 084	6 206	5 826	527	90.5
1977	26 086	6 659	6 119	629	102.8
1978	24 293	6 776	6 250	671	107.4
1979	27 583	7 415	6 476	775	119.7
1980	27 179	7 246	6 994	1 021	146.0
1981	25 441	7 079	6 510	1 082	166.2
1982	23 625	6 631	5 953	1 103	185.3
1983	24 372	7 231	6 378	1 185	185.8
1984	31 537	8 781	6 905	1 579	228.7
1985	31 839	8 792	7 169	1 433	199.9
1986	32 384	9 423	7 688	1 427	185.6
1987	34 008	10 109	8 301	1 545	186.1
1988	36 192	10 518	8 519	1 836	215.6
1989	38 579	10 800	8 636	2 725	315.5
1990	41 389	11 231	8 708	2 940	337.6
1991	40 504	11 713	9 275	2 490	268.5
1992	39 741	11 783	9 604	2 253	234.6
1993	41 320	12 598	9 753	2 383	244.3
1994	42 159	12 819	10 570	2 193	207.4
1995	42 655	13 161	10 727	2 504	233.4
1996	43 063	13 348	10 754	2 612	242.9
1997	44 464	13 384	10 902	2 735	250.8
1998	44 653	13 853	10 804	3 055	282.7
1999	48 416	14 532	11 130	2 879	258.6
2000	53 802	15 680	12 419	4 222	340.0
2001	53 799	16 313	12 972	4 430	341.5
2002	54 135	16 382	12 932	3 752	290.2
2003	55 602	16 529	13 498	3 655	270.8
2004	56 593	16 701	13 702	4 110	299.9
2005	59 959	17 704	14 358	4 647	323.7
2006	61 780	18 312	14 986	6 082	405.9
2007	62 398	18 843	15 264	5 975	391.5
2008	64 038	19 446	15 909	6 382	401.2

a Alumina (hydrate and oxide) only. **b** Average export unit value. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; International Monetary Fund, *International Financial Statistics,* Washington DC; World Bureau of Metal Statistics, *World Metal Statistics,* London.

235 Summary of Australian statistics for aluminium

	Primary aluminium		Exports		
	Production	Consumption a	Volume b	Value	Unit value c
	kt	kt	kt	$m	$/t
1962	16	48	na	na	na
1963	42	49	5	2	400.0
1964	80	65	15	6	400.0
1965	88	67	22	9	409.1
1966	92	76	16	7	437.5
1967	93	82	11	5	454.5
1968	97	104	6	3	500.0
1969	126	107	21	10	476.2
1970	206	123	82	38	463.4
1971	224	138	85	35	411.8
1972	206	112	95	35	368.4
1973	207	151	57	24	421.1
1974	219	176	53	28	528.3
1975	214	138	77	46	597.4
1976	232	168	65	45	692.3
1977	248	170	78	70	897.4
1978	263	184	77	72	935.1
1979	270	198	76	86	1 131.6
1980	304	267	46	62	1 347.8
1981	379	254	79	97	1 227.8
1982	381	219	156	168	1 076.9
1983	478	245	235	333	1 417.0
1984	758	265	404	637	1 576.7
1985	851	288	564	862	1 528.4
1986	882	287	579	975	1 685.4
1987	1 004	319	711	1 423	2 001.4
1988	1 150	328	816	2 218	2 719.2
1989	1 244	324	922	2 347	2 546.4
1990	1 234	288	936	1 990	2 125.6
1991	1 235	298	954	1 771	1 857.2
1992	1 245	309	930	1 618	1 739.1
1993	1 388	338	1 056	1 822	1 725.2
1994	1 317	354	948	1 804	1 902.5
1995	1 297	343	957	2 431	2 540.7
1996	1 372	322	1 068	2 140	2 003.7
1997	1 495	352	1 156	2 527	2 186.3
1998	1 627	367	1 310	2 929	2 235.6
1999	1 718	344	1 381	2 919	2 114.2
2000	1 769	346	1 402	3 785	2 700.3
2001	1 797	317	1 489	4 233	2 842.3
2002	1 836	299	1 527	3 845	2 518.4
2003	1 857	337	1 528	3 426	2 242.4
2004	1 895	362	1 534	3 626	2 364.2
2005	1 903	380	1 585	4 024	2 539.5
2006	1 932	312	1 618	5 464	3 377.1
2007	1 959	327	1 652	5 365	3 247.0
2008	1 974	312	1 679	5 244	3 123.9

a Apparent primary consumption. **b** Aluminium ingot metal. **c** Average export unit value. **na** Not available.

Sources: Australian Aluminium Council, *Australian Aluminium Statistical Summary,* Canberra; ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; International Monetary Fund, *International Financial Statistics,* Washington DC; World Bureau of Metal Statistics, *World Metal Statistics,* London.

236 Australian supply, disposal and prices of alumina and aluminium

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Production									
Bauxite	kt	53 949	54 472	56 316	57 648	60 874	62 684	63 463	63 321
Alumina	kt	16 417	16 413	16 690	17 161	17 826	18 506	19 359	19 597
Aluminium	kt	1 809	1 855	1 877	1 890	1 912	1 954	1 964	1 974
Secondary metal **a**	kt	127	127	127	127	127	127	126	127
Exports									
Alumina **b**	kt	13 091	13 168	13 572	14 073	14 499	15 056	15 739	16 395
– value	$m	4 114	3 660	3 781	4 383	5 262	6 243	5 809	6 015
Aluminium **a**	kt	1 490	1 551	1 546	1 512	1 617	1 638	1 650	1 748
– value	$m	3 965	3 696	3 441	3 726	4 788	5 650	4 967	4 724
Imports									
Alumina	kt	8.9	11.4	9.9	9.3	9.6	10.7	11.9	10.5
– value	$m	11.4	13.1	9.7	10.2	11.5	12.2	12.7	13.1
Aluminium **a**	kt	6.8	4.8	6.7	5.9	6.3	2.7	3.0	3.5
– value	$m	20.5	14.3	16.2	16.6	19.9	10.7	10.2	10.1
Consumption c	kt	300.2	303.7	319.8	313.2	343.1	330.8	345.4	330.0
Export unit values									
Alumina	$/t	314.25	277.97	278.60	311.47	362.90	414.63	369.08	366.90
Aluminium	$/t	2 661.38	2 382.64	2 226.28	2 463.63	2 961.66	3 449.95	3 010.77	2 702.10

a Ingot metal. **b** Includes aluminium hydroxide. **c** Estimated apparent consumption (primary and secondary).

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Australian Aluminium Council, *Australian Statistical Summary,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London.

237 Volume of Australian exports of aluminium, by destination

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
China	18.6	20.0	46.4	72.0	75.2	59.5	37.4	29.3	15.9
Chinese Taipei	227.2	151.5	219.0	184.1	203.0	159.4	184.3	170.9	181.0
Hong Kong, China	102.1	61.6	74.3	90.0	108.8	85.5	66.0	42.3	30.4
Indonesia	51.1	47.6	51.3	56.3	57.1	88.1	83.3	77.7	91.7
Japan	610.3	610.8	577.5	569.9	551.9	581.0	578.1	591.5	645.8
Korea, Rep. of	230.5	210.2	234.8	217.2	188.5	222.4	233.0	243.2	229.7
Malaysia	24.4	52.1	53.4	61.8	75.2	81.3	82.1	105.6	111.4
Philippines	10.2	5.6	8.6	9.6	7.5	7.7	7.8	7.7	6.6
Singapore	4.1	5.3	5.4	6.0	13.5	16.0	27.9	23.8	17.2
Thailand	75.0	121.4	121.9	152.4	134.4	186.3	196.9	210.1	216.9
Other countries	48.0	203.1	133.9	108.6	118.6	97.4	121.2	150.3	131.9
Total	1 401.6	1 489.2	1 526.6	1 527.8	1 533.7	1 584.7	1 617.9	1 652.4	1 678.6

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

238 World production, consumption, stocks and prices for aluminium

	Production							
			Aluminium					
	Bauxite	Alumina a	Primary	Secondary	Total	Primary consumption	Stocks	Price b
	kt	kt	kt	kt	kt	kt	kt	US$/t
1963	30 456	na	3 523	1 061	4 584	3 458	na	498.9
1964	33 185	na	3 865	1 178	5 043	3 893	na	526.0
1965	37 233	na	4 253	1 311	5 564	4 322	na	540.1
1966	41 070	11 510	4 800	1 657	6 457	4 809	na	540.1
1967	45 087	13 118	5 098	1 700	6 798	5 226	na	540.1
1968	46 571	13 983	5 592	1 946	7 538	6 137	na	552.9
1969	54 475	16 175	6 160	2 256	8 416	6 088	na	588.4
1970	59 490	20 003	6 583	2 181	8 764	7 035	na	614.2
1971	66 663	22 719	7 439	2 295	9 734	7 732	na	627.9
1972	69 215	24 539	8 056	2 451	10 507	7 935	1 687	590.2
1973	75 208	21 908	8 621	2 817	11 438	8 471	1 352	599.2
1974	84 176	22 878	9 205	2 887	12 092	9 450	2 012	764.8
1975	77 380	22 093	10 129	2 542	12 671	11 350	3 129	868.4
1976	80 662	22 663	12 863	2 781	15 644	14 077	2 321	890.0
1977	84 480	25 186	14 322	3 052	17 374	14 511	2 505	1 143.8
1978	83 927	25 146	14 776	3 240	18 016	15 329	2 052	1 325.0
1979	89 131	26 034	15 175	3 316	18 491	15 981	1 513	1 602.8
1980	93 061	28 106	16 035	3 318	19 353	15 298	2 078	1 774.9
1981	88 552	26 648	15 698	3 618	19 316	14 516	3 275	1 262.8
1982	77 896	22 230	13 990	3 583	17 573	14 161	3 185	991.6
1983	78 585	23 342	14 334	3 960	18 294	15 361	2 249	1 438.3
1984	92 299	27 055	15 941	3 950	19 891	15 574	2 775	1 251.6
1985	89 609	25 543	15 555	4 022	19 577	15 858	2 444	1 042.8
1986	92 842	26 114	15 619	4 196	19 815	16 071	1 964	1 150.0
1987	96 499	28 053	16 483	4 511	20 994	17 053	1 474	1 580.0
1988	102 588	29 155	18 575	4 943	23 518	18 867	1 619	2 603.0
1989	107 584	31 537	19 135	4 943	24 078	19 253	1 634	1 953.0
1990	114 750	40 500	19 348	5 062	24 410	19 227	1 847	1 639.0
1991	114 977	40 890	19 653	5 336	24 988	18 743	2 741	1 303.5
1992	109 468	40 783	19 459	5 476	24 935	18 558	3 244	1 254.6
1993	114 124	42 978	19 715	6 058	25 773	18 134	4 497	1 139.4
1994	112 230	41 953	19 112	6 447	25 559	19 715	3 733	1 477.1
1995	118 231	43 809	19 668	6 876	26 544	20 552	2 576	1 806.0
1996	123 965	40 841	20 848	6 914	27 762	20 684	3 135	1 506.0
1997	126 381	43 297	21 798	7 484	29 282	21 870	2 749	1 599.8
1998	123 034	45 043	22 654	7 594	30 248	21 889	2 837	1 357.9
1999	130 158	45 784	23 707	8 132	31 839	23 356	3 020	1 361.1
2000	138 915	48 119	24 418	8 197	32 615	25 059	2 623	1 549.5
2001	139 044	48 488	24 436	7 264	31 700	23 722	3 103	1 443.8
2002	147 312	49 785	26 076	7 649	33 725	25 372	3 444	1 350.3
2003	158 315	52 591	28 001	7 656	35 657	27 607	3 672	1 431.6
2004	168 035	62 576	29 922	7 636	37 558	29 961	3 033	1 715.9
2005	177 028	66 692	32 017	8 119	40 136	31 689	3 010	1 898.8
2006	191 655	72 790	33 975	8 322	42 297	33 954	2 764	2 569.8
2007	209 018	79 619	38 108	8 866	46 974	37 561	2 960	2 638.5
2008	216 377	78 905	39 256	8 015	47 272	37 020	4 672	2 486.7

a Western world production to 1989, total world production from 1990. **b** London Metal Exchange, 99.5 per cent purity, spot cash settlement until 1988; 99.7 per cent purity from 1989. Before 1979, UK producer price. **na** Not available.

Sources: International Monetary Fund, *International Financial Statistics,* Washington DC; Metallgesellschaft AG, *Metallstatistik,* Frankfurt; World Bureau of Metal Statistics, *World Metal Statistics,* London.

239 World primary aluminium production, by region and country

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Africa									
Cameroon	95	81	67	77	86	90	87	87	90
Egypt	189	191	195	195	216	244	252	258	259
Ghana	156	162	132	16	0	13	76	13	9
Nigeria	0	0	0	0	0	0	0	0	0
South Africa	683	654	704	733	864	851	887	898	898
Americas									
Argentina	262	245	269	272	272	271	273	287	394
Brazil	1 271	1 132	1 318	1 381	1 457	1 498	1 604	1 655	1 661
Canada	2 374	2 583	2 709	2 792	2 592	2 894	3 051	3 083	3 119
Mexico	61	52	38	18	0	0	0	0	0
Surinam	0	0	0	0	0	0	0	0	0
United States	3 668	2 637	2 705	2 705	2 517	2 480	2 281	2 560	2 659
Venezuela	569	572	605	606	631	624	617	616	608
Asia									
China	2 794	3 371	4 321	5 547	6 689	7 806	9 349	12 559	13 177
India	649	624	671	799	861	942	1 105	1 222	1 308
Indonesia	191	209	163	197	241	252	250	242	242
Japan	7	7	6	7	7	6	6	6	7
Tajikistan	269	289	308	319	358	380	414	419	402
Europe									
France	441	461	463	443	451	442	442	428	432
Germany	644	652	653	661	668	648	516	551	606
Greece	163	162	164	165	167	165	165	168	162
Hungary	34	35	35	35	34	31	0	0	0
Iceland	226	243	264	266	271	272	325	399	760
Italy	190	188	190	191	195	193	194	180	186
Netherlands	302	293	284	283	326	341	312	296	321
Norway	1 026	1 068	1 096	1 192	1 322	1 376	1 427	1 357	1 359
Poland	52	55	59	53	54	54	52	58	47
Romania	181	182	187	196	219	244	258	286	290
Russian Federation	3 247	3 302	3 348	3 478	3 594	3 647	3 718	3 955	3 800
Slovakia	110	110	112	131	157	158	157	160	163
Slovenia	76	77	88	110	121	139	140	125	83
Spain	366	376	380	389	398	394	367	405	408
Sweden	100	102	101	101	101	103	101	100	82
Switzerland	36	36	40	44	45	44	12	0	0
Ukraine	104	106	113	114	113	114	113	113	89
United Kingdom	305	341	344	343	360	368	360	365	325
Yugoslavia	96	108	117	120	121	120	122	124	112
Middle East									
Bahrain	509	522	517	526	524	708	844	860	872
Iran	140	145	166	172	203	232	240	204	241
Turkey	62	62	63	63	62	59	60	63	61
United Arab Emirates	536	536	536	536	683	850	789	890	892
Oceania									
Australia	1 769	1 797	1 836	1 857	1 895	1 903	1 932	1 959	1 974
New Zealand	328	322	334	334	350	349	338	353	316
Total	24 418	24 436	26 076	28 001	29 922	32 017	33 975	38 108	39 256

Sources: ABARE, *Australian Mineral Statistics*, Canberra; World Bureau of Metal Statistics, *World Metal Statistics*, London.

240 World primary aluminium consumption, by region and country

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Africa									
Cameroon	24	25	27	27	19	19	19	19	19
Egypt	82	97	91	101	98	98	110	107	120
Ghana	16	16	16	16	20	22	24	28	31
South Africa	186	198	180	180	222	240	264	279	409
Other Africa	31	31	32	33	41	47	49	59	69
Total	339	366	347	357	401	426	466	492	648
Americas									
Argentina	81	54	51	81	116	113	133	138	134
Brazil	514	553	578	589	651	759	773	854	932
Canada	800	743	747	736	755	801	846	718	714
Mexico	88	113	113	113	130	158	164	124	124
United States	6 161	5 230	5 509	5 667	5 800	6 114	6 150	5 545	4 906
Venezuela	183	165	173	181	208	179	160	226	306
Other Americas	86	85	99	100	118	128	58	58	65
Total	7 912	6 942	7 270	7 467	7 777	8 254	8 385	7 717	7 055
Asia									
China **a**	3 499	3 492	4 115	5 178	6 043	7 119	8 648	12 347	12 413
Chinese Taipei	502	321	407	431	497	412	422	368	361
Hong Kong, China	50	50	42	28	25	30	30	30	30
India	602	589	604	798	861	958	1 079	1 207	1 284
Indonesia	146	163	127	211	249	268	288	267	311
Japan	2 225	2 014	2 010	2 235	2 319	2 276	2 323	2 197	2 250
Korea, Rep. of	823	850	921	982	1 118	1 201	1 153	1 081	964
Malaysia	150	153	149	126	140	150	193	221	181
Philippines	33	25	30	26	29	28	26	19	16
Singapore	15	48	48	56	63	60	60	60	60
Thailand	195	227	250	323	378	374	407	401	407
Other Asia	163	206	237	242	258	312	325	382	432
Total	8 402	8 138	8 940	10 636	11 980	13 188	14 956	18 580	18 709
Europe									
Austria	168	201	208	241	234	218	269	288	286
Belgium	341	327	333	322	402	442	467	510	442
Croatia	29	38	41	28	56	71	70	76	79
Czech Republic	78	88	105	103	114	134	130	143	133
Denmark	41	44	56	60	66	63	69	75	69
Finland	39	37	32	29	33	37	39	42	39
France	782	746	762	754	749	719	713	737	689
Germany	1 491	1 580	1 690	1 916	1 795	1 758	1 823	2 008	1 950
Greece	231	218	220	243	266	281	280	277	277
Hungary	210	223	240	244	226	226	225	213	210
Italy	780	756	851	956	987	977	1 021	1 087	951
Netherlands	155	155	155	153	146	146	146	146	146
Norway	253	233	246	246	246	245	261	243	217
Poland	150	149	133	152	160	128	155	181	242
Portugal	78	67	78	72	90	88	93	92	98
Romania	128	113	112	163	163	213	246	263	232
Russian Federation	748	786	990	803	1 020	1 020	1 047	1 020	1 020
Slovakia	36	39	28	24	20	25	25	27	30
Slovenia	81	116	76	87	119	115	112	126	115
Spain	526	508	533	596	603	624	620	642	603

Continued

240 World primary aluminium consumption, by region and country continued

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Europe (continued)									
Sweden	147	119	127	126	124	113	106	114	148
Switzerland	165	161	152	168	169	162	193	185	180
Ukraine	50	50	50	30	33	37	40	51	51
United Kingdom	576	433	428	302	439	353	362	364	350
Yugoslavia	16	18	23	38	45	62	96	96	96
Total	7 341	7 249	7 721	7 925	8 380	8 342	8 720	9 134	8 793
Middle East									
Bahrain	239	261	248	255	353	355	328	323	323
Iran	117	117	126	126	161	154	158	175	175
Saudi Arabia	60	65	70	77	77	80	85	90	95
Turkey	211	176	231	308	351	390	433	555	576
Total	673	664	721	812	988	1 028	1 054	1 192	1 208
Oceania									
Australia	346	317	299	337	362	380	312	327	312
New Zealand	46	46	74	73	75	71	62	68	73
Total	392	363	373	410	437	451	374	395	385
Total	25 059	23 722	25 372	27 607	29 961	31 689	33 954	37 561	37 020

a Excludes Hong Kong.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London.

241 Volume of world aluminium trade, by country a

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Exports									
Argentina	187.0	182.5	203.4	199.9	163.1	168.5	131.1	152.7	243.0
Australia	1 401.6	1 489.2	1 526.6	1 527.8	1 533.7	1 584.7	1 617.9	1 652.4	1 678.6
Austria	91.8	102.2	108.9	103.7	136.0	132.8	126.5	120.0	114.1
Bahrain	269.8	261.1	268.8	270.9	na	na	na	530.0	na
Belgium	61.6	184.4	287.3	198.7	308.7	306.7	240.4	203.6	194.7
Brazil	760.0	587.9	749.4	798.8	818.4	753.1	842.1	823.3	747.9
Cameroon	69.8	56.8	39.8	51.4	72.9	65.0	62.7	62.9	na
Canada	1 837.3	2 046.1	2 133.3	2 233.2	1 996.9	2 239.6	2 359.9	2 500.6	2 532.1
Chinese Taipei	103.1	96.1	113.6	121.1	125.8	111.3	117.5	139.3	142.2
Denmark	23.3	26.1	23.4	17.7	14.1	23.6	31.9	37.8	33.3
Egypt	114.4	95.1	108.7	99.2	119.8	144.6	140.7	60.7	132.0
Finland	38.9	33.7	23.5	18.6	17.3	14.1	11.4	12.9	14.3
France	157.4	151.0	156.7	139.0	148.1	172.8	214.2	185.5	185.8
Germany	374.8	366.7	387.6	389.3	413.4	391.6	432.3	423.0	435.0
Ghana	na	68.7	na	na	na	na	na	na	na
Greece	94.5	15.8	62.9	67.6	70.4	76.0	83.3	94.9	91.1
Hong Kong, China	193.0	134.4	145.9	183.4	203.3	118.1	80.2	42.7	40.2
Hungary	12.2	10.9	10.6	16.2	10.0	22.6	28.9	27.6	11.0
Iceland	209.7	258.0	282.5	286.0	278.0	283.6	303.3	446.3	760.8
India	91.4	101.5	135.7	71.4	76.2	108.3	119.9	163.7	193.4
Indonesia	172.2	149.6	142.7	119.9	167.7	166.1	186.1	168.3	153.9
Italy	33.8	31.5	42.0	34.5	47.8	66.3	93.5	123.3	115.0
Japan	10.0	12.6	12.4	18.2	36.3	34.4	24.3	26.8	19.0
Korea, Rep. of	11.8	8.0	24.3	49.9	56.1	48.6	50.8	77.7	120.9
Mexico	10.3	7.5	5.5	4.7	13.6	14.7	22.2	46.3	61.3
Netherlands	450.5	470.0	581.7	635.6	609.6	482.3	608.8	795.0	643.3
New Zealand	296.1	293.5	298.5	289.7	316.1	319.5	308.9	327.8	304.0
Norway	1 041.8	1 187.6	1 127.8	1 362.5	1 485.0	1 513.2	1 539.4	1 609.9	1 590.6
Russian Federation	3 177.2	3 074.4	2 782.0	3 107.9	3 700.2	2 740.3	3 163.6	3 948.6	4 817.9
Singapore	75.0	88.8	127.5	127.9	101.6	103.9	107.2	226.8	156.5
South Africa	504.4	461.0	584.6	625.8	646.4	671.2	601.3	625.2	597.9
Spain	82.1	92.2	70.9	88.3	103.2	115.0	136.5	141.0	162.9
Sweden	53.3	66.2	81.2	76.0	127.8	97.7	113.5	90.3	95.5
Switzerland	15.7	5.5	7.1	0.8	8.2	14.5	21.3	22.7	9.9
Tajikistan	288.0	287.0	304.0	316.7	342.6	374.9	408.9	411.2	393.4
United Arab Emirates	515.9	452.8	377.3	341.0	327.2	301.0	287.4	189.8	110.7
United Kingdom	347.7	263.3	250.4	271.2	335.9	379.1	350.2	298.2	330.5
United States	451.4	339.3	305.2	241.6	344.1	379.0	419.5	399.1	379.2
Venezuela	388.3	398.0	437.4	392.1	389.7	403.3	373.6	370.6	290.0
Yugoslavia	92.5	95.8	116.5	35.0	1.7	1.3	4.2	7.0	13.2
Total	15 285.4	15 176.3	15 911.5	16 852.3	18 090.7	17 016.3	17 699.0	18 902.9	19 514.9

Continued

241 Volume of world aluminium trade, by country a continued

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Imports									
Australia	6.0	7.6	4.4	6.1	6.9	5.1	4.7	2.9	2.6
Austria	251.5	293.0	307.3	326.3	336.0	297.1	350.3	391.3	375.0
Belgium	431.9	599.8	669.7	599.6	749.6	763.0	737.7	754.4	557.9
Brazil	2.3	8.7	8.9	6.8	12.0	18.6	11.6	22.4	18.5
Canada	276.3	223.0	196.1	137.9	165.5	163.2	155.3	139.3	127.4
China	914.1	529.6	581.8	880.8	1 033.3	637.0	512.0	282.2	260.1
Chinese Taipei	604.7	417.4	520.8	552.1	622.5	523.5	540.0	504.0	503.7
Denmark	45.4	48.7	61.5	65.4	75.2	70.6	79.6	86.4	85.3
Finland	52.0	50.5	37.5	36.7	41.3	44.6	40.9	50.5	43.0
France	527.8	506.9	474.3	490.5	513.8	517.2	593.0	604.6	509.4
Germany	1 586.2	1 602.0	1 666.6	1 895.6	1 798.9	1 770.5	2 073.0	2 230.8	2 063.3
Greece	135.6	122.4	118.9	144.3	167.6	190.2	188.4	198.7	191.3
Hong Kong, China	242.8	162.9	188.1	211.2	228.5	148.8	114.9	47.1	36.4
Hungary	193.0	203.3	209.3	227.9	366.6	163.7	182.1	282.0	229.4
India	44.7	66.6	68.3	70.6	76.4	123.8	109.7	149.1	170.0
Ireland	12.2	11.5	6.8	6.5	6.6	4.1	2.8	1.4	0.3
Italy	704.8	670.2	781.2	871.5	903.3	890.1	986.1	1 079.4	882.1
Japan	2 905.2	2 611.6	2 575.1	2 941.3	3 021.4	2 976.7	3 036.1	2 985.7	3 064.1
Korea, Rep. of	889.7	880.6	973.3	1 080.2	1 197.1	1 230.6	1 204.4	1 190.5	1 085.0
Mexico	231.7	229.4	292.1	325.3	403.9	406.8	439.7	453.1	459.5
Netherlands	615.6	520.6	526.0	583.5	594.3	656.3	971.4	1 043.2	731.4
New Zealand	9.7	5.7	10.7	17.3	22.1	19.1	17.1	16.1	16.1
Norway	252.5	224.1	282.2	301.6	355.5	370.8	387.1	508.3	440.6
Portugal	194.9	175.0	172.9	193.2	211.2	238.6	253.9	231.8	232.3
Singapore	81.0	229.9	271.7	85.0	188.7	234.2	292.9	217.8	288.8
South Africa	8.2	5.4	4.8	7.7	3.9	18.1	29.3	6.6	7.7
Spain	231.0	216.1	222.7	283.3	326.5	333.9	399.0	450.6	363.8
Sweden	109.1	97.2	120.2	118.9	150.2	135.1	143.2	205.3	191.6
Switzerland	136.3	130.5	119.4	125.1	132.5	132.0	191.7	214.9	190.0
Thailand	356.1	232.2	259.3	330.3	390.7	386.9	418.4	420.9	437.4
Turkey	169.6	125.5	185.5	274.0	327.0	382.9	414.4	572.1	598.4
United Kingdom	277.1	346.9	371.1	294.7	234.2	200.8	294.2	295.3	255.6
United States	2 687.6	2 677.1	2 918.2	2 982.7	3 297.7	3 690.7	3 461.1	2 951.1	2 931.7
Yugoslavia	3.0	4.2	11.0	20.1	24.5	39.7	63.1	77.8	73.5
Total	15 720.8	14 686.3	15 642.8	17 008.3	18 551.3	18 318.2	19 253.9	19 351.7	18 095.6

a Covers principal imports and exports of aluminium and aluminium alloys. **na** Not available or not applicable.

Sources: ABARE, *Australian Mineral Statistics*, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review*, AGPS, Canberra; World Bureau of Metal Statistics, *World Metal Statistics*, London.

242 Australian exports of clays, by destination [a]

	Japan	New Zealand	United Kingdom	Other	Total Volume	Total Value
	t	t	t	t	t	$'000
1963	na	634	na	na	801	36
1964	na	2 193	na	na	2 756	77
1965	na	552	na	na	2 560	56
1966	na	714	na	na	3 514	120
1967	na	650	na	na	4 890	223
1968	na	657	na	na	4 544	224
1969	na	614	na	na	6 145	182
1970	2 894	973	2 433	1 004	7 304	324
1971	2 271	681	2 827	598	6 377	299
1972	1 554	703	1 998	489	4 744	211
1973	2 038	1 011	3 249	332	6 630	286
1974	1 198	895	3 953	201	6 247	278
1975	1 732	175	4 816	126	6 849	294
1976	1 500	101	3 025	326	4 952	228
1977	2 115	462	5 400	1 950	9 927	679
1978	1 609	600	5 001	6 198	13 408	1 054
1979	1 939	1 175	2 597	381	6 092	525
1980	735	125	1 206	327	2 393	281
1981	1 539	313	596	577	3 025	364
1982	1 364	463	1 376	2 133	5 336	983
1983	927	365	1 601	5 025	7 918	1 041
1984	2 878	829	2 234	11 074	17 015	1 683
1985	1 549	719	1 877	4 259	8 404	1 021
1986	9 670	1 241	2 106	4 428	17 445	1 980
1987	14 990	3 908	1 059	11 401	31 358	4 743
1988	40 983	9 003	1 965	16 133	68 084	10 480
1988-89	71 466	10 044	1 808	27 281	110 599	16 315
1989-90	94 507	6 779	2 303	39 601	143 190	19 953
1990-91	119 979	7 528	1 175	32 203	160 885	24 557
1991-92	97 614	5 260	135	46 424	149 433	23 408
1992-93	115 735	5 009	100	43 774	164 618	28 090
1993-94	122 866	5 495	0	43 209	171 570	30 926
1994-95	85 853	4 987	844	60 509	152 193	24 656
1995-96	103 848	5 226	1 224	68 504	178 802	33 523
1996-97	52 775	5 671	43	47 208	105 697	20 801
1997-98	2 797	6 036	1 321	34 068	44 222	10 609
1998-99	4 886	6 237	2 320	30 059	43 502	10 570
1999-00	4 039	11 760	3 474	60 069	79 342	10 203
2000-01	6 152	4 768	266	21 539	32 725	7 924
2001-02	31 119	7 963	332	100 828	140 242	11 109
2002-03	12 137	11 346	231	87 538	111 252	15 862
2003-04	18 364	7 869	232	33 132	59 597	13 738
2004-05	2 893	19 366	308	37 147	59 714	12 420
2005-06	2 875	25 084	82	27 530	55 571	9 976
2006-07	2 407	17 603	122	44 151	64 283	10 933
2007-08	2 525	34 494	61	232 816	269 896	11 958
2008-09	2 018	4 057	20	61 478	67 573	11 145

a Excludes activated clays. **na** Not available.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review*, AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964*, Bureau of Mineral Resources, Canberra; ABARE.

243 Australian imports of clays

	Bentonite a		Kaolin b		Refactory clays c		Other clays d	
	t	$'000	t	$'000	t	$'000	t	$'000
1963	10 938	492	24 589	448	1 649	65	5 960	250
1964	14 286	569	25 089	496	4 380	171	9 578	354
1965	16 312	644	26 128	517	3 524	182	14 793	271
1966	15 346	494	31 991	686	3 705	148	9 939	406
1967	21 263	615	37 908	878	2 391	101	14 270	519
1968	44 513	984	44 603	1 030	5 071	173	12 578	548
1969	54 597	1 134	43 606	1 075	4 825	112	13 177	590
1970	66 484	1 474	56 571	1 458	7 720	285	20 245	686
1971	88 803	1 887	42 579	1 268	10 565	267	12 178	726
1972	49 861	1 540	33 314	991	5 949	174	12 442	504
1973	57 965	1 390	38 344	1 130	2 154	70	16 920	665
1974	85 363	1 649	37 535	1 028	4 880	106	25 616	1 207
1975	54 736	1 142	5 572	387	16 139	561	26 654	1 286
1976	22 204	708	8 620	426	5 054	231	25 711	1 679
1977	13 191	558	7 488	521	6 665	367	29 342	2 051
1978	30 355	1 375	11 773	750	3 652	350	57 957	3 872
1979	57 241	2 028	6 751	537	2 610	198	45 635	3 842
1980	55 917	2 424	3 624	404	15 119	1 125	25 097	2 505
1981	43 034	1 828	11 737	1 113	16 564	1 431	36 658	2 720
1982	32 571	2 067	15 668	1 780	10 874	1 141	8 649	1 836
1983	17 767	1 611	9 829	1 663	3 327	461	9 261	1 373
1984	24 419	2 617	7 652	1 580	13 408	1 485	16 216	2 606
1985	30 531	3 474	2 586	870	904	209	29 166	5 412
1986	24 942	2 643	4 785	2 892	2 719	431	21 776	4 400
1987	8 654	1 822	12 641	6 002	17 367	2 079	14 021	3 773
1988	22 269	3 530	12 487	3 113	17 324	2 253	5 217	1 946
1988-89	21 344	2 553	17 174	3 927	30 795	3 793	9 441	4 410
1989-90	28 476	4 427	11 896	3 204	10 953	1 653	24 462	5 070
1990-91	28 348	3 858	11 331	3 172	4 979	813	18 574	4 146
1991-92	12 529	2 596	7 119	3 413	13 752	1 834	8 330	2 950
1992-93	21 004	4 078	11 965	6 104	1 442	371	10 569	3 806
1993-94	16 227	3 537	12 476	4 774	2 016	464	6 875	3 155
1994-95	29 151	3 290	17 686	7 450	6 038	1 717	26 312	5 524
1995-96	4 202	2 864	17 167	5 284	5 192	927	44 704	8 194
1996-97	9 633	2 481	19 535	6 919	1 910	473	23 648	5 340
1997-98	12 124	3 872	16 298	7 500	5 220	1 021	26 641	7 427
1998-99	7 035	3 179	13 525	8 510	1 539	443	19 873	6 553
1999-00	15 291	4 353	9 410	6 235	3 414	819	19 988	6 875
2000-01	25 611	5 524	11 629	9 321	8 985	1 559	23 333	9 563
2001-02	28 900	6 636	10 239	9 113	2 794	754	19 963	8 068
2002-03	26 841	4 870	6 957	4 097	10 402	2 176	12 086	5 702
2003-04	26 629	5 854	13 379	8 293	12 819	2 231	14 846	5 322
2004-05	22 009	5 130	13 376	6 714	6 417	1 071	11 856	4 755
2005-06	36 930	4 751	18 772	8 477	9 469	1 748	5 728	2 970
2006-07	37 945	4 617	16 861	7 573	5 090	1 036	7 813	4 372
2007-08	43 574	6 351	19 182	8 180	4 500	1 154	9 338	4 468
2008-09	35 684	7 306	13 828	7 314	2 820	977	7 408	4 687

a Includes bentonitic clay. **b** Includes ball and china clay. **c** Includes fireclay and chamotte. **d** Includes andalusite, mullite, kyanite, sillimanite and other clays.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964* ,Bureau of Mineral Resources, Canberra; ABARE. Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; ABARE.

244 Summary of Australian statistics for black coal

	Production		Domestic	Exports		Closing
	Raw	Net a	consumption	Volume	Unit value	stocks b
	Mt	Mt	Mt	Mt	$/t	Mt
1964-65	30.11	27.54	22.02	5.94	8.31	na
1965-66	34.23	31.22	22.85	8.87	8.12	na
1966-67	35.95	32.29	23.15	8.04	8.03	na
1967-68	39.06	34.71	24.04	10.48	8.21	na
1968-69	44.86	39.81	24.71	14.41	8.33	na
1969-70	50.41	44.30	25.57	17.97	9.32	na
1970-71	52.97	45.00	24.96	18.96	10.50	7.59
1971-72	58.86	49.02	25.49	21.85	10.89	9.27
1972-73	66.19	54.63	27.39	25.83	11.28	10.68
1973-74	66.58	54.74	27.68	28.39	12.50	9.35
1974-75	72.21	63.78	30.19	32.42	22.10	10.52
1975-76	77.13	62.33	29.45	30.43	34.96	12.97
1976-77	85.96	69.55	32.19	35.37	37.23	14.95
1977-78	87.79	71.01	32.56	37.91	39.14	15.50
1978-79	91.90	73.37	33.43	38.28	38.99	17.17
1979-80	90.20	73.59	35.62	43.16	39.35	11.97
1980-81	106.20	87.39	37.71	47.25	41.64	14.22
1981-82	110.20	91.08	36.79	46.12	49.64	21.34
1982-83	120.34	99.59	37.29	54.65	56.21	28.02
1983-84	129.44	105.55	38.64	64.33	51.77	27.98
1984-85	145.14	118.26	40.67	86.10	54.09	21.95
1985-86	163.62	134.31	42.56	90.30	57.49	23.93
1986-87	182.43	148.73	44.07	97.70	55.46	32.71
1987-88	167.69	136.35	46.01	102.10	46.61	20.59
1988-89	184.05	149.35	49.87	97.66	48.04	20.91
1989-90	196.85	160.41	50.68	104.58	55.74	27.37
1990-91	204.68	166.56	50.92	113.37	56.08	29.10
1991-92	218.25	176.51	52.81	123.30	55.38	29.61
1992-93	222.50	177.99	52.94	129.18	58.28	26.23
1993-94	221.50	177.98	54.18	129.06	55.49	21.81
1994-95	237.23	192.35	55.36	136.24	50.45	23.30
1995-96	243.02	194.53	57.41	138.55	56.00	21.29
1996-97	261.34	207.50	57.88	145.75	54.42	24.91
1997-98	278.64	222.37	61.26	162.61	58.62	25.77
1998-99	284.29	225.01	61.64	169.41	54.54	19.92
1999-00	298.66	239.43	61.30	175.78	47.20	20.03
2000-01	321.48	258.22	64.13	193.50	55.81	21.48
2001-02	345.14	272.59	66.16	197.87	67.37	27.39
2002-03	348.92	274.85	66.34	207.74	57.26	27.14
2003-04	360.41	283.84	69.24	218.43	49.82	21.87
2004-05	393.36	305.01	71.29	231.31	73.90	23.66
2005-06	398.87	307.04	71.58	231.30	104.67	25.36
2006-07	414.39	325.23	na	243.59	89.48	na
2007-08	421.18	326.80	na	251.99	96.84	na
2008-09	437.97 s	333.63 s	na	261.60	208.93	na

a Before 1980-81, net production referred to raw coal production less rejects removed at coal industry washeries plus/less unexplained stock adjustments at mines and ports. From 1980-81, net production refers to raw coal production less rejects removed at coal industry washeries plus/less unexplained stock adjustments at mines only. Thus, from 1980-81, net production is identical to salable production. **b** Calendar year basis before 1984-85. **s** ABARE estimate. **na** Not available.

Sources: Joint Coal Board, *Black Coal in Australia 1987-88*, Sydney; Coal Services Pty Ltd, *Australian Black Coal Statistics*, Sydney; Queensland Department of Natural Resources, Mines and Energy; ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; ABARE.

245 Australian raw coal production, by state

	New South Wales	Victoria a	Queensland	Western Australia	South Australia	Tasmania
	Mt	Mt	Mt	Mt	Mt	Mt
1961-62	19.39	17.00	3.47	0.95	1.25	0.26
1962-63	19.03	18.05	3.48	0.95	1.50	0.24
1963-64	20.56	18.98	4.50	0.93	1.63	0.18
1964-65	22.16	19.87	4.86	0.97	1.94	0.13
1965-66	25.41	21.90	5.56	1.08	2.04	0.10
1966-67	26.63	22.87	6.06	1.10	2.05	0.08
1967-68	28.57	23.43	7.19	1.08	2.02	0.09
1968-69	32.24	23.50	9.20	1.12	2.18	0.11
1969-70	35.32	24.31	11.65	1.17	2.15	0.12
1970-71	35.72	23.18	14.32	1.18	1.62	0.12
1971-72	36.96	23.63	19.01	1.21	1.56	0.12
1972-73	38.66	24.12	25.27	1.15	1.58	0.13
1973-74	36.63	26.44	27.15	1.20	1.49	0.12
1974-75	42.31	27.54	32.10	1.88	1.79	0.14
1975-76	40.59	29.21	32.40	2.14	1.82	0.18
1976-77	46.79	30.99	34.66	2.38	1.95	0.20
1977-78	49.25	30.47	34.14	2.42	1.78	0.19
1978-79	50.52	32.10	37.26	2.41	1.47	0.25
1979-80	48.71	32.90	36.53	3.03	1.72	0.21
1980-81	58.29	32.10	42.76	3.12	1.73	0.30
1981-82	59.82	37.57	45.14	3.42	1.44	0.39
1982-83	67.46	34.71	46.91	3.96	1.45	0.56
1983-84	66.53	33.20	57.20	3.93	1.33	0.45
1984-85	70.03	38.38	69.21	3.65	1.75	0.49
1985-86	77.19	36.07	80.01	3.75	2.17	0.50
1986-87	88.51	41.81	87.09	3.78	2.43	0.62
1987-88	76.27	44.29	84.61	3.69	2.52	0.60
1988-89	81.27	48.65	95.48	3.89	2.76	0.65
1989-90	93.89	45.96	95.30	4.13	2.94	0.60
1990-91	96.70	49.39	99.67	5.21	2.53	0.59
1991-92	101.17	50.72	108.32	5.48	2.74	0.54
1992-93	102.91	47.90	110.93	5.40	2.79	0.48
1993-94	101.95	49.68	111.12	5.15	2.69	0.57
1994-95	107.78	49.92	119.97	5.82	3.04	0.61
1995-96	113.09	54.28	120.93	5.97	2.45	0.58
1996-97	123.68	60.80	128.92	5.59	2.59	0.56
1997-98	134.01	65.27	135.56	5.80	2.70	0.58
1998-99	131.38	66.65	143.79	5.74	2.80	0.57
1999-00	132.90	67.36	155.72	6.63	2.87	0.55
2000-01	138.78	64.96	172.88	6.19	3.16	0.47
2001-02	145.23	66.66	190.07	6.25	3.06	0.54
2002-03	143.07	66.81	195.96	6.14	3.24	0.52
2003-04	147.05	66.34	203.70	5.98	3.21	0.48
2004-05	156.31	67.15	226.62	6.22	3.64	0.58
2005-06	161.14	67.74	226.69	6.92	3.48	0.63
2006-07	169.72	65.61	234.12	6.18	3.60	0.77
2007-08	177.02	72.40	233.24	6.33	3.83	0.76
2008-09 s	182.18	72.90	244.52	6.80	3.84	0.64

a Brown coal. Between 1960-61 and 1968-69, Victoria produced small quantities of black coal which are not included in this table. **s** ABARE estimate.
Sources: Joint Coal Board, *Black Coal in Australia 1987-88*, Sydney; Joint Coal Board and the Queensland Department of Mines and Energy, *Australian Black Coal Statistics*, Sydney; Victorian Department of Natural Resources and Environment; ABARE.

246 Australian consumption of coal, by major end use

	Black coal					Brown coal
	Electricity generation	Iron and steel a	Cement industry	Other consumers	Total	Electricity generation
	Mt	Mt	Mt	Mt	Mt	Mt
1984-85	29.74	6.25	1.02	3.67	40.67	37.09
1985-86	31.48	6.20	0.93	3.95	42.56	34.89
1986-87	32.76	6.44	0.70	4.18	44.07	40.49
1987-88	33.91	7.22	0.69	4.20	46.01	43.07
1988-89	36.82	7.92	0.79	4.34	49.87	47.35
1989-90	38.17	7.43	0.85	4.23	50.68	44.87
1990-91	38.41	7.40	0.86	4.25	50.92	49.39
1991-92	39.88	7.35	0.85	4.72	52.81	50.72
1992-93	40.68	7.11	0.87	4.28	52.94	47.65
1993-94	41.83	7.09	0.90	4.37	54.18	48.75
1994-95	42.82	7.55	0.74	4.26	55.36	50.75
1995-96	45.60	6.39	0.82	4.60	57.41	53.71
1996-97	46.15	6.24	0.80	4.68	57.88	58.16
1997-98	48.16	7.55	0.86	4.69	61.26	66.26
1998-99	49.68	6.48	0.87	4.61	61.64	69.55
1999-00	50.16	5.63	0.85	4.66	61.30	69.96
2000-01	53.54	5.20	0.74	4.66	64.13	67.96
2001-02	55.46	5.46	0.78	4.46	66.16	68.71
2002-03	55.55	5.41	0.85	4.52	66.34	68.81
2003-04	58.51	5.28	0.90	4.55	69.24	69.83
2004-05	60.43	4.99	0.90	4.97	71.29	70.27
2005-06	61.48	4.26	0.94	4.90	71.58	na
2006-07	na	na	na	na	na	na
2007-08	na	na	na	na	na	na

a As received basis. **na** Not available.

Sources: Joint Coal Board, *Black Coal in Australia 1987-88*, Sydney; Joint Coal Board and the Queensland Department of Mines and Energy, *Australian Black Coal Statistics*, Sydney; Victorian Department of Natural Resources and Environment; ABARE.

247 Australian exports of coal, by coal type

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Metallurgical coal									
High quality									
Volume	Mt	65.46	66.45	67.55	80.73	77.48	82.81	83.65	79.63
Value	$m	5 353	5 122	4 340	7 692	12 203	11 010	10 847	25 322
Unit value	$/t	81.77	77.08	64.26	95.28	157.49	132.96	129.66	318.00
Excluding high quality									
Volume	Mt	40.37	41.34	44.19	44.19	42.99	49.15	53.27	45.62
Value	$m	2 685	2 325	2 169	3 067	4 800	4 029	5 191	11 448
Unit value	$/t	66.51	56.25	49.10	69.40	111.65	81.97	97.46	250.94
Total									
Volume	Mt	105.83	107.79	111.73	124.92	120.48	131.97	136.92	125.25
Value	$m	8 038	7 448	6 510	10 758	17 003	15 039	16 038	36 770
Unit value	$/t	75.95	69.09	58.26	86.12	141.13	113.96	117.14	293.57
Thermal coal									
Volume	Mt	92.04	99.95	106.69	106.40	110.82	111.62	115.07	136.35
Value	$m	5 294	4 448	4 372	6 336	7 206	6 758	8 365	17 901
Unit value	$/t	57.51	44.50	40.98	59.55	65.02	60.54	72.70	131.28

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Department of Foreign Affairs and Trade, computer database compiled from trade data supplied by the ABS.

248 Volume of Australian exports of thermal coal, by destination

	2001-02 Mt	2002-03 Mt	2003-04 Mt	2004-05 Mt	2005-06 Mt	2006-07 Mt	2007-08 Mt	2008-09 Mt
Asia								
ASEAN **a**	2.48	2.62	2.61	3.79	4.12	7.22	4.82	6.18
China **b**	2.95	3.99	2.45	1.75	3.99	3.22	1.48	8.40
Chinese Taipei	10.24	10.82	9.89	14.33	13.21	16.23	18.56	20.30
Hong Kong, China	0.26	0.73	1.20	0.37	0.08	0.01	0.00	0.76
Japan	49.62	52.44	58.78	57.28	59.33	58.64	66.92	62.57
Korea, Rep. of	13.40	14.20	16.22	17.95	20.24	15.06	18.55	30.14
Other Asia	3.45	2.79	3.51	2.42	1.59	1.17	0.87	1.50
Total	82.40	87.59	94.66	97.89	102.55	101.56	111.20	129.85
Europe								
European Union **c**	6.30	7.49	7.86	3.48	2.32	3.81	2.15	3.72
Denmark	0.19	0.41	0.79	0.00	0.28	0.16	0.00	0.15
Germany	0.17	0.00	0.26	0.12	0.00	0.13	0.00	0.00
Netherlands	1.51	1.82	1.59	0.73	0.30	0.74	0.19	0.93
United Kingdom	0.97	1.28	1.88	0.99	0.43	0.60	0.07	0.38
Other Europe	3.34	4.87	4.18	5.02	5.96	6.25	1.72	2.79
Total all countries	92.04	99.95	106.69	106.40	110.82	111.62	115.07	136.35

a Includes Brunei Darrusalam, Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. **b** Excludes Hong Kong. **c** Regarded as 27 countries for all years.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Foreign Affairs and Trade, computer database compiled from trade data provided by the ABS.

249 Volume of Australian exports of high quality metallurgical coal, by destination

	2001-02 Mt	2002-03 Mt	2003-04 Mt	2004-05 Mt	2005-06 Mt	2006-07 Mt	2007-08 Mt	2008-09 Mt
Asia								
China **a**	0.04	0.68	3.07	3.73	2.22	2.41	1.37	9.81
Chinese Taipei	4.01	3.82	3.43	3.51	3.31	3.47	3.43	2.66
India	9.67	11.08	10.09	13.41	13.63	16.30	18.94	19.18
Japan	17.37	18.22	17.78	22.87	23.87	25.42	24.87	22.78
Korea, Rep. of	6.63	7.44	6.80	8.01	6.58	6.25	6.57	5.47
Pakistan	0.49	0.44	0.43	0.59	0.05	0.20	0.21	0.26
Other Asia	2.11	1.80	1.20	1.18	1.34	1.48	1.59	1.84
Total Asia	40.33	43.50	42.82	53.32	51.00	55.53	56.99	61.99
Europe								
European Union **b**	18.89	17.11	18.39	19.91	19.61	20.38	19.82	12.79
France	2.94	2.54	2.32	2.47	2.20	2.26	1.89	1.17
Germany	1.24	1.46	1.37	1.58	1.78	2.16	1.62	1.38
Italy	2.34	1.63	1.93	2.53	2.26	2.29	2.25	1.50
United Kingdom	3.97	3.72	3.67	4.01	3.52	3.65	3.28	2.31
Other Europe	6.24	5.84	6.34	7.50	6.88	6.90	6.84	4.85
Total all countries	65.46	66.45	67.55	80.73	77.48	82.81	83.65	79.63

a Excludes Hong Kong. **b** Regarded as 27 countries for all years.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Foreign Affairs and Trade, computer database compiled from trade data provided by the ABS.

250 Volume of Australian exports of metallurgical coal other than high quality, by destination

	2001-02 Mt	2002-03 Mt	2003-04 Mt	2004-05 Mt	2005-06 Mt	2006-07 Mt	2007-08 Mt	2008-09 Mt
Asia								
India	2.27	3.02	3.49	4.03	2.77	3.32	5.28	5.10
Japan	23.02	23.09	23.60	22.09	20.35	23.44	25.33	19.45
Europe								
European Union **a**	4.24	3.57	4.11	4.76	4.73	4.49	4.69	1.90
Americas								
Brazil	1.62	2.30	0.77	0.00	0.00	0.00	0.59	1.85
Total all countries	40.37	41.34	44.19	44.19	42.99	49.15	53.27	45.62

a Regarded as 27 countries for all years.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Foreign Affairs and Trade, computer database compiled from trade data provided by the ABS.

251 Volume of world exports of coal, by coal type and major exporters

	2001 Mt	2002 Mt	2003 Mt	2004 Mt	2005 Mt	2006 Mt	2007 Mt	2008 Mt
Metallurgical coal								
Australia **a**	106.1	104.4	111.5	116.7	124.9	124.4	138.2	134.8
Canada	26.9	23.0	23.7	23.8	26.7	24.9	26.0	26.6
China	11.4	13.3	13.1	5.8	5.3	4.3	2.5	4.7
Poland	3.8	3.5	2.7	3.0	3.2	3.6	2.4	1.6
Russian Federation	14.4	9.2	9.5	11.9	10.0	10.0	10.0	15.5
United States	23.1	19.5	20.0	24.3	26.0	24.9	29.2	38.6
World **a**	189.3	186.1	189.8	199.9	205.6	209.6	227.2	232.7
Total seaborne	185.7	172.9	180.6	185.7	196.0	192.2	208.3	221.8
Thermal coal								
Australia	86.7	98.5	103.1	106.9	107.6	111.6	112.4	126.4
Canada	2.7	2.1	1.3	1.9	1.4	2.9	4.0	6.3
China **a**	78.7	70.6	80.9	80.9	66.4	58.9	50.6	42.7
Colombia	39.1	35.5	45.5	50.9	53.6	62.0	64.6	73.6
Indonesia	65.3	74.2	84.9	96.2	128.0	170.0	189.0	193.0
Poland	19.2	19.1	17.4	16.6	16.2	13.1	9.5	6.2
Russian Federation	27.1	34.3	45.2	56.7	76.0	81.4	88.0	85.8
South Africa	68.2	68.5	70.9	67.0	70.9	68.9	65.1	61.3
United States	21.0	16.3	18.9	19.0	19.1	19.9	24.2	35.1
World	478.4	492.7	534.8	582.6	610.2	672.8	696.5	704.0
Total seaborne	384.7	407.6	445.3	489.0	532.1	571.1	607.0	na

a Includes pulverised coal injection – coal used for metallurgical purposes.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; International Energy Agency, *Coal Information,* OECD, Paris; ABARE.

252 Volume of Japanese imports of coal, by source

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Thermal coal										
Total imports	Mt	90.00	94.1	98.0	103.8	119.9	120.5	121.4	128.8	128.2
Australia	%	59.13	58.0	55.5	56.1	55.6	57.1	58.3	60.6	70.5
Canada	%	8.90	6.4	5.7	5.2	3.2	4.2	4.8	5.9	2.1
China	%	2.39	1.4	0.2	0.0	2.6	0.8	0.1	0.0	0.2
Indonesia	%	13.37	17.0	19.8	18.8	15.9	12.9	11.2	7.7	9.9
Russian Federation	%	9.55	10.6	11.8	12.5	14.4	16.6	17.5	17.5	8.8
South Africa	%	3.54	3.6	4.3	4.6	5.3	6.1	5.3	6.0	7.1
United States	%	1.01	0.7	0.3	0.1	0.0	0.0	0.0	0.2	0.1
Other	%	2.10	2.2	2.4	2.7	3.0	2.4	2.5	2.0	1.3
Metallurgical coal										
Total imports	Mt	57.08	56.6	58.4	57.7	60.9	56.5	57.7	58.2	57.4
Australia	%	60.89	60.6	58.1	58.7	58.2	59.6	60.6	62.8	51.9
Canada	%	9.27	6.8	6.0	5.5	3.4	4.4	5.0	6.2	9.5
China	%	11.87	14.9	17.9	17.0	14.8	11.6	10.1	6.3	2.8
Indonesia	%	9.95	11.2	12.4	13.2	15.1	17.4	18.4	18.3	29.9
Russian Federation	%	3.69	3.8	4.4	4.8	5.2	5.6	5.1	6.0	3.0
South Africa	%	1.06	0.7	0.3	0.1	0.0	0.0	0.0	0.2	0.0
United States	%	2.49	1.5	0.2	0.0	2.7	0.8	0.1	0.0	2.0
Other	%	0.79	0.6	0.6	0.7	0.5	0.5	0.6	0.3	1.0

Source: ABS; International Energy Agency, *Energy Prices and Taxes*, OECD, Paris.

253 Volume of European Union imports of coal, by source [a]

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Thermal coal										
Total imports	Mt	115.50	134.2	129.5	144.2	159.1	158.2	170.0	180.7	173.5
Australia	%	6.40	6.0	6.1	6.5	5.3	3.5	3.4	3.9	4.0
Indonesia	%	6.85	6.7	7.5	8.1	8.8	8.7	10.9	8.7	8.7
Columbia	%	15.85	13.5	13.9	14.6	13.1	13.5	12.5	14.3	11.6
Russian Federation	%	7.35	10.3	9.9	11.8	17.3	21.2	12.7	26.5	28.1
South Africa	%	31.53	30.1	33.5	34.5	31.1	30.8	27.4	23.2	18.3
United States	%	5.26	6.5	2.9	1.9	2.4	2.0	2.0	2.8	8.4
Other	%	33.39	33.4	33.6	30.8	30.8	28.8	41.8	29.0	20.9
Metallurgical coal										
Total imports	Mt	41.85	39.6	35.7	37.1	45.2	46.4	51.0	59.8	51.7
Australia	%	41.27	43.9	44.8	42.8	39.8	39.8	39.5	34.8	28.7
Canada	%	12.74	13.5	13.4	12.1	12.5	12.7	11.0	11.3	9.7
Columbia	%	0.37	0.2	0.0	0.4	1.1	0.7	0.0	0.9	2.2
Russian Federation	%	0.43	0.6	0.7	1.8	2.2	5.7	4.2	5.5	4.3
South Africa	%	1.81	4.3	2.7	6.6	6.1	4.0	2.4	1.2	1.5
United States	%	30.95	25.3	23.9	24.9	23.3	22.7	21.1	23.4	28.9
Other	%	12.42	12.3	14.5	11.4	14.9	14.4	21.7	23.0	24.8

a Imports from non-EU countries only. Regarded as 15 countries.

Source: International Energy Agency, *Energy Prices and Taxes*, OECD, Paris.

254 Japanese and European Union coal import unit values, by country of origin a

	2000 US$/t	2001 US$/t	2002 US$/t	2003 US$/t	2004 US$/t	2005 US$/t	2006 US$/t	2007 US$/t	2008 US$/t
Japan									
Thermal coal									
Australia	34.59	38.32	37.38	35.13	50.20	61.90	63.90	71.03	127.23
Canada	34.72	36.94	37.34	33.82	52.60	63.79	56.32	66.04	125.52
China	33.69	36.95	36.25	35.28	55.06	65.65	63.88	73.60	124.10
Indonesia	31.85	35.17	34.52	32.72	46.98	59.65	60.31	66.45	116.08
South Africa	35.82	38.05	40.30	35.21	na	80.64	na	77.46	105.49
United States	45.49	45.99	48.63	na	186.48	na	596.68	553.99	151.26
All sources b	34.59	37.95	36.95	34.93	51.48	62.73	63.33	70.92	125.42
Metallurgical coal									
Australia	39.01	40.96	43.32	43.56	56.85	96.44	106.20	96.03	206.71
Canada	45.46	47.30	50.50	51.64	62.04	106.05	125.68	112.61	234.34
China	37.12	39.35	38.97	39.09	72.57	100.45	91.98	100.91	256.42
Indonesia	32.36	35.13	34.12	31.94	40.78	53.51	53.73	60.43	104.80
South Africa	39.99	47.09	na	na	na	na	na	na	na
United States	52.69	47.81	52.07	42.93	163.61	159.01	159.35	516.32	308.56
All sources b	39.46	41.13	42.14	41.73	61.40	88.80	93.10	88.43	184.13
European Union c									
Thermal coal									
Australia	39.04	44.13	43.28	46.83	69.05	106.40	109.71	103.73	184.75
Columbia	34.22	42.32	36.99	41.65	61.54	67.98	66.07	78.16	138.32
Indonesia	30.05	36.08	36.48	39.29	52.56	61.27	61.85	71.95	113.71
South Africa	33.83	42.32	36.65	39.10	58.00	67.64	66.24	80.25	142.07
United States	41.07	46.52	43.48	47.37	61.50	86.75	82.08	97.50	138.40
All sources d	35.22	42.96	38.69	41.94	61.91	71.27	69.80	82.21	137.79
Metallurgical coal									
Australia	45.45	51.24	55.52	58.03	73.63	114.89	135.52	127.74	220.54
Russian Federation	42.02	58.89	58.11	47.45	86.41	86.05	81.34	92.15	147.83
South Africa	39.09	42.10	38.69	39.20	61.31	71.77	66.18	96.82	141.18
United States	52.91	58.54	61.48	64.18	84.75	110.91	123.44	126.95	175.35
All sources d	47.88	53.56	56.63	59.61	78.12	109.61	125.86	125.73	197.84

a Average unit value cif. **b** Average includes countries not listed separately. **c** Fifteen countries for all years. **d** Average includes non-EU countries not listed separately. **na** Not available.

Source: International Energy Agency, *Energy Prices and Taxes,* OECD, Paris.

255 Selected Australian-Japanese prices for metallurgical and thermal coal a

	2002	2003	2004	2005	2006	2007	2008	2009
Metallurgical coal								
Hard b								
US$/t	48.10	46.20	57.00	125.00	115.00	98.00	300.00	128.00
A$/t	88.45	70.90	77.56	164.23	153.05	116.95	352.10	163.15
Real A$/t	106.07	82.74	88.43	182.38	164.15	122.58	353.65	163.15
Other c								
US$/t	33.05	31.05	41.00	80.00	56.00	64.00	240.00	85.00
A$/t	60.77	47.65	55.79	105.11	74.53	76.38	281.68	108.34
Real A$/t	72.88	55.60	63.61	116.72	79.94	80.05	282.92	108.34
Thermal coal d								
US$/t	28.75	26.75	45.00	52.50	52.50	55.50	125.00	70.35
A$/t	51.34	38.77	60.81	70.00	69.08	63.79	158.23	81.80
Real A$/t	62.38	46.02	70.46	78.60	75.37	67.31	161.89	81.80

a Japanese fiscal year beginning 1 April. Prices are fob; real prices are in 2009 Australian dollar terms. **b** For example, Goonyella export coal. **c** Non-hard coking coal price based on Australian/Japanese contract settlements. **d** For steaming coal with a calorific value of 6700 kcal/kg (gross air dried).
Sources: International Energy Agency, *Coal Information,* OECD, Paris; ABARE.

256 Australian and US coal export unit values, by destination a

	2000 US$/t	2001 US$/t	2002 US$/t	2003 US$/t	2004 US$/t	2005 US$/t	2006 US$/t	2007 US$/t	2008 US$/t
Australia									
Thermal coal									
France	19.14	31.38	22.62	24.05	29.77	45.88	46.28	44.93	75.81
Italy	21.30	31.07	25.26	24.77	31.26	na	na	na	na
Japan	24.72	29.69	29.20	26.00	38.45	49.42	50.59	54.61	103.23
Netherlands	20.65	26.45	24.65	26.69	42.90	60.71	50.50	49.60	86.94
All destinations **b**	24.27	28.71	28.01	25.41	37.65	48.86	47.05	51.11	92.23
Metallurgical coal									
France	33.37	37.32	41.41	39.06	46.79	96.94	100.91	89.99	193.92
Italy	34.97	42.68	45.90	45.51	51.40	102.14	116.96	99.64	229.97
Japan	31.64	34.46	36.79	36.18	45.51	83.74	94.04	79.50	193.79
Netherlands	34.10	41.09	46.17	45.45	52.07	98.18	102.32	92.15	213.20
All destinations **b**	32.85	36.93	40.16	39.75	48.84	88.94	98.27	84.16	194.87
United States									
Thermal coal									
France	28.96	30.50	na	na	na	40.17	64.19	91.66	102.43
Italy	30.67	42.50	42.91	46.67	46.90	89.78	51.04	76.87	116.28
Japan	34.90	37.70	40.41	166.40	91.47	105.21	166.53	198.41	143.02
Netherlands	28.90	35.71	36.88	33.13	43.79	76.28	69.91	69.83	79.14
All destinations **b**	31.84	34.51	37.70	37.00	53.93	67.09	55.66	52.61	62.76
Metallurgical coal									
France	44.19	48.54	54.96	55.56	71.81	99.69	102.30	96.39	126.48
Italy	49.45	53.11	56.41	54.49	66.99	86.21	104.96	104.34	121.55
Japan	41.99	na	na	56.01	98.14	100.61	89.80	na	157.59
Netherlands	45.46	48.90	55.39	52.13	72.20	93.04	95.44	94.55	129.86
All destinations **b**	42.98	45.88	50.06	49.11	70.14	89.91	111.72	98.10	148.39

a Average unit value, fob. **b** Average for all countries. **na** Not available.
Source: International Energy Agency, *Energy Prices and Taxes*, OECD, Paris.

257 World hard coal production, by country a

	2001 Mt	2002 Mt	2003 Mt	2004 Mt	2005 Mt	2006 Mt	2007 Mt	2008 Mt
Australia	264.2	273.2	274.9	285.9	300.2	299.7	323.8	325.4
Canada	34.0	29.6	26.6	29.3	29.1	29.9	32.8	33.2
China **b**	1 218.6	1 343.6	1 587.7	1 867.6	2 066.6	2 219.4	2 352.9	2 652.6
Colombia	44.3	40.1	50.5	54.2	59.1	65.6	69.9	78.6
Germany	30.7	29.2	28.8	29.2	28.0	23.8	24.2	19.1
India	319.7	332.9	353.5	374.8	399.1	422.5	448.2	483.3
Indonesia	72.8	83.3	97.4	118.2	143.6	195.7	230.3	246.2
Kazakhstan	76.6	71.0	80.8	83.1	82.8	92.0	93.5	104.4
Poland	103.3	102.7	101.7	100.5	97.1	94.4	87.4	83.7
Russian Federation	164.8	163.5	177.4	189.8	209.2	210.4	217.9	247.1
South Africa	223.6	220.2	238.8	242.8	245.0	244.8	247.7	235.8
United Kingdom	31.5	29.5	27.8	24.5	20.0	18.1	16.5	16.1
United States	948.8	917.0	892.9	932.2	949.7	977.7	967.9	992.9
World total **d**	3 699.0	3 798.9	4 105.6	4 503.4	4 812.4	5 087.0	5 306.4	5 715.1

a Hard coal includes anthracite and bituminous coal, and for the United States and New Zealand, sub-bituminous coal. **b** Excludes Hong Kong. **d** Includes countries not listed separately.
Sources: International Energy Agency, *Coal Information*, OECD, Paris.

258 Summary of Australian statistics for dimension stone

	Production a	Exports		Imports
	Volume	Volume	Value	Value
	kt	t	$'000	$'000
1967	290	280	16	408
1968	280	657	32	407
1969	269	792	44	427
1970	90	1 821	84	466
1971	81	1 209	57	569
1972	318	731	42	708
1973	144	1 621	105	395
1974	143	2 347	155	440
1975	255	379	na	606
1976	112	112	na	489
1977	84	757	180	832
1978	115	387	133	2 371
1979	122	1 086	83	2 224
1980	116	2 762	220	4 472
1981	125	205	46	5 450
1982	129	84	33	7 768
1983	97	1 224	367	6 619
1984	102	4 244	1 861	9 980
1985	190	2 537	782	14 025
1986	106	5 226	1 893	12 097
1987	99	2 974	1 119	15 231
1988	149	1 659	776	16 295
1988-89	92	2 913	1 441	19 732
1989-90	198	1 665	1 520	17 455
1990-91	na	3 393	4 417	11 237
1991-92	na	11 672	2 963	11 466
1992-93	553	8 721	4 501	11 173
1993-94	na	10 007	5 829	10 604
1994-95	na	14 605	5 531	9 811
1995-96	na	17 372	6 220	8 411
1996-97	na	15 364	5 519	7 828
1997-98	na	10 107	5 804	9 560
1998-99	na	16 766	6 509	12 327
1999-00	119	21 747	6 249	14 818
2000-01	104	18 029	7 725	11 958
2001-02	132	39 651	8 716	6 902
2002-03	143	16 851	6 074	9 111
2003-04	147	27 067	8 606	8 875
2004-05	266	28 099	9 263	9 321
2005-06	227	28 823	9 096	9 872
2006-07	193	31 466	9 681	7 439
2007-08	na	30 020	8 699	6 372
2008-09	na	33 854	10 150	7 980

a Data incomplete because coverage differs between states. **b** Excludes the Australian Capital Territory, the Northern Territory and Queensland. **c** Excludes the Australian Capital Territory and the Northern Territory. **d** Excludes the Australian Capital Territory. **e** Excludes the Australian Capital Territory and Queensland. **f** Excludes the Australian Capital Territory, Queensland and Western Australia. **g** Excludes the Australian Capital Territory, Queensland and Tasmania. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* BMR, Canberra; state mines departments and their equivalents; ABARE.

259 Australian production of dimension stone, by state a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia
	kt	kt	kt	kt	kt	kt	kt
1966	45	10	2	149	31	1	245
1967	45	11	2	129	47	2	290
1968	42	7	5	148	42	4	280
1969	31	9	3	167	49	2	269
1970	23	8	na	4	51	2	90
1971	13	10	na	7	50	1	81 **b**
1972	27	13	na	228	47	1	318 **c**
1973	14	15	na	67	46	2	144 **c**
1974	14	11	na	67	49	2	143 **c**
1975	12	12	na	187	40	2	255 **c**
1976	15	11	na	30	36	2	112 **c**
1977	13	8	4	22	27	3	84 **b**
1978	14	13	2	45	29	4	115 **b**
1979	16	7	8	56	28	6	122 **b**
1980	14	26	12	31	32	3	116 **d**
1981	24	29	24	20	27	1	125 **d**
1982	16	20	44	24	24	1	129 **e**
1983	21	35	na	11	29	1	97 **e**
1984	22	18	na	25	35	1	102 **e**
1985	22	28	na	101	34	4	190 **f**
1986	21	19	na	32	31	2	106 **f**
1987	21	46	na	na	31	1	99 **g**
1988	32	31	na	50	34	2	149 **h**
1988-89	34	17	na	na	40	1	92 **g**
1989-90	32	52	9	72	31	2	198
1990-91	40	6	na	na	42	2	na
1991-92	35	na	na	na	61	2	na
1992-93	33	12	31	414	61	2	553
1993-94	na	na	25	na	na	na	na
1994-95	na	na	na	na	na	na	na
1995-96	29	na	na	na	31	na	na
1996-97	25	na	20	1	28	na	na
1997-98	25	na	17	3	37	na	na
1998-99	34	5	25	4	41	na	na
1999-00	32	4	20	3	52	7	119
2000-01	27	2	30	1	38	6	104
2001-02	28	21	39	2	36	5	132 **i**
2002-03	32	15	43	2	42	3	143 **i**
2003-04	29	16	49	3	40	5	147 **i**
2004-05	27	18	126	5	79	9	266 **i**
2005-06	62	28	74	2	46	14	227 **i**
2006-07	41	33	50	2	49	16	193 **i**
2007-08	84	33	na	0	42	14	na

a Data incomplete because coverage differs between states. Australian totals may include estimates for states for which data are not available separately. **b** Includes the Australian Capital Territory, the Northern Territory and Queensland. **c** Excludes the Australian Capital Territory, the Northern Territory and Queensland. **d** Excludes the Australian Capital Territory and the Northern Territory. **e** Excludes the Australian Capital Territory. **f** Excludes the Australian Capital Territory and Queensland. **g** Excludes the Australian Capital Territory, Queensland and Western Australia. **h** Excludes the Australian Capital Territory, Queensland and Tasmania. **i** Includes Northern Territory. **na** Not available.

Sources: ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* Bureau of Mineral Resources, Canberra; state mines departments and their equivalents; ABARE.

260 Australian exports of dimension stone, by destination

	Italy	New Zealand	Other	Total Volume	Total Value
	t	t	t	t	$'000
1962	na	na	na	na	8
1963	na	na	na	na	24
1964	na	na	na	na	7
1965	na	na	na	na	12
1966	na	na	na	1 629	32
1967	na	na	na	280	16
1968	na	na	na	657	32
1969	na	na	na	792	44
1970	na	na	na	1 821	84
1971	na	na	na	1 209	57
1972	na	na	na	731	42
1973	na	na	na	1 621	105
1974	na	na	na	2 347	155
1975	na	na	na	379	na
1976	na	na	na	112	na
1977	na	na	na	757	180
1978	na	na	na	387	133
1979	na	na	na	1 086	83
1980	1 973	40	749	2 762	220
1981	na	4	201	205	46
1982	na	31	53	84	33
1983	1 178	6	40	1 224	367
1984	3 290	26	928	4 244	1 861
1985	2 364	133	40	2 537	782
1986	4 831	259	136	5 226	1 893
1987	1 903	324	747	2 974	1 119
1988	634	272	753	1 659	776
1988-89	530	290	2 092	2 913	1 441
1989-90	249	158	1 258	1 665	1 520
1990-91	910	110	2 373	3 393	4 417
1991-92	490	57	11 125	11 672	2 963
1992-93	1 324	54	7 343	8 721	4 501
1993-94	203	199	9 604	10 007	5 829
1994-95	136	178	14 292	14 605	5 531
1995-96	2 168	23	15 180	17 372	6 220
1996-97	2 546	148	12 670	15 364	5 519
1997-98	1 962	75	8 070	10 107	5 804
1998-99	220	186	16 359	16 766	6 509
1999-00	1 015	106	20 626	21 747	6 249
2000-01	2 565	25	15 439	18 029	7 725
2001-02	3 400	268	35 983	39 651	8 716
2002-03	6 715	21	10 115	16 851	6 074
2003-04	6 339	80	20 648	27 067	8 606
2004-05	6 958	81	21 060	28 099	9 263
2005-06	5 996	90	22 736	28 823	9 096
2006-07	3 384	278	27 804	31 466	9 681
2007-08	2 193	154	27 672	30 020	8 699
2008-09	2 370	147	31 337	33 854	10 150

na Not available.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review*, AGPS, Canberra; ABARE.

261 Australian imports of dimension stone

	Slate		Marble a		Crystalline rock b		Quartzite c		Total
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Value
	'000 m^2	$'000	t	$'000	t	$'000	t	$'000	$'000
1970	na	na	1 910	246	1 591	77	na	na	466
1971	na	na	3 372	330	2 007	110	na	na	569
1972	na	na	2 711	407	1 468	85	na	na	708
1973	na	na	1 309	206	1 898	118	na	na	395
1974	na	na	1 376	204	1 267	73	na	na	440
1975	na	na	1 634	289	1 610	133	na	na	606
1976	na	na	1 183	218	2 791	177	na	na	489
1977	na	na	1 706	397	1 862	215	na	na	832
1978	na	na	1 578	457	1 658	160	na	na	2 371
1979	na	na	1 752	507	2 479	287	na	na	2 224
1980	na	2 109	2 707	995	2 026	391	na	na	4 472
1981	na	3 728	2 800	1 205	1 982	369	207	94	5 450
1982	na	5 510	3 631	1 516	3 277	572	659	170	7 768
1983	689	4 535	3 049	1 493	1 993	420	3 521	171	6 619
1984	988	6 521	3 569	1 964	3 517	1 170	5 703	325	9 980
1985	1 266	8 911	4 449	2 999	3 859	1 956	222	159	14 025
1986	1 062	7 717	3 001	2 354	2 685	1 698	357	328	12 097
1987	1 343	9 105	3 221	2 982	8 873	2 663	349	481	15 231
1988	1 674	11 414	2 300	1 903	17 122	2 552	580	426	16 295
1988-89	2 139	14 023	2 688	2 058	28 732	3 120	905	530	19 732
1989-90	1 687	11 584	1 975	2 087	15 232	3 348	744	436	17 455
1990-91	1 255	7 598	960	784	5 291	2 598	483	257	11 237
1991-92	1 659	8 330	694	663	3 688	2 110	463	363	11 466
1992-93	1 410	7 406	557	499	4 181	2 613	1 071	655	11 173
1993-94	1 200	6 401	702	618	4 824	3 241	659	343	10 604
1994-95	1 044	5 475	689	718	6 172	3 273	364	346	9 811
1995-96	608	3 098	700	750	7 350	4 211	217	352	8 411
1996-97	509	2 778	702	675	7 915	4 160	128	215	7 828
1997-98	401	2 316	1 330	1 238	10 435	5 743	200	264	9 560
1998-99	333	2 350	1 809	2 659	10 323	7 114	112	204	12 327
1999-00	370	3 452	1 654	2 000	14 576	8 967	248	398	14 818
2000-01	269	1 406	1 368	1 648	12 018	8 660	152	244	11 958
2001-02	215	1 373	406	273	10 283	4 827	434	429	6 902
2002-03	177	1 381	947	975	13 324	6 114	880	641	9 111
2003-04	123	898	1 398	1 173	15 929	6 527	316	277	8 875
2004-05	250	948	1 315	1 069	16 530	6 855	695	450	9 321
2005-06	94	863	1 468	1 092	15 376	7 129	1 085	788	9 872
2006-07	56	585	1 281	1 277	11 635	4 685	1 055	891	7 439
2007-08	54	621	1 385	1 338	9 277	3 894	895	518	6 372
2008-09	67	786	1 072	800	9 326	5 832	990	562	7 980

a Includes calcareous stone. **b** Includes sandstone. **c** Predominantly quartzite. **na** Not available.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review*, AGPS, Canberra; ABARE.

262 Australian production of sand, by state a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Northern Territory	Australia
	kt	kt	kt	kt	kt	kt	kt	kt
1965	5 045	3 989	na	na	1 823	280	na	11 628
1966	4 246	4 356	na	na	1 611	232	na	10 838
1967	4 598	4 278	na	na	1 784	234	na	11 328
1968	6 718	5 075	na	na	2 110	281	na	14 637
1969	6 686	6 680	1 022	na	2 930	265	na	18 199
1970	6 174	5 242	2 282	na	2 627	271	na	16 973
1971	6 353	5 747	3 031	na	2 707	185	371	18 394 **b**
1972	7 603	5 619	3 619	na	2 387	185	471	19 884 **b**
1973	8 798	6 660	4 182	na	2 525	179	581	22 925 **b**
1974	8 797	7 788	4 733	na	2 476	252	474	24 520 **b**
1975	8 415	7 541	4 933	na	2 567	190	766	24 412 **b**
1976	7 793	7 766	5 172	na	2 575	391	568	24 264 **b**
1977	7 676	9 040	4 137	na	3 919	439	389	25 600 **b**
1978	7 077	8 951	3 768	na	2 808	349	310	23 264 **b**
1979	8 263	8 357	4 410	na	2 526	448	285	24 290 **b**
1980	9 553	8 400	4 800	na	2 287	361	293	25 694 **b**
1981	10 738	7 929	5 787	na	2 753	334	460	28 002 **b**
1982	10 767	7 449	6 337	na	2 564	332	1 268	28 718 **b**
1983	8 403	6 884	5 583	na	2 094	388	192	23 543 **d**
1984	8 401	6 951	5 876	na	2 542	450	455	24 675 **d**
1985	8 989	7 437	6 386	na	2 852	576	399	26 640 **d**
1986	10 239	6 653	5 949	na	4 145	510	396	27 892 **d**
1987	9 501	8 476	6 179	na	2 961	572	377	28 067 **d**
1988	10 176	7 339	7 596	na	3 435	713	75	29 334 **d**
1988-89	11 188	7 339	6 970	na	3 195	518	154	30 121 **e**
1989-90	11 605	6 633	7 561	na	3 646	498	146	33 856 **e**
1990-91	10 098	5 693	na	na	2 694	426	na	18 912 **f**
1991-92	10 035	na	na	na	2 745	448	na	na
1992-93	10 647	9 984	5 733	na	3 129	495	186	32 970
1993-94	na	na	na	na	3 185	na	na	na
1994-95	na	na	na	na	na	na	na	na
1995-96	8 902	na	na	na	2 225	na	na	na
1996-97	7 109	na	na	na	2 286	na	578	na
1997-98	9 428	na	na	na	2 389	na	na	na
1998-99	10 378	na	na	na	2 892	na	na	na
1999-00	10 498	na	na	na	na	423	306	na
2000-01	8 769	5 981	na	na	661	316	165	na
2001-02	8 634	6 905	5 034	1 545	4 104	382	196	26 800
2002-03	9 642	7 092	5 560	1 436	4 681	383	194	28 988
2003-04	8 632	6 408	6 376	2 240	4 530	485	154	28 825
2004-05	6 681	7 064	6 037	2 730	4 178	582	120	27 394
2005-06	8 101	7 545	6 520	3 660	4 027	580	109	30 540
2006-07	7 438	9 099	9 796	4 221	4 048	601	320	35 532
2007-08	7 113	9 429	na	3 308	na	627	227	na

a Data incomplete because coverage differs between states. Australian totals may include estimates for states for which data are not available separately. **b** Excludes Western Australia. **c** Includes the Australian Capital Territory. **d** Excludes the Australian Capital Territory and Western Australia. **e** Excludes the Australian Capital Territory. **f** Excludes the Australian Capital Territory, Queensland, Western Australia and the Northern Territory. **na** Not available.

Sources: ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* Bureau of Mineral Resources, Canberra; state mines departments and their equivalents; ABARE.

263 Australian production of gravel, by state a

	New South Wales	Victoria	Queensland	South Australia	Tasmania	Northern Territory	Australia
	kt	kt	kt	kt	kt	kt	kt
1966	2 474	3 326	na	871	1 449	na	8 686
1967	2 329	3 683	na	935	1 468	na	9 193
1968	3 043	3 247	na	350	1 621	na	8 473
1969	3 118	2 834	1 155	918	1 531	na	10 501
1970	3 869	2 797	2 106	820	1 295	na	12 093
1971	4 021	3 599	2 392	847	915	1 074	12 849 c
1972	3 341	3 486	3 306	833	1 034	770	12 771 c
1973	3 652	3 634	4 447	694	1 093	922	14 441 c
1974	3 667	4 858	5 481	754	1 016	1 725	17 500 c
1975	3 530	4 732	4 874	458	1 063	1 524	16 181 c
1976	3 498	4 493	5 045	490	1 004	1 110	15 640 c
1977	3 224	4 743	4 126	1 098	1 219	1 073	15 483 c
1978	3 522	4 807	3 178	806	1 184	679	14 176 c
1979	4 354	4 918	3 377	394	1 176	1 786	16 005 c
1980	4 736	5 131	3 030	331	1 102	1 336	15 667 c
1981	4 612	4 740	3 525	125	1 077	561	14 639 c
1982	5 552	5 053	3 513	74	1 156	1 323	16 813 c
1983	4 080	4 478	3 205	74	1 238	857	13 931 d
1984	4 486	3 494	3 777	284	1 165	1 824	15 031 d
1985	4 666	5 206	3 297	2 258	1 171	1 793	18 393 d
1986	5 461	4 176	3 186	221	986	1 870	15 900 d
1987	4 992	4 334	2 797	207	832	2 203	15 365 d
1988	5 003	3 558	3 548	442	314	2 819	15 684 d
1988-89	5 464	3 753	4 247	213	107	2 243	16 050 e
1989-90	6 532	1 002	3 069	176	91	1 380	12 259 e
1990-91	6 091	1 131	na	415	35	na	7 672 g
1991-92	6 241	na	na	424	33	na	na
1992-93	5 823	1 780	2 788	555	47	1 090	12 141
1993-94	na	na	na	na	na	na	na
1994-95	na	na	na	na	na	na	na
1995-96	5 871	na	na	na	na	na	na
1996-97	7 925	na	na	na	na	2 764	na
1997-98	5 495	na	na	na	na	na	na
1998-99	5 220	3 939	na	239	61	1 097	na
1999-00	4 565	2 479	na	181	64	276	7 771
2000-01	3 644	3 556	na	58	41	174	7 635
2001-02	3 087	3 404	1 110	85	1 549	270	9 858 s
2002-03	4 265	3 802	1 222	115	1 989	608	12 155 s
2003-04	4 355	3 542	2 391	79	1 801	414	12 718 s
2004-05	3 760	3 865	4 116	45	2 488	206	14 783 s
2005-06	3 956	5 027	1 906	198	2 182	181	13 581 s
2006-07	5 202	3 600	1 663	47	2 663	319	13 670 s
2007-08	3 892	4 275	na	na	2 256	39	na s

a Data incomplete because coverage differs between states. Australian totals may include estimates for states for which data are not available separately. **b** Includes the Australian Capital Territory. **c** Excludes Western Australia. **d** Excludes the Australian Capital Territory and Western Australia. **e** Excludes the Australian Capital Territory. **f** Victorian data after 1988-89 includes only establishments holding titles under the *Extractive Industries Act 1966*. Previous details represent estimates for all establishments. **g** Excludes the Australian Capital Territory, Queensland, Western Australia and the Northern Territory. **s** ABARE estimate. **na** Not available.

Sources: ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* BMR, Canberra; state mines departments and their equivalents; ABARE.

264 Australian production of crushed and broken stone, by state a

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Northern Territory	Australia
	kt	kt	kt	kt	kt	kt	kt	kt
1965	6 802	15 784	2 817	2 510	10 948	1 361	na	40 810
1966	8 434	19 409	3 174	3 011	10 978	2 149	na	47 547
1967	8 590	18 301	4 762	3 107	10 709	1 176	na	47 011
1968	9 345	17 575	3 917	3 719	9 016	1 206	na	45 087
1969	9 217	15 865	4 030	4 517	12 418	1 377	na	47 830
1970	10 867	15 451	4 159	4 743	1 027	1 313	na	50 793 **b**
1971	10 020	17 505	4 665	5 234	10 817	1 365	670	50 275 **b**
1972	11 322	16 079	4 218	4 574	12 680	1 336	906	51 115
1973	11 452	15 805	6 933	4 451	10 084	1 558	999	51 281
1974	11 451	17 499	8 246	5 128	9 864	1 486	996	54 671
1975	13 196	18 382	9 454	5 166	9 242	1 495	1 278	58 213
1976	10 581	16 885	8 241	5 043	9 765	1 697	820	53 033
1977	9 728	17 884	9 411	5 031	9 618	1 621	1 104	54 398
1978	10 699	18 665	10 811	5 258	8 848	1 582	1 046	56 910
1979	12 081	19 115	12 588	5 801	4 146	1 707	1 090	56 498
1980	14 436	18 001	12 722	4 762	4 460	1 746	1 611	57 737
1981	14 543	14 073	15 784	7 397	3 759	1 562	992	58 110
1982	12 765	13 279	19 601	5 145	4 189	1 719	303	57 100 **c**
1983	10 185	13 527	16 592	4 272	2 435	1 609	495	49 115 **c**
1984	10 452	14 756	19 869	5 067	3 613	2 023	551	56 331 **c**
1985	12 641	20 539	20 692	6 596	4 066	1 981	959	67 474 **c**
1986	13 819	20 658	21 597	6 160	4 335	3 040	646	70 255 **c**
1987	13 135	19 526	20 433	5 743	3 600	2 488	353	65 278 **c**
1988	12 575	20 001	22 644	6 297	3 432	2 361	193	67 503 **c**
1988-89	14 861	22 763	22 724	na	3 567	2 525	270	66 710 **d**
1989-90	15 437	21 232	25 623	8 176	3 703	2 460	367	76 998 **d**
1990-91	15 488	14 854	na	na	3 571	2 065	na	35 977 **e**
1991-92	14 326	na	na	na	3 192	2 013	na	na
1992-93	14 725	28 517	20 189	3 839	4 402	2 533	451	74 656
1993-94	na	na	na	na	na	na	na	na
1994-95	na	na	na	na	na	na	na	na
1995-96	na	na	na	na	na	na	na	na
1996-97	16 292	na	na	na	na	na	516	na
1997-98	15 171	na	na	na	na	na	na	na
1998-99	16 775	na	na	na	na	na	na	na
1999-00	17 620	21 864	na	480	3 445	1 452	626	58 556
2000-01	16 256	23 535	na	536	2 991	1 277	352	52 949
2001-02	15 130	24 249	22 394	900	4 311	1 868	1 548	70 400
2002-03	13 864	23 616	22 905	829	3 841	1 663	1 653	68 369
2003-04	11 679	25 096	31 156	826	4 197	1 930	765	75 649
2004-05	11 459	24 300	29 972	761	4 732	2 904	939	75 066
2005-06	14 141	28 048	29 634	1 480	4 354	2 736	585	80 978
2006-07	16 047	32 854	32 238	1 492	8 865	2 660	698	94 855
2007-08	17 723	na	na	3 048	na	2 417	533	na

a Data incomplete because coverage differs between states. Australian totals may include estimates for states for which data are not available separately. **b** Includes the Australian Capital Territory and the Northern Territory. **c** Excludes the Australian Capital Territory. **d** Excludes the Australian Capital Territory and Western Australia. **e** Excludes the Australian Capital Territory, Queensland, Western Australia and the Northern Territory. **na** Not available.

Sources: ABS, *Mineral Production, Australia* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* BMR, Canberra; state mines departments and their equivalents; ABARE.

265 Summary of Australian statistics for copper

	Production						Exports d		
			Refined			Consump-			
	Mine a	Smelter b	Primary	Secondary	Total	tion c	Volume	Value	Price e
	kt	kt	kt	kt	kt	kt	kt	$m	$/t
1967	92	79	66	18	84	88	30	30	1 026.0
1968	109	103	84	17	101	105	38	40	1 099.0
1969	131	124	101	19	120	106	54	66	1 324.0
1970	158	120	104	21	125	114	70	86	1 317.0
1971	177	150	127	15	142	116	96	85	991.4
1972	186	150	139	17	156	112	109	91	942.3
1973	220	166	145	14	159	133	106	112	1 234.3
1974	251	200	162	12	174	120	133	177	1 298.2
1975	219	183	166	12	178	97	176	139	950.1
1976	218	170	161	15	176	119	139	157	1 143.3
1977	222	172	152	15	167	106	126	146	1 190.1
1978	222	167	152	14	166	127	102	114	1 189.8
1979	238	169	138	16	154	127	122	206	1 768.0
1980	242	182	145	20	165	128	120	250	1 956.6
1981	231	177	164	15	179	143	114	201	1 535.8
1982	245	180	160	11	171	131	110	156	1 474.5
1983	262	182	169	34	203	115	158	276	1 790.5
1984	236	188	171	26	197	118	126	226	1 592.5
1985	260	175	164	30	194	126	139	274	2 064.8
1986	248	179	164	21	185	117	125	248	2 111.2
1987	233	183	172	36	208	124	119	267	2 559.7
1988	238	193	196	27	223	128	157	510	3 319.4
1989	296	240	230	35	265	129	175	601	3 606.0
1990	330	235	247	24	271	118	230	765	3 413.9
1991	320	258	252	20	272	111	243	723	3 013.4
1992	378	315	300	13	313	123	258	770	3 114.2
1993	430	344	318	13	331	139	271	723	2 818.3
1994	418	337	340	20	360	150	305	816	3 158.2
1995	379	224	266	24	290	158	215	804	3 980.3
1996	548	264	311	24	314	162	363	993	2 948.7
1997	549	216	276	25	276	159	402	1 098	3 061.5
1998	618	211	279	25	279	160	488	1 298	2 636.9
1999	738	332	412	25	412	164	560	1 429	2 438.2
2000	839	390	484	0	484	165	621	1 931	3 127.6
2001	898	455	558	0	558	163	754	2 318	3 043.4
2002	872	456	543	0	542	189	683	2 000	2 869.6
2003	830	435	484	0	484	184	704	2 024	2 730.9
2004	854	443	498	0	490	169	653	2 589	3 902.0
2005	930	412	461	0	471	158	784	4 088	4 844.1
2006	875	377	429	0	429	144	723	6 600	8 937.3
2007	871	399	442	0	442	147	708	6 404	8 490.5
2008	885	450	503	0	503	154	811	6 734	7 993.4

a Total metallic content of minerals produced. **b** Includes both primary and secondary (scrap) production of blister copper. **c** Primary refined; producers' shipments to domestic consumers plus imports. **d** Quantities refer to total metallic content of all ores, concentrates, intermediate products or refined metal; value of metals contained in host mine and smelter products (for example, copper in lead concentrate or lead bullion) is not available separately and is included in the value of the mineral product or metal in which it is exported. **e** Mount Isa Mines, cathode, fot Townsville refinery, price discountinued end of June 2000. 2000 onwards based on average US$ LME spot calendar price converted into A$.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; Metallgesellschaft AG, *Metallstatistik,* Frankfurt; London Metal Exchange.

266 Australian supply, disposal and prices of copper

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Production									
Mine **a**	kt	882	883	811	895	936	859	863	889
Smelter	kt	456	469	389	434	404	389	395	459
Refined	kt	561	537	458	479	461	435	444	499
Primary	kt	561	537	458	486	461	435	444	499
Secondary	kt	0	0	0	0	0	0	0	0
Exports b									
Ores and concentrates **c**	kt	1 271	1 193	1 286	1 326	1 635	1 493	1 694	1 801
Value	$m	1 028	1 048	1 242	1 750	3 492	3 914	4 151	3 594
Refined **d**	kt	388	359	301	322	314	290	296	361
Value	$m	1 131	956	924	1 332	2 161	2 612	2 579	2 241
Consumption e	kt	181	222	236	168	136	146	156	138
Export unit value									
Ores and concentrates	A$/t	808.7	878.8	966.3	1 319.7	2 135.6	2 621.8	2 450.7	1 995.9
Refined	A$/t	2 918.1	2 666.9	3 075.5	4 140.5	6 882.0	9 004.4	8 722.7	6 207.3

a Total metallic content of minerals produced. **b** Value of metals contained in host mine and smelter products is not available separately and is included in the value of the mineral product or metal in which it is exported. **c** Gross weight of ores and concentrates. **d** Refinery shapes, unworked. **e** Refined copper, domestic despatches and imports.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

267 Volume of Australian exports of copper, by destination

	2001 kt	2002 kt	2003 kt	2004 kt	2005 kt	2006 kt	2007 kt	2008 kt
Ores and concentrates								
China	453.2	370.9	361.7	216.3	571.4	540.0	412.3	602.4
Germany	0.0	14.8	4.8	4.0	0.1	0.0	0.0	0.0
India	453.7	362.5	451.1	452.7	443.2	444.2	565.3	531.4
Japan	261.9	322.2	415.7	346.8	440.9	372.2	380.6	369.4
Korea, Rep. of	20.3	38.1	105.5	36.8	82.4	93.5	162.9	193.6
Philippines	30.6	34.3	26.9	76.1	35.9	67.7	20.5	109.7
Other	25.3	11.7	0.8	49.9	32.4	41.8	0.0	0.0
Total	1 245.1	1 154.5	1 366.5	1 182.5	1 606.4	1 559.3	1 541.6	1 806.6
Total Cu content **s**	353.3	317.0	371.2	328.3	449.1	432.9	399.7	447.1
Refined								
Chinese Taipei	90.9	89.8	81.6	96.0	65.4	83.6	95.5	94.6
European Union **a**	72.6	34.8	31.6	2.6	0.1	0.0	1.8	0.0
Indonesia	7.3	12.4	13.1	31.1	38.2	18.5	13.0	22.7
Korea, Rep. of	51.8	57.6	19.6	6.7	39.5	21.0	34.1	36.4
Malaysia	81.7	83.8	81.8	72.6	51.4	55.1	52.8	44.9
Thailand	28.8	35.0	39.6	52.6	64.3	52.7	38.6	36.6
Other	65.4	50.5	56.3	61.1	56.6	53.4	58.8	124.5
Total	398.6	363.8	323.7	322.7	315.5	284.4	294.6	359.8

a Regarded as 25 countries. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

268 World copper production, consumption, stocks and prices

	Production						Price	
			Refined				US	
	Mine	Smelter	Secondary a	Total b	Consumption	Stocks c	producer d	LME e
	kt	kt	kt	kt	kt	kt	USc/lb	US$t
1965	5 070	5 119	2 850	6 181	5 033	na	35.0	1 288.0
1966	5 220	5 103	3 081	6 366	5 224	na	36.2	1 528.8
1967	5 062	4 897	2 872	6 004	5 032	na	38.2	1 135.0
1968	5 459	5 510	3 176	6 653	6 548	na	41.8	1 236.0
1969	5 935	5 965	3 452	7 205	7 136	na	47.5	1 464.0
1970	6 382	6 308	3 298	7 583	7 294	582	57.7	1 413.6
1971	6 458	6 374	3 155	7 393	7 295	610	51.4	1 080.5
1972	7 044	7 007	3 272	8 084	7 948	657	50.6	1 069.0
1973	7 498	7 286	3 639	8 525	8 754	394	58.9	1 781.1
1974	7 576	7 565	3 502	8 759	8 310	832	76.6	2 052.6
1975	7 185	7 280	2 699	8 177	7 445	1 744	63.2	1 232.2
1976	7 661	7 616	3 163	8 624	8 539	1 828	69.0	1 405.2
1977	7 856	7 810	3 109	8 878	9 057	1 985	66.2	1 308.3
1978	7 678	7 686	3 313	9 020	9 527	1 564	65.8	1 363.4
1979	7 767	7 738	3 668	9 181	9 848	1 116	92.2	1 978.1
1980	7 704	7 681	3 738	9 297	9 396	1 035	101.3	2 189.2
1981	8 164	8 036	3 671	9 545	9 522	1 133	84.2	1 740.2
1982	8 078	7 850	3 518	9 378	9 003	1 640	72.8	1 477.9
1983	8 101	8 379	3 688	9 694	9 099	1 709	76.5	1 590.1
1984	8 258	8 684	3 848	9 512	9 914	1 220	66.9	1 371.4
1985	8 365	8 933	3 837	9 689	9 665	1 074	67.0	1 415.5
1986	8 393	9 165	3 905	9 862	10 075	893	64.7	1 414.5
1987	8 747	9 287	3 996	10 160	10 449	522	81.1	1 764.9
1988	8 698	9 372	4 307	10 485	10 531	585	119.1	2 597.1
1989	9 025	9 720	4 250	10 858	10 969	636	129.5	2 838.8
1990	8 957	9 132	4 325	10 809	10 789	716	121.8	2 669.0
1991	9 099	9 066	4 317	10 688	10 695	843	107.9	2 338.1
1992	9 418	9 730	4 408	11 170	10 806	833	106.0	2 282.0
1993	9 475	9 671	4 948	11 306	10 996	1 116	91.6	1 910.8
1994	9 575	9 740	5 026	11 166	11 665	768	110.2	2 307.3
1995	10 180	9 745	5 337	11 817	12 152	699	138.3	2 935.6
1996	11 111	10 407	5 917	12 756	12 399	527	109.2	2 293.7
1997	11 480	10 779	6 200	13 600	13 017	897	106.8	2 277.1
1998	12 273	10 928	5 976	14 120	13 353	1 274	78.6	1 654.2
1999	12 749	11 494	5 883	14 465	14 056	1 360	75.9	1 572.6
2000	13 246	11 855	6 028	14 816	15 191	971	82.3	1 813.5
2001	13 757	12 350	5 747	15 675	14 686	1 636	71.6	1 577.5
2002	13 565	11 965	5 427	15 336	15 037	1 712	70.8	1 560.8
2003	13 685	11 982	5 367	15 221	15 315	1 212	80.7	1 779.5
2004	14 710	12 242	5 484	15 828	16 671	518	134.2	2 865.9
2005	15 150	12 904	5 558	16 610	16 639	547	173.6	3 677.7
2006	15 181	13 304	5 909	17 343	16 974	703	315.6	6 740.6
2007	15 539	13 463	5 996	18 029	18 109	668	328.7	7 133.0
2008	15 529	13 718	6 169	18 484	18 102	816	321.5	6 975.7

a Includes direct use by manufacturers. **b** Excludes copper recovered from secondary materials by simple remelting. **c** Unwrought copper. **d** Average price for US producer cathodes. **e** LME average cash settlement price, grade A copper. Before December 1981, wirebars; from 1982 to 1986, higher grade copper. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; Metallgesellschaft AG, *Metallstatistik,* Frankfurt; World Bureau of Metal Statistics, *World Metal Statistics,* London; London Metal Exchange; International Copper Study Group, *Copper Bulletin,* Lisbon.

269 World copper production, by region and country

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Mine production a								
Africa	526	481	545	612	705	792	843	1 000
Congo, Dem. Rep. of	33	32	57	70	98	131	145	239
South Africa	142	90	89	86	97	99	106	118
Zambia	307	308	347	411	465	516	524	568
Americas	8 033	7 737	8 003	8 859	8 780	8 851	9 237	9 159
Argentina	192	204	199	177	187	180	180	157
Canada	634	603	557	563	595	603	596	607
Chile	4 739	4 581	4 904	5 413	5 321	5 361	5 557	5 330
Peru	722	845	843	1 036	1 010	1 048	1 190	1 268
Mexico	371	330	356	406	391	312	338	247
United States	1 340	1 140	1 116	1 160	1 140	1 197	1 168	1 330
Asia	2 662	2 730	2 611	2 577	2 876	2 828	2 865	2 767
China	587	568	604	742	762	873	928	931
Indonesia	1 047	1 163	1 003	842	1 064	817	789	650
Kazakhstan	470	473	485	468	436	446	407	420
Mongolia	136	135	132	130	129	132	133	129
Philippines	24	20	20	16	16	18	23	21
Uzbekistan	97	80	82	83	104	104	104	104
Europe	1 435	1 526	1 494	1 635	1 666	1 640	1 554	1 558
Bulgaria	97	84	80	80	95	110	103	109
Poland	474	503	503	531	512	497	452	429
Portugal	83	77	78	96	89	79	90	89
Russian Federation	600	685	665	767	805	779	770	785
Sweden	74	72	83	82	87	87	63	57
Middle East	221	215	207	203	241	288	315	325
Iran	146	141	146	153	193	230	249	255
Turkey	75	75	61	50	48	57	65	71
Oceania	1 100	1 090	1 032	1 027	1 123	1 069	1 040	1 045
Australia	898	872	830	854	930	875	871	885
Papua New Guinea	204	211	202	173	193	194	169	160
Other countries	0	0	0	0	0	0	0	0
Total	13 757	13 565	13 685	14 710	15 150	15 181	15 539	15 529

Continued

269 World copper production, by region and country continued

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Smelter production b								
Africa	489	459	464	440	454	519	521	503
South Africa	121	117	112	89	101	103	111	96
Zambia	306	311	320	320	320	384	384	384
Americas	4 018	3 493	3 354	3 393	3 435	3 448	3 385	3 170
Canada	643	539	457	476	472	521	517	486
Chile	1 503	1 439	1 542	1 518	1 558	1 565	1 514	1 369
Mexico	348	263	220	271	301	260	223	153
Peru	392	380	376	378	382	381	296	360
United States	919	683	539	542	523	501	617	574
Asia	4 409	4 484	4 725	4 996	5 485	5 883	6 160	6 520
China	1 145	1 180	1 379	1 503	1 752	1 918	2 112	2 496
Japan	1 444	1 499	1 516	1 465	1 518	1 628	1 613	1 625
Kazakhstan	433	446	432	445	405	425	393	392
Korea, Rep. of	390	390	410	390	390	390	390	390
Philippines	217	138	112	217	201	240	220	240
Uzbekistan	97	80	82	85	115	115	115	115
Australia	455	456	435	443	412	377	399	450
Europe	2 974	3 061	3 004	3 050	3 118	3 077	2 997	3 076
Belgium	138	126	120	108	113	104	115	116
Germany	559	578	494	541	510	510	510	510
Poland	514	540	584	581	584	589	559	537
Russian Federation	758	800	790	850	850	850	850	850
Spain	305	298	290	224	284	264	256	260
Total	12 350	11 965	11 982	12 242	12 904	13 304	13 463	13 718
Refined copper production								
Africa	453	449	459	501	555	613	673	758
South Africa	107	92	90	81	97	102	116	95
Zambia	308	347	360	410	446	497	522	612
Americas	6 390	5 914	5 682	5 764	5 711	5 669	5 743	5 800
Canada	568	495	455	527	515	500	453	442
Chile	2 882	2 850	2 902	2 837	2 824	2 811	2 937	3 060
Peru	472	503	517	505	510	508	414	464
United States	1 800	1 512	1 310	1 310	1 260	1 250	1 226	1 280
Asia	4 937	5 051	5 326	5 741	6 432	7 155	7 777	7 885
China	1 523	1 632	1 836	2 199	2 600	3 003	3 499	3 779
India	325	374	391	419	518	627	719	669
Japan	1 426	1 401	1 430	1 380	1 395	1 532	1 577	1 540
Kazakhstan	422	453	432	446	419	430	406	400
Korea, Rep. of	476	499	510	496	527	575	583	536
Philippines	165	144	171	175	172	181	160	175
Uzbekistan	97	80	82	85	115	115	115	115
Australia	558	542	484	490	471	429	442	503
Europe	3 337	3 377	3 269	3 332	3 441	3 477	3 395	3 538
Belgium	423	427	423	383	383	379	394	396
Germany	694	696	598	653	638	662	666	690
Poland	498	509	530	550	560	557	533	527
Russian Federation	888	861	855	909	968	959	923	913
Spain	280	322	293	228	267	260	272	277
Total	15 675	15 336	15 221	15 828	16 610	17 343	18 029	18 484

a Metal content. **b** Metal produced in the form of blister and anodes from ores, concentrates, other primary materials and secondary blister produced from scrap.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London.

270 World refined copper consumption, by region and country

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Africa									
South Africa	82	93	93	75	97	84	85	83	83
Total	131	142	148	142	162	195	222	231	331
Americas									
Argentina	49	40	20	26	33	34	30	31	30
Brazil	331	345	237	300	332	335	339	330	382
Canada	272	265	274	257	297	290	302	206	197
Chile	83	90	81	96	100	103	111	105	103
Mexico	464	437	383	353	394	402	348	345	318
United States	3 025	2 619	2 364	2 290	2 410	2 257	2 096	2 123	2 123
Peru	55	55	55	55	55	55	55	55	55
Total	4 289	3 862	3 428	3 392	3 642	3 498	3 308	3 218	3 127
Asia									
China	1 928	2 307	2 737	3 084	3 364	3 656	3 614	4 863	5 134
Chinese Taipai	628	540	656	619	689	638	643	603	582
India	240	293	295	307	335	397	407	516	515
Indonesia	60	104	109	121	188	180	185	205	205
Japan	1 349	1 145	1 164	1 202	1 279	1 229	1 282	1 252	1 184
Korea, Rep. of	862	849	936	901	940	868	828	856	815
Malaysia	170	160	165	134	191	222	224	224	224
Turkey	248	194	225	265	281	316	302	391	365
Thailand	151	167	186	204	247	241	251	206	256
Total	6 025	6 169	6 959	7 313	8 035	8 250	8 339	9 756	9 915
Europe									
Finland	116	101	89	101	105	93	83	80	61
France	574	538	561	551	536	472	460	365	379
Germany	1 307	1 120	1 067	1 010	1 100	1 115	1 398	1 392	1 398
Greece	135	130	126	106	118	89	104	104	75
Italy	674	676	673	665	715	680	801	764	635
Poland	246	272	247	253	274	271	275	301	242
Russian Federation	183	224	355	422	550	667	693	688	717
Spain	289	299	312	312	331	292	285	280	270
Sweden	203	195	169	185	189	164	184	180	179
United kingdom	323	286	261	242	243	165	172	41	43
Total	4 579	4 342	4 312	4 284	4 664	4 540	4 962	4 757	4 574
Total	15 191	14 686	15 037	15 315	16 671	16 639	16 974	18 109	18 102

Sources: World Bureau of Metal Statistics, *World Metal Statistics*, London.

271 Volume of world copper exports, by country

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Concentrates (Cu content)								
Australia	353	317	371	328	449	433	400	447
Canada	622	283	170	165	256	231	215	352
Chile	1 798	1 553	1 798	2 166	2 190	2 171	2 258	2 014
Indonesia	649	719	595	452	596	583	432	407
Papua New Guinea	189	177	222	163	204	174	187	163
Peru	93	371	280	502	523	462	747	776
Portugal	92	49	72	87	94	82	100	94
United States	45	23	10	24	137	383	302	303
Other	448	508	520	599	618	600	856	833
World total	4 290	3 999	4 037	4 485	5 066	5 119	5 497	5 390
Blister and anode copper								
Chile	155	182	276	366	347	457	506	347
Finland	52	43	33	25	30	35	11	28
Mexico	24	18	16	21	18	20	24	14
Namibia	27	25	26	25	26	21	na	104
Peru	31	25	22	0	0	16	25	10
South Africa	35	26	12	1	6	7	8	4
Spain	35	21	37	51	62	46	37	42
Other	351	345	349	380	353	333	314	358
World total	709	685	771	869	841	935	924	905
Refined copper								
Australia	397	364	323	323	315	287	295	357
Belgium	241	201	337	170	241	237	201	260
Canada	310	241	222	289	297	280	298	290
Chile	2 696	2 767	2 614	2 954	2 799	2 606	2 910	3 004
Germany	108	91	118	137	149	146	117	125
Japan	416	378	290	195	248	320	428	423
Kazakhstan	399	391	376	391	401	357	349	344
Peru	433	415	459	318	514	449	365	419
Philippines	157	143	167	159	114	177	181	182
Poland	227	262	284	280	290	288	240	297
Russian Federation	651	505	397	359	301	268	275	207
Singapore	61	59	38	39	34	94	69	42
United States	23	29	123	127	51	124	52	38
Zambia	308	339	363	393	423	476	491	587
Other	886	918	925	895	1 271	1 366	1 317	1 264
World total	7 313	7 105	7 034	7 029	7 449	7 472	7 586	7 838

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London.

272 Volume of world copper imports, by country

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Ores and concentrates								
Brazil	136	116	103	135	101	134	121	118
Canada	220	128	72	67	84	106	59	74
China	564	516	671	721	1 009	908	1 132	1 299
Finland	126	125	136	132	126	136	111	134
Germany	259	259	220	285	287	287	325	272
Japan	1 285	1 261	1 246	1 274	1 320	1 327	1 408	1 321
Korea, Rep. of	293	320	331	327	348	365	351	371
Spain	226	264	263	194	260	275	250	281
United States	122	226	27	23	0	0	12	64
Other	404	422	506	688	771	1 077	1 007	1 037
Total	3 634	3 638	3 574	3 848	4 307	4 614	4 776	4 971
Blister and anode copper								
Belgium	149	209	291	291	238	268	227	208
Canada	21	58	127	149	159	93	102	94
China	91	105	123	114	129	89	173	198
Germany	27	38	17	12	37	42	32	25
Korea, Rep. of	59	69	51	53	33	87	100	58
Mexico	119	73	62	70	64	78	75	66
United States	218	145	159	149	133	172	155	124
Other	43	27	24	70	106	152	131	152
Total	726	726	854	908	899	980	995	925
Refined copper								
Belgium	44	37	58	17	10	22	28	54
Brazil	141	103	151	154	168	175	218	252
China	835	1 181	1 357	1 200	1 222	827	1 496	1 458
Chinese Taipei	541	657	621	692	640	647	615	585
France	564	576	579	590	517	507	432	434
Germany	528	459	517	585	625	881	844	833
Greece	130	126	107	120	91	106	106	76
Italy	650	643	651	700	652	774	746	617
Japan	156	114	79	88	74	75	102	90
Korea, Rep. of	380	446	441	488	428	380	420	406
Malaysia	161	187	134	186	246	186	201	167
Singapore	67	40	34	48	41	110	62	45
Thailand	167	186	204	224	235	268	6	6
Turkey	137	187	229	217	224	150	288	288
United Kingdom	311	316	246	214	182	184	47	48
United States	1 199	1 062	687	704	977	1 076	832	721
Other	692	570	572	573	572	522	686	687
Total	6 702	6 891	6 669	6 801	6 902	6 891	7 129	6 768

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London.

273 Summary of Australian statistics for gemstones

	Exports			Imports
	Diamonds	Opals	Sapphires a	Gem diamonds
	$m	$m	$m	$m
1962	0.41	6.21	na	2.37
1963	0.37	5.39	na	2.62
1964	0.35	5.40	na	2.96
1965	0.42	5.33	na	3.69
1966	0.43	7.65	na	3.94
1967	0.33	8.62	na	4.23
1968	0.37	10.65	na	4.23
1969	0.39	12.21	3.09	5.25
1970	0.51	11.97	3.21	5.45
1971	0.77	11.20	3.32	6.57
1972	0.81	13.80	2.80	7.44
1973	1.63	17.68	2.91	11.74
1974	4.86	12.70	2.63	15.01
1975	4.61	14.60	3.01	15.45
1976	4.58	22.62	3.61	20.04
1977	5.28	19.21	4.03	24.05
1978	11.99	26.69	10.31	34.25
1979	13.25	24.98	17.17	33.36
1980	12.90	25.55	10.81	50.38
1981	11.16	23.69	14.57	38.25
1982	9.86	16.73	14.46	32.59
1983	36.54	22.69	13.48	31.48
1984	25.90	22.76	9.89	36.14
1985	29.83	17.67	7.78	48.16
1986	180.00	24.41	12.86	55.38
1987	285.00	45.99	19.95	66.62
1988	349.42	67.54	23.13	77.96
1989	410.19	77.19	31.60	108.16
1990	433.13	84.87	17.49	106.68
1991	453.80	83.67	11.27	110.99
1992	574.60	77.13	11.46	105.71
1993	482.30	78.07	22.46	90.24
1994	485.40	96.24	18.27	96.40
1995	480.24	99.79	13.65	103.60
1996	442.99	101.85	10.97	112.41
1997	421.19	75.64	8.52	154.85
1998	621.78	63.20	7.70	150.88
1999	560.57	53.86	5.94	172.28
2000	714.96	75.96	8.35	223.34
2001	517.01	69.78	6.43	241.97
2002	724.10	61.75	1.37	269.90
2003	754.74	56.16	1.11	301.69
2004	507.77	47.28	1.08	320.02
2005	880.88	55.42	1.36	370.57
2006	782.52	49.85	0.45	386.01
2007	684.30	39.66	1.11	426.70
2008	618.07	40.50	0.95	432.06

a Excludes cut and polished sapphires from 1 July 1999, for which data are not available separately. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Minerals and Energy Western Australia, *Statistics Digest; Bureau of Mineral Resources, Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* Bureau of Mineral Resources, Canberra.

274 Australian supply and disposal of gemstones

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Diamonds									
Production	'000 ct	26 176	33 648	31 013	20 620	30 703	29 308	19 231	15 670
Exports									
Unsorted **s**	'000 ct	21 722	34 442	28 193	20 447	30 594	29 220	18 960	15 397
	$m	428	621	623	385	749	641	552	448
Sorted									
Gem	'000 ct	39	43	74	89	108	87	271	273
	$m	89	103	126	122	132	142	132	169
Industrial	'000 ct	0.98	0.19	2761.25	84.99	0.37	1.32	0.79	0.26
	$m	0.18	0.50	5.19	0.51	0.21	0.12	0.12	0.37
Total exports	$m	517	724	755	508	881	783	684	618
Imports									
Gem diamonds	$m	242	270	302	320	371	386	427	432
Other gemstones									
Exports									
Opals	$m	70	62	56	47	55	50	40	40
Sapphires **a**	$m	6	1	1	1	1	0	1	1
Others **b**	$m	13	14	10	8	9	5	7	8

a Excludes cut and polished sapphires from 1 July 1999, for which data are not available separately. **b** Includes cut and polished sapphires from 1 July 1999. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Department of Minerals and Energy Western Australia, *Statistics Digest,* Perth; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

275 World production of natural gem and cheap gem diamonds

	2000 million ct	2001 million ct	2002 million ct	2003 million ct	2004 million ct	2005 million ct	2006 million ct	2007 million ct
Angola	4.01	5.10	5.70	6.30	7.50	10.00	9.18	9.70
Australia	26.65	26.18	33.65	31.01	20.62	30.70	29.31	19.23
Botswana	24.64	26.19	28.37	30.40	31.13	31.89	34.29	33.64
Congo, Dem. Rep. of	16.50	19.64	21.99	29.00	29.00	27.00	28.99	28.45
Namibia	1.54	1.49	1.54	1.45	2.00	1.90	2.40	2.27
Russian Federation	20.50	20.50	20.00	33.02	35.52	38.00	38.36	38.29
South Africa	10.79	11.16	10.88	12.67	14.46	15.78	14.93	15.25
Other	6.87	8.05	9.28	15.13	17.37	18.20	17.73	23.17
Total	111.50	118.30	131.40	159.00	157.60	173.50	175.20	170.00

Sources: Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; British Gelological Survey, *World Mineral Statistics,* Nottingham England.

276 Summary of Australian statistics for gold

	Mine production	Exports a		Price d	
		Volume b	Value c		
	t	t	$m	A$/oz	US$/oz
1964	30	15	13	31.41	35.00
1965	27	27	23	31.36	35.00
1966	29	29	23	31.40	35.00
1967	25	22	17	31.40	35.00
1968	24	16	13	34.71	38.68
1969	22	22	21	36.92	41.09
1970	19	12	6	32.22	35.95
1971	21	7	3	36.15	41.16
1972	23	14	13	49.02	58.44
1973	17	9	11	68.43	97.59
1974	16	12	23	111.39	159.62
1975	16	8	17	122.87	161.23
1976	16	15	40	102.30	124.94
1977	19	14	43	133.37	147.98
1978	20	8	42	168.88	193.44
1979	19	10	59	271.77	303.22
1980	17	7	90	537.37	612.52
1981	18	7	56	398.19	458.06
1982	27	13	136	371.97	375.76
1983	31	21	270	469.65	423.83
1984	40	32	418	409.94	360.29
1985	59	50	668	455.70	317.28
1986	75	56	972	554.15	367.76
1987	110	85	1 694	639.18	446.43
1988	157	139	2 642	557.34	433.45
1989	204	166	2 559	483.54	381.49
1990	244	238	3 424	493.94	384.35
1991	236	259	3 684	465.21	362.29
1992	244	298	4 458	467.74	343.67
1993	227	275	4 672	530.94	359.89
1994	237	277	4 664	527.92	384.09
1995	236	316	5 251	521.02	384.15
1996	277	325	5 223	497.98	387.72
1997	304	340	4 912	446.17	331.14
1998	300	504	7 621	469.17	294.23
1999	289	334	4 720	433.07	279.08
2000	291	296	4 634	480.37	279.28
2001	280	304	5 086	521.30	271.09
2002	266	269	4 908	570.30	310.20
2003	281	313	5 551	559.68	363.68
2004	258	311	5 551	557.15	409.28
2005	262	306	5 693	585.23	444.91
2006	247	349	8 863	804.30	604.71
2007	247	411	10 789	831.26	696.81
2008	215	415	13 332	1 034.31	872.54

a Prior to July 1999 includes exports of refined gold that was imported as unrefined bullion, thereafter includes Australian origin gold only. **b** Quantities refer to total metallic content of all ores, concentrates, intermediate products or refined metal of which gold is the predominant constituent. **c** Value of metal contained in host mine and smelter products (for example, gold in copper concentrates or lead bullion) is not separately available; this is included in the value of the mineral product or metal product in which it is exported. **d** Average London AM fix.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; London Bullion Market Association; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

277 Australian gold production, imports and exports

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Production									
Mine	t	280.1	266.2	281.4	258.1	262.2	246.9	247.4	215.2
Refined primary									
Australian origin	t	288.0	261.8	257.0	230.8	220.2	205.6	204.8	177.4
Overseas origin	t	16.8	40.5	74.1	81.7	71.1	60.8	54.0	66.3
Refined secondary									
Australian origin	t	23.3	7.2	4.3	4.3	6.3	5.7	4.6	5.8
Overseas origin	t	45.1	39.8	75.9	53.4	43.4	107.3	111.5	111.4
Exports									
Refined and unrefined bullion **a**									
Chinese Taipei	t	15.7	6.5	3.6	0.5	0.0	0.5	0.0	0.0
Hong Kong, China	t	49.1	29.6	11.7	1.2	1.2	0.0	0.0	1.9
India	t	9.8	13.8	66.1	161.0	164.4	140.4	160.5	159.8
Japan	t	16.0	24.5	8.5	9.4	16.5	12.6	7.0	0.5
Korea, Rep. of	t	45.1	50.3	41.7	30.6	5.3	4.8	2.3	1.4
Middle East	t	28.2	11.1	0.8	0.0	0.0	7.9	41.5	46.8
Switzerland	t	4.5	1.1	4.6	0.0	1.1	8.0	56.7	5.9
Thailand	t	5.1	22.5	11.5	27.2	55.7	21.9	21.5	36.6
United Kingdom	t	54.6	69.8	148.9	56.6	29.2	114.6	100.4	146.5
Other	t	75.6	40.0	15.1	24.8	32.6	38.5	21.1	15.7
Total	t	303.6	269.1	312.6	311.4	305.8	349.3	411.0	415.2
	$m	5 085.8	4 907.9	5 551.2	5 550.8	5 693.5	8 863.2	10 788.6	13 332.3
Imports									
Refined and unrefined	$m	2 145.6	2 503.8	2 910.4	2 448.5	2 792.0	5 786.4	6 121.7	9 731.7
Price b	$/oz	521.30	570.30	559.68	557.15	585.23	804.30	831.26	1 034.31

a Prior to July 1999 includes exports of refined gold that was imported as unrefined bullion, thereafter includes Australian origin gold only. **b** Average London AM fix price, expressed in Australian dollars.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; London Bullion Market Association; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

278 Australian gold production, by state

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australia
	t	t	t	t	t	t	t	t
Mine production								
1986	0.96	1.15	11.12	na	53.88	2.67	5.30	75.10
1987	4.25	1.21	15.43	0.00	78.08	2.23	8.71	109.90
1988	5.63	1.77	24.78	0.01	110.75	2.03	11.97	156.95
1989	8.75	1.84	27.72	0.28	146.61	1.76	17.06	204.02
1990	8.05	3.93	29.73	0.89	180.79	1.68	19.04	244.10
1991	6.33	3.76	27.06	0.76	179.44	1.62	17.30	236.28
1992	5.65	3.35	32.61	1.05	181.29	1.15	18.64	243.74
1993	8.11	4.36	27.40	1.68	167.36	1.30	17.09	227.31
1994	7.60	3.82	29.23	1.84	175.67	1.32	17.42	236.92
1995	9.74	4.30	27.84	1.72	173.72	0.62	18.45	236.40
1996	11.10	4.52	28.20	1.81	208.14	1.63	21.33	276.73
1997	11.72	4.82	28.83	1.64	228.49	4.15	24.33	303.98
1998	14.77	4.90	32.33	1.74	221.32	4.18	20.39	299.62
1999	21.04	4.63	33.65	1.77	201.12	4.95	22.30	289.47
2000	18.58	4.23	37.10	2.95	198.23	6.68	23.15	290.91
2001	17.10	3.50	31.89	4.31	196.59	6.18	20.51	280.08
2002	23.48	3.24	25.06	3.14	187.20	6.05	18.03	266.21
2003	27.49	3.11	26.24	5.33	187.07	9.32	22.85	281.40
2004	29.14	3.46	23.16	5.12	164.32	10.60	22.27	258.07
2005	28.05	5.24	24.62	6.24	173.13	8.34	16.55	262.16
2006	27.04	6.27	22.50	6.75	165.19	5.10	14.03	246.88
2007	34.89	6.42	22.91	6.92	155.56	4.19	16.54	247.40
2008	31.38	6.09	19.15	6.71	132.54	5.06	14.30	215.23
Share of total	%	%	%	%	%	%	%	
1986	1.28	1.53	14.81	na	71.74	3.56	7.06	
1987	3.87	1.10	14.04	0.00	71.04	2.03	7.93	
1988	3.59	1.13	15.79	0.01	70.57	1.29	7.63	
1989	4.29	0.90	13.59	0.14	71.86	0.86	8.36	
1990	3.30	1.61	12.18	0.36	74.06	0.69	7.80	
1991	2.68	1.59	11.45	0.32	75.94	0.69	7.32	
1992	2.32	1.38	13.38	0.43	74.38	0.47	7.65	
1993	3.57	1.92	12.06	0.74	73.63	0.57	7.52	
1994	3.21	1.61	12.34	0.78	74.15	0.56	7.35	
1995	4.12	1.82	11.78	0.73	73.49	0.26	7.80	
1996	4.01	1.63	10.19	0.65	75.21	0.59	7.71	
1997	3.85	1.59	9.48	0.54	75.17	1.36	8.00	
1998	4.93	1.63	10.79	0.58	73.87	1.39	6.81	
1999	7.27	1.60	11.62	0.61	69.48	1.71	7.70	
2000	6.39	1.45	12.75	1.01	68.14	2.30	7.96	
2001	6.11	1.25	11.39	1.54	70.19	2.21	7.32	
2002	8.82	1.22	9.42	1.18	70.32	2.27	6.77	
2003	9.77	1.11	9.32	1.89	66.48	3.31	8.12	
2004	11.29	1.34	8.98	1.98	63.67	4.11	8.63	
2005	10.70	2.00	9.39	2.38	66.04	3.18	6.31	
2006	10.95	2.54	9.11	2.73	66.91	2.06	5.68	
2007	14.10	2.59	9.26	2.80	62.88	1.69	6.68	
2008	14.58	2.83	8.90	3.12	61.58	2.35	6.64	

na Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

279 World supply, demand and price of gold

	Unit	2000	2001	2002	2003	2004	2005	2006	2007	2008
Supply										
Mine production										
Australia	t	291	280	266	281	258	262	247	247	215
Asia	t	296	331	309	330	292	336	284	317	264
Canada	t	155	157	148	141	129	120	104	102	96
China	t	172	193	202	211	217	230	247	281	292
Europe	t	20	20	21	20	20	18	18	16	15
Latin America	t	378	375	392	406	413	462	495	472	486
Russian Federation	t	154	165	181	182	182	175	173	169	189
South Africa	t	454	417	419	398	363	315	296	270	233
Other Africa	t	193	221	238	231	215	234	245	245	251
United States	t	355	335	299	281	260	262	252	238	235
Other	t	145	146	138	138	144	131	126	125	139
Total mine production	t	2 613	2 640	2 613	2 619	2 492	2 546	2 486	2 481	2 416
Forward sales and option hedging	t	- 15	- 151	- 412	- 289	- 438	- 92	- 410	- 444	- 351
Net official sales	t	479	520	547	620	479	663	370	484	236
Net scrap sales	t	619	749	872	985	878	898	1 129	958	1 209
Net other sales	t	292	115	171	0	0	0	0	0	0
Total supply **a**	t	4 018	3 909	4 033	4 223	3 866	4 107	3 984	3 923	3 861
Demand										
Fabrication consumption										
Jewellery	t	3 204	3 008	2 660	2 483	2 617	2 712	2 288	2 404	2 191
Electronics	t	283	197	206	233	262	281	308	311	293
Dentistry	t	69	69	69	67	68	62	61	58	56
Official coins	t	77	83	97	107	115	111	129	137	191
Medals and unofficial coins	t	29	29	27	26	26	37	59	73	70
Other	t	99	97	83	82	84	88	91	93	87
Total fabrication	t	3 761	3 483	3 142	2 998	3 172	3 291	2 936	3 076	2 888
Net bullion purchases	t	242	275	479	937	257	723	639	404	622
Total demand **a**	t	4 018	3 909	4 033	4 223	3 866	4 107	3 984	3 923	3 861
Gold price **b**	$/oz	279.28	271.09	310.20	363.68	409.28	444.91	604.71	696.81	872.54

a Total supply is defined as the flow of new mine output, and the net sale of aboveground stocks, while total demand is equal to net gold purchases. This classification of annual gold flows is symmetric, so that total annual supply equals total annual demand. **b** Average London AM fix price, expressed in US dollars.

Sources: ABARE, *Australian Commodities,* Canberra; Gold Fields Mineral Services Ltd, *Gold,* Surrey London; London Bullion Market Association.

280 Summary of Australian statistics for gypsum

	Production	Exports a		
		Volume	Value	Unit value
	kt	kt	$'000	$/t
1962-63	737.1	146.1	715	4.89
1963-64	807.8	208.8	1 008	4.83
1964-65	846.9	140.9	747	5.30
1965-66	814.4	235.2	1 100	4.68
1966-67	928.8	211.0	879	4.17
1967-68	857.3	251.9	1 135	4.51
1968-69	912.1	232.8	1 006	4.32
1969-70	845.4	218.4	1 051	4.81
1970-71	889.2	258.3	1 251	4.84
1971-72	959.1	282.3	1 444	5.12
1972-73	1 165.2	437.3	2 128	4.87
1973-74	1 068.9	303.2	1 778	5.86
1974-75	932.6	215.8	1 539	7.13
1975-76	941.9	187.7	1 527	8.13
1976-77	916.0	190.5	1 624	8.52
1977-78	939.9	181.0	1 640	9.06
1978-79	1 230.2	423.0	3 105	7.34
1979-80	1 309.3	389.3	3 814	9.80
1980-81	1 752.3	645.2	6 861	10.63
1981-82	1 863.7	604.5	7 982	13.20
1982-83	1 509.8	800.0	11 044	13.81
1983-84	1 931.2	726.0	9 653	13.30
1984-85	1 744.5	516.0	8 362	16.21
1985-86	1 671.0	423.2	7 702	18.20
1986-87	1 811.9	195.4	2 968	15.19
1987-88	1 655.9	116.2	1 391	11.97
1988-89	1 834.6	68.1	1 048	15.39
1989-90	1 885.5	na	na	na
1990-91	1 381.7	53.2	759	14.28
1991-92	1 347.5	160.7	1 775	11.04
1992-93	1 589.5	161.6	1 807	11.19
1993-94	1 691.6	151.7	2 036	13.42
1994-95	1 995.5	231.1	2 993	12.95
1995-96	1 916.3	85.6	1 476	17.24
1996-97	2 392.6	116.9	2 134	18.25
1997-98	3 052.3	570.9	12 070	21.14
1998-99	3 465.6	988.8	18 781	18.99
1999-00	3 796.5	1 121.2	21 059	18.78
2000-01	3 225.5	724.4	16 096	22.22
2001-02	4 267.7	1 010.0	21 835	21.62
2002-03	4 066.0	1 045.0	18 788	17.98
2003-04	4 325.1	1 083.0	16 570	15.30
2004-05	3 881.6	878.4	15 172	17.27
2005-06	4 264.9	1 525.8	26 449	17.33
2006-07	3 951.4	1 179.7	21 550	18.27
2007-08	na	1 032.2	18 584	18.00
2008-09	na	856.5	20 673	24.14

a Raw gypsum. Bulk only to 1978; bulk and bagged thereafter. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; state mines departments and their equivalents; ABARE.

281 Australian production of gypsum, by state

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Australia
	kt	kt	kt	kt	kt	kt
1961-62	73.0	80.0	na	435.6	52.5	641.0
1962-63	63.2	116.3	na	505.9	51.6	737.1
1963-64	65.6	105.9	na	590.5	45.7	807.8
1964-65	59.3	171.3	na	568.9	47.4	846.9
1965-66	45.7	113.1	na	613.1	42.6	814.4
1966-67	43.2	227.7	na	617.2	40.7	928.8
1967-68	32.8	78.7	na	640.1	105.6	857.3
1968-69	32.1	85.7	na	728.8	65.4	912.1
1969-70	39.0	47.6	na	667.4	91.4	845.4
1970-71	36.4	46.3	na	652.7	153.9	889.2
1971-72	39.1	42.1	na	721.5	156.5	959.1
1972-73	32.8	43.7	na	921.9	166.8	1 165.2
1973-74	42.6	43.0	na	769.8	213.5	1 068.9
1974-75	34.2	54.1	na	759.3	85.1	932.6
1975-76	36.2	69.0	na	721.0	115.8	941.9
1976-77	33.6	84.8	na	694.0	103.7	916.0
1977-78	18.0	107.4	na	648.1	166.3	939.9
1978-79	26.8	201.2	na	782.3	219.9	1 230.2
1979-80	25.0	269.4	na	768.6	246.3	1 309.3
1980-81	20.2	282.8	na	1 017.2	432.0	1 752.3
1981-82	17.4	235.9	na	1 159.3	451.2	1 863.7
1982-83	14.7	79.3	na	924.0	491.9	1 509.8
1983-84	38.9	236.4	na	1 018.2	637.7	1 931.2
1984-85	51.0	239.8	na	1 001.9	451.8	1 744.5
1985-86	47.3	173.4	na	1 135.8	314.5	1 671.0
1986-87	34.5	412.0	na	1 229.4	136.0	1 811.9
1987-88	33.7	233.0	na	1 277.2	112.0	1 655.9
1988-89	27.8	241.4	na	1 399.4	166.0	1 834.6
1989-90	29.0	301.5	na	1 400.0	155.0	1 885.5
1990-91	27.5	49.2	na	1 222.5	82.5	1 381.7
1991-92	18.7	53.1	na	1 173.9	101.8	1 347.5
1992-93	24.0	180.2	na	1 260.5	124.8	1 589.5
1993-94	0.0	176.8	3.8	1 315.8	195.2	1 691.6
1994-95	69.0	193.1	24.9	1 478.9	229.6	1 995.5
1995-96	37.3	198.7	25.6	1 401.8	252.9	1 916.3
1996-97	43.2	501.5	40.6	1 555.3	251.9	2 392.6
1997-98	105.2	479.8	36.4	1 596.0	834.9	3 052.3
1998-99	174.4	404.9	29.6	1 601.3	1 255.5	3 465.6
1999-00	161.7	462.8	11.0	1 824.1	1 336.9	3 796.5
2000-01	198.2	437.7	27.0	1 615.2	947.4	3 225.5
2001-02	284.8	781.2	78.7	1 776.6	1 346.3	4 267.7
2002-03	183.3	546.4	55.3	1 822.3	1 458.6	4 066.0
2003-04	230.4	571.9	69.2	1 919.5	1 534.1	4 325.1
2004-05	174.6	450.5	52.1	1 796.7	1 407.7	3 881.6
2005-06	168.1	541.2	48.6	1 913.2	1 593.9	4 264.9
2006-07	129.3	305.8	67.4	1 898.7	1 550.2	3 951.4
2007-08	140.4	514.5	na	2 110.1	716.1	na

na Not available.

Sources: ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; state mines departments and their equivalents; ABARE.

282 Australian exports of gypsum

	Raw a						Calcined	
					Total			
	Indonesia	New Zealand	Singapore	Other	Volume	Value	Volume	Value
	kt	kt	kt	kt	kt	$'000	t	$'000
1961-62	0.0	80.4	0.0	61.3	141.6	747	na	na
1962-63	0.0	78.2	0.0	67.9	146.1	715	na	na
1963-64	0.0	106.0	0.0	102.8	208.8	1 008	na	na
1964-65	5.1	102.2	0.0	33.6	140.9	747	na	na
1965-66	5.6	109.7	0.0	119.9	235.2	1 100	na	na
1966-67	14.0	87.7	0.0	109.3	211.0	879	na	na
1967-68	10.6	85.8	0.0	155.6	251.9	1 135	na	na
1968-69	21.1	101.5	17.0	93.2	232.8	1 006	na	na
1969-70	11.7	104.8	18.8	83.2	218.4	1 051	na	na
1970-71	15.9	100.3	12.1	129.9	258.3	1 251	na	na
1971-72	23.6	107.7	26.3	124.6	282.3	1 444	na	na
1972-73	26.2	147.5	42.1	221.4	437.3	2 128	na	na
1973-74	30.6	173.1	14.9	84.6	303.2	1 778	na	na
1974-75	15.6	151.7	27.3	21.2	215.8	1 539	na	na
1975-76	34.5	122.9	27.5	2.8	187.7	1 527	na	na
1976-77	37.9	113.0	15.9	23.8	190.5	1 624	na	na
1977-78	29.7	84.5	16.2	50.6	181.0	1 640	na	na
1978-79	148.1	63.7	49.7	161.5	423.0	3 105	1 696	223
1979-80	197.9	98.3	42.9	50.2	389.3	3 814	2 003	172
1980-81	183.0	104.6	67.1	290.5	645.2	6 861	1 771	188
1981-82	173.6	124.5	88.0	218.5	604.5	7 982	2 350	263
1982-83	174.4	98.2	110.4	416.9	800.0	11 044	3 187	416
1983-84	251.4	128.2	96.9	249.5	726.0	9 653	6 196	901
1984-85	192.6	143.0	57.0	123.5	516.0	8 362	4 751	728
1985-86	148.1	118.1	38.4	118.7	423.2	7 702	5 348	893
1986-87	15.5	122.7	0.0	57.2	195.4	2 968	4 866	848
1987-88	0.0	116.2	0.0	0.0	116.2	1 391	4 704	845
1988-89	0.1	68.0	0.0	0.0	68.1	1 048	3 940	752
1989-90	0.1	0.0	0.0	na	na	na	10 437	1 032
1990-91	0.0	15.5	0.0	37.6	53.2	759	5 702	1 100
1991-92	0.0	97.2	0.0	63.5	160.7	1 775	6 128	1 318
1992-93	0.0	111.5	12.0	38.1	161.6	1 807	8 610	1 958
1993-94	0.0	101.6	0.0	50.1	151.7	2 036	9 986	2 408
1994-95	0.0	155.2	12.4	63.5	231.1	2 993	8 836	2 338
1995-96	0.2	32.3	0.0	53.1	85.6	1 476	11 477	3 212
1996-97	1.3	0.4	0.1	115.0	116.9	2 134	12 012	3 487
1997-98	48.2	0.8	0.2	521.7	570.9	12 070	17 538	5 656
1998-99	38.5	0.1	0.0	950.2	988.8	18 781	6 926	2 046
2000-01	0.0	0.4	0.0	724.0	724.4	16 096	2 576	916
2001-02	0.0	0.1	0.0	1 009.8	1 010.0	21 835	779	494
2002-03	0.0	0.1	0.1	1 044.8	1 045.0	18 788	36 986	941
2003-04	0.0	0.1	0.1	1 082.8	1 083.0	16 570	30 921	1 589
2004-05	0.0	0.1	0.0	878.3	878.4	15 172	1 717	1 149
2005-06	0.0	126.1	0.1	1 399.7	1 525.8	26 449	977	452
2006-07	0.0	93.7	0.1	1 085.9	1 179.7	21 550	676	299
2007-08	0.0	348.0	0.1	684.0	1 032.2	18 584	201	238
2008-09	0.0	196.0	0.0	660.5	856.5	20 673	139	142

a Bulk only to 1978; bulk and bagged thereafter. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

283 World mine production of gypsum, by country

	Australia	Canada	China a	France	Japan	Spain	United States	Other	Total
	kt	kt	kt	kt	kt	kt	kt	kt	kt
1961	620	4 591	na	3 836	724	3 052	8 618	20 217	41 658
1962	641	4 837	na	3 997	800	3 557	8 221	22 653	44 706
1963	737	5 381	na	4 208	782	4 598	9 424	21 608	46 738
1964	808	5 770	na	4 913	751	2 854	9 692	21 951	46 738
1965	847	5 720	na	5 013	649	2 855	9 104	20 518	44 706
1966	814	5 427	na	5 272	597	2 947	8 751	20 898	44 706
1967	929	4 471	na	5 190	584	2 947	8 522	22 064	44 706
1968	857	5 664	na	5 162	572	3 963	9 235	23 064	48 516
1969	912	6 334	na	6 055	569	4 064	9 108	23 557	50 599
1970	845	5 844	na	6 088	581	4 288	8 584	24 570	50 800
1971	889	6 169	na	5 111	536	4 200	9 451	26 644	53 000
1972	959	7 200	na	5 850	465	4 100	11 840	27 236	57 650
1973	1 165	7 540	na	6 160	460	4 100	12 330	29 105	60 860
1974	1 069	7 470	na	6 220	na	4 400	10 890	31 941	61 990
1975	933	5 700	na	5 800	na	4 200	8 800	31 567	57 000
1976	942	6 002	na	5 900	na	4 200	10 868	34 858	62 770
1977	916	7 234	na	6 032	na	5 482	12 147	39 894	71 705
1978	940	8 075	1 500	6 036	na	5 369	13 509	40 280	75 709
1979	1 230	8 098	3 630	6 240	na	5 275	13 272	43 615	81 360
1980	1 309	7 209	3 360	5 889	na	5 223	11 227	43 150	77 367
1981	1 752	7 025	3 450	6 147	na	5 223	10 430	42 129	76 156
1982	1 864	5 987	3 540	6 039	6 363	5 048	9 560	33 913	72 314
1983	1 510	7 507	4 260	5 544	5 845	5 620	11 688	36 695	78 669
1984	1 931	7 756	4 810	5 400	6 100	5 365	12 990	36 378	80 730
1985	1 744	8 400	5 700	5 400	6 300	5 500	13 360	38 706	85 110
1986	1 671	8 500	6 500	5 500	6 300	5 500	14 300	39 309	87 580
1987	1 812	8 600	6 800	5 400	6 300	5 500	14 300	39 680	88 160
1988	1 656	8 500	8 100	5 400	6 300	5 500	14 870	49 534	99 860
1989	1 835	8 700	8 100	5 700	6 300	5 500	16 000	46 385	98 520
1990	1 886	8 200	8 000	5 620	6 350	5 000	14 550	48 055	97 660
1991	1 382	8 000	8 100	5 600	6 350	5 000	14 022	45 481	93 935
1992	1 348	7 054	10 977	5 715	5 443	4 990	14 759	47 257	97 791
1993	1 590	7 345	9 616	4 536	4 990	6 804	14 344	44 504	93 623
1994	1 692	8 500	10 500	5 000	5 300	7 250	17 200	45 735	101 000
1995	1 995	7 960	11 000	5 000	3 900	7 500	16 600	44 297	98 100
1996	1 916	8 330	8 000	5 000	5 350	8 000	17 500	45 802	99 700
1997	2 393	8 500	7 800	5 000	5 500	7 400	18 600	49 309	104 000
1998	3 052	8 100	9 000	4 500	5 300	7 400	19 000	51 128	107 000
1999	3 466	9 470	9 000	4 500	5 500	7 500	22 400	50 940	107 000
2000	3 796	8 550	6 800	4 500	5 600	7 500	19 500	45 233	106 000
2001	3 225	8 560	6 800	4 500	5 900	7 500	16 300	51 249	104 000
2002	4 268	8 850	6 850	3 500	5 900	7 500	15 700	48 432	101 000
2003	4 066	9 000	6 900	3 500	5 700	7 500	16 000	51 334	104 000
2004	4 325	9 340	7 000	3 500	5 800	11 500	17 200	50 335	109 000
2005	3 882	9 400	7 300	3 500	5 890	11 500	21 100	55 428	118 000
2006	4 265	9 500	7 500	4 800	5 950	13 200	21 100	58 685	125 000
2007	3 896	7 700	37 000	4 800	5 900	11 500	17 900	65 304	154 000
2008	na	7 300	40 700	4 700	5 700	11 300	12 700	68 600 **b**	151 000

a Excludes Hong Kong. **b** Includes Australia. **na** Not available.

Sources: ABS, *Mining Operations, Australia*, cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review*, AGPS, Canberra; US Department of the Interior, US Geological Survey, *Mineral Commodity Summaries*, Washington DC; ABARE.

284 Summary of Australian statistics for iron ore and steel

	Production a				Exports		
	Iron ore		Pig	Crude	Iron ore	Pig	Crude
	Pellets	Total	iron	steel	and pellets	iron	steel bs
	kt	kt	kt	kt	kt	kt	kt
1965	0	6 805	4 252	5 464	152	46	10
1966	0	11 071	4 743	5 891	2 045	97	255
1967	0	17 314	5 058	6 268	9 164	152	344
1968	3 000	26 632	5 573	6 503	16 398	246	356
1969	5 871	38 576	6 107	7 016	26 858	375	545
1970	5 957	51 188	6 148	6 822	41 112	310	226
1971	6 800	62 063	6 128	6 737	52 796	519	122
1972	6 424	64 401	6 491	6 743	54 079	582	597
1973	10 153	84 828	7 658	7 682	74 181	853	771
1974	10 066	96 950	7 250	7 755	83 654	753	775
1975	9 469	97 651	7 475	7 843	80 363	520	1 636
1976	9 594	93 255	7 417	7 774	81 231	698	1 534
1977	10 226	95 932	6 753	7 313	78 908	647	1 280
1978	9 471	83 134	7 337	7 589	75 264	711	1 008
1979	9 303	91 717	7 811	8 125	78 447	643	611
1980	5 329	95 534	6 959	7 594	80 375	515	306
1981	3 887	84 661	6 830	7 635	71 729	158	378
1982	3 321	87 694	5 956	6 371	72 567	101	218
1983	3 043	71 485	5 045	5 657	74 088	469	384
1984	3 497	89 046	5 329	6 303	85 477	71	294
1985	3 725	97 447	5 607	6 578	84 746	26	583
1986	3 338	94 015	5 889	6 703	79 523	26	496
1987	3 309	101 748	5 569	6 125	77 829	165	523
1988	3 400	96 084	5 730	6 399	94 855	25	843
1989	3 600	105 810	6 094	6 735	101 681	24	948
1990	4 537	109 166	6 125	6 666	95 928	0	1 740
1991	3 475	117 134	5 647	6 017	111 557	0	1 934
1992	1 437	113 097	6 388	6 990	103 487	0	2 315
1993	1 512	121 429	7 284	7 837	111 527	0	2 621
1994	1 507	128 662	7 855	8 455	119 093	0	3 069
1995	1 596	139 067	7 861	8 481	130 367	0	2 950
1996	1 608	147 200	7 381	8 429	128 274	22	3 130
1997	168	157 767	7 685	8 837	146 757	0	3 188
1998	3 618	153 459	7 723	8 886	136 418	0	3 364
1999	1 932	154 979	7 047	8 481	139 278	3	3 253
2000	2 066	167 935	7 049	7 855	157 368	3	2 815
2001	2 024	181 174	6 017	8 299	156 718	0	3 187
2002	2 139	187 198	6 106	8 874	165 869	0	3 385
2003	2 256	212 981	6 116	9 661	187 708	1	3 955
2004	2 103	233 994	5 735	8 104	209 828	0	2 997
2005	2 165	261 855	6 203	7 789	239 313	0	2 265
2006	2 441	275 098	6 433	7 937	247 429	67	2 595
2007	3 623	298 974	6 351	8 057	266 884	96	2 501
2008	3 734	342 422	6 409	7 724	309 473	81	1 811

a Iron ore figures expressed in natural weight. **b** Series up to and including 1987 do not include flat rolled products, bars and rods, and wire and steel sections. Subsequent series include all items in ABS, *Australian Harmonized Export Commodity Classification,* chapter 72, 'Iron and steel', excluding ferrous waste, scrap and ferroalloys. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

285 Volume of Australian exports of iron and steel, by destination [a]

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa	59	8	5	7	2	5	6	6
Americas								
North	88	270	254	259	251	492	308	486
Other	44	44	35	15	4	14	47	22
Total	132	314	289	274	255	506	355	508
Asia								
China	698	877	1 251	430	6	6	4	102
Chinese Taipei	78	39	65	155	50	8	22	3
Hong Kong, China	16	9	12	5	15	10	6	3
India	4	41	6	5	1	18	4	3
Indonesia	73	36	45	60	50	25	25	54
Japan	25	175	3	5	27	5	7	4
Korea, Rep. of	343	149	271	93	78	129	209	131
Malaysia	48	17	94	51	6	32	61	86
Philippines	19	2	3	3	3	2	7	2
Singapore	7	51	7	7	3	5	12	11
Thailand	29	51	70	81	64	102	219	294
Other	37	78	139	50	57	25	72	97
Total	1 378	1 525	1 965	946	360	366	650	790
Europe	73	224	77	6	4	187	154	60
New Zealand	91	137	111	117	67	90	88	87
Other	13	65	77	13	10	10	13	29
Total	3 187	3 385	3 955	2 997	2 265	2 595	2 501	1 811

a Includes all items in ABS, *Australian Harmonized Export Commodity Classification,* chapter 72, 'Iron and steel', excluding ferrous waste, scrap and ferroalloys. Data for slab, hot rolled, cold rolled and coated steel products became confidential in 2000. Estimates or export volumes are included in 'other' category.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

286 Australian supply and disposal of iron ore and steel

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Production								
Iron ore and concentrate	kt	199 146	222 797	251 935	263 853	287 693	324 693	352 996
Pig iron	kt	6 111	5 926	5 969	6 318	6 392	6 329	4 352
Raw steel	kt	9 399	9 430	7 395	7 866	8 010	8 151	5 568
Exports								
Iron ore and pellets	kt	181 478	194 773	228 456	239 380	257 365	294 293	323 451
	$m	5 342	5 277	8 120	12 854	15 512	20 511	34 234
Iron and steel **s**	kt	3 589	3 818	2 338	2 428	2 648	2 131	1 741
	$m	1 855	2 004	2 031	1 674	1 743	1 562	1 363
Scrap	kt	890	955	1 009	1 876	1 328	1 783	1 742
	$m	211	298	402	467	607	833	749
Export unit value								
Iron ore and pellets	$/t	29.44	27.09	35.54	53.70	60.27	69.70	105.84

s ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

287 Volume of Australian iron ore exports, by destination **a**

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Asia								
China	38 023	44 018	59 971	80 109	117 537	128 568	142 436	183 304
Chinese Taipei	9 904	9 347	8 664	9 095	9 144	9 448	9 997	9 993
Japan **b**	66 830	70 492	75 353	80 314	76 200	73 834	77 310	76 847
Korea, Rep. of	23 810	25 120	26 000	26 472	24 978	26 261	30 503	33 296
Other	922	865	594	494	215	208	212	146
United States	436	628	67	0	0	0	0	0
Western Europe	15 867	14 450	16 051	12 563	10 914	8 575	6 218	5 886
Other **c**	926	949	1 008	782	325	536	209	0
Total	156 718	165 869	187 708	209 828	239 313	247 429	266 884	309 473

a Dry weight. **b** Includes exports to the Philippines which were subsequently re-exported to Japan. **c** Includes data for which details of export destinations are not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

288 Summary of world statistics for iron ore and steel

	Production				
	Iron ore a				Iron ore
	Pellets	Total	Iron b	Crude steel	exports a
	Mt	Mt	Mt	Mt	Mt
1965	46.5	624.3	326.3	452.4	211.7
1966	58.0	625.9	335.8	471.3	214.9
1967	71.5	629.2	352.4	493.3	223.7
1968	94.5	687.7	378.4	523.9	256.7
1969	104.3	720.3	408.4	570.9	278.8
1970	117.9	773.9	426.5	595.3	323.1
1971	122.2	780.5	423.1	582.3	318.0
1972	127.5	781.7	447.1	630.2	311.4
1973	150.7	845.6	493.5	696.4	377.0
1974	153.6	896.3	503.4	703.5	411.8
1975	161.5	888.8	469.9	643.5	381.0
1976	174.5	922.9	489.4	675.1	379.8
1977	163.3	880.8	485.8	675.3	358.0
1978	182.6	891.3	506.7	716.5	350.6
1979	205.4	947.6	528.3	746.7	398.1
1980	186.3	917.9	508.1	716.3	384.6
1981	195.2	894.6	497.2	707.1	372.9
1982	155.1	818.2	452.6	644.9	329.3
1983	171.0	782.1	458.1	663.4	315.1
1984	192.8	882.2	490.7	710.3	372.4
1985	201.9	909.6	499.6	718.9	375.8
1986	196.5	920.7	496.3	714.0	370.0
1987	211.5	945.5	509.0	735.5	367.8
1988	230.2	964.4	538.4	780.1	400.9
1989	237.1	991.0	544.8	785.9	424.3
1990	225.3	980.6	531.6	770.1	397.1
1991	211.5	952.1	508.6	736.2	398.9
1992	205.9	907.8	476.4	719.6	334.0
1993	205.3	944.3	477.4	727.6	354.0
1994	218.7	967.8	482.6	725.1	383.0
1995	245.3	918.6	524.2	752.3	459.8
1996	238.9	898.0	517.4	750.1	442.7
1997	249.5	924.4	546.6	798.9	473.8
1998	242.6	906.6	539.5	777.3	453.9
1999	233.5	884.6	541.1	789.0	437.6
2000	259.1	959.7	576.3	847.7	499.0
2001	239.1	932.0	578.4	850.4	493.3
2002	267.6	986.4	611.0	903.9	533.9
2003	284.3	1 074.2	670.1	969.7	581.6
2004	305.7	1 184.2	724.1	1 068.6	672.5
2005	314.7	1 314.9	800.8	1 146.2	715.4
2006	320.6	1 498.3	881.1	1 250.2	761.7
2007	326.2	1 664.0	946.3	1 343.5	823.0
2008	316.5	1 724.6	926.4	1 329.7	881.8

a Natural weight. **b** Total production of primary iron less total production of directly reduced iron.

Sources: Association of Iron Ore Exporting Countries, *Iron Ore Statistics,* Geneva; International Iron and Steel Institute, *Steel Statistical Yearbook,* Brussels; United Nations Conference on Trade and Development, Trust Fund on Iron Ore, *Iron Ore Statistics,* Geneva; United Nations Conference on Trade and Development, *Review of Iron Ore Statistics, Iron Ore Statistics,* Geneva; United Nations Conference on Trade and Development, *Statistical Issues: Statistics on Iron Ore,* Geneva; United Nations Conference on Trade and Development, Trust Fund Project on Iron Ore Information, *The Iron Ore Market 2008-2010,* Geneva; World Steel Association, web tables.

289 World iron ore production, by country a

	2001	2002	2003	2004	2005	2006	2007	2008
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Australia	181.2	187.2	213.0	234.0	261.9	275.1	299.0	342.4
Brazil b	210.0	225.1	245.6	270.5	292.4	321.5	375.1	381.5
Canada	27.9	30.9	33.3	28.3	30.1	35.0	34.1	32.1
China c	102.6	108.8	122.7	145.7	197.6	276.4	365.0	366.0
India	79.2	86.4	99.1	120.6	142.7	180.9	206.9	214.0
Russian Federation	83.0	84.3	91.4	97.0	95.1	102.5	105.0	99.9
South Africa	34.8	36.5	38.1	39.3	39.5	41.3	41.6	49.0
Sweden	19.5	20.3	21.5	22.3	23.3	23.3	24.7	23.8
Ukraine	54.7	58.9	62.5	65.5	68.6	73.1	77.4	71.7
United States	45.8	51.5	48.5	54.7	54.3	52.9	52.4	53.0
Venezuela	19.0	20.9	19.2	20.0	21.2	22.1	20.7	21.5
Other	74.4	75.6	79.4	86.3	88.3	94.2	62.1	69.6
Total	932.0	986.4	1 074.2	1 184.2	1 314.9	1 498.3	1 664.0	1 724.6

a Natural weight. **b** Pellets not included. **c** Converted to correspond with world average Fe content.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; United Nations Conference on Trade and Development, Trust Fund on Iron Ore, *Iron Ore Statistics,* Geneva; United Nations Conference on Trade and Development, *Review of Iron Ore Statistics,* Geneva; United Nations Conference on Trade and Development, Trust Fund on Iron Ore, *The Iron Ore Market*, *2008-2010*, Geneva.

290 Volume of world iron ore exports, by country a

	2001	2002	2003	2004	2005	2006	2007	2008
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Australia	156.7	165.9	187.7	209.8	239.3	247.4	266.9	309.5
Brazil	155.7	170.0	184.4	200.9	223.4	247.5	269.4	281.7
Canada	22.0	25.6	27.1	23.1	27.9	27.7	28.3	28.2
India	37.3	46.6	57.3	62.7	80.9	89.3	93.7	101.4
Mauritania	10.1	10.5	9.6	11.0	10.6	10.7	11.8	11.0
Russian Federation	23.3	13.0	16.2	17.0	20.1	22.8	25.5	22.5
South Africa	23.5	24.3	24.1	24.7	26.6	26.2	30.3	32.8
Sweden	13.6	14.2	15.6	17.3	17.8	18.2	19.4	17.8
Ukraine	18.1	18.7	20.2	18.1	19.6	20.2	20.7	21.9
Venezuela	6.9	6.7	7.4	9.3	7.6	5.6	6.5	5.5
Other	26.1	38.3	31.9	78.6	41.5	46.0	50.5	49.5
Total	493.3	533.9	581.6	672.5	715.4	761.7	823.0	881.8

a Natural weight.

Sources: Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; United Nations Conference on Trade and Development, Trust Fund on Iron Ore Information, *The Iron Ore Market 2008-2010,* Geneva; United Nations Conference on Trade and Development, *Review of Iron Ore Statistics,* Geneva.

291 Volume of world iron ore imports, by region and country [a]

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Africa and Middle East									
Qatar	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.8	2.1
Saudi Arabia	4.6	4.4	4.7	4.3	3.9	9.7	5.5	6.0	8.4
Other	9.2	9.5	10.1	10.5	9.6	8.7	8.6	8.3	9.9
Total	14.9	15.1	15.9	16.0	14.8	19.7	15.5	16.1	20.4
Americas									
Argentina	5.1	4.5	5.2	6.3	13.5	5.7	6.7	5.8	7.2
Canada	6.6	5.9	6.8	6.6	8.0	9.6	7.6	7.3	9.3
Mexico	3.1	2.3	2.7	3.6	4.4	4.2	3.9	3.1	3.9
United States	15.7	10.6	12.5	12.5	11.8	13.0	11.7	9.2	9.2
Other	2.6	3.5	3.3	3.4	3.9	3.9	4.5	4.5	3.1
Total	33.0	26.8	30.6	32.5	41.5	36.3	34.3	29.9	32.7
Asia and Oceania									
China	70.0	92.4	111.4	148.1	208.1	275.3	326.3	383.1	444.0
Chinese Taipei	14.9	15.6	15.2	15.6	15.7	14.6	15.5	16.0	15.6
Indonesia	2.2	1.3	1.3	1.6	1.6	1.5	1.8	1.7	2.3
Japan	131.7	126.3	129.1	132.1	134.9	132.3	134.4	138.9	140.4
Korea, Rep. of	39.0	45.9	43.3	43.1	44.2	43.5	43.9	46.2	49.5
Malaysia	1.7	1.6	1.3	2.4	2.2	1.9	2.1	2.7	3.3
Pakistan	0.1	1.5	1.5	1.0	1.0	2.1	0.9	0.9	0.6
Other	4.8	4.6	5.0	4.8	4.6	5.3	5.0	5.3	4.8
Total	264.4	289.1	308.1	348.7	412.3	476.4	529.9	594.9	659.9
Europe									
Austria	5.4	5.3	5.8	5.7	5.8	7.4	7.7	9.0	8.0
Belgium–Luxembourg	11.8	11.2	12.2	11.6	10.4	9.4	11.4	9.6	12.3
Bulgaria	1.8	1.3	1.5	1.6	1.7	1.4	1.3	1.2	0.2
Czech Republic	6.6	6.9	6.8	8.2	9.4	6.8	7.6	5.3	6.8
Finland	3.9	3.9	3.8	4.2	3.8	4.2	3.5	3.2	3.0
France	19.7	16.7	19.0	19.0	20.8	19.5	19.9	20.1	18.3
Germany	47.5	40.1	44.3	33.9	43.3	39.1	44.9	46.2	44.3
Hungary	2.1	1.7	1.7	1.8	1.9	1.9	2.0	2.3	1.9
Italy	17.6	15.8	14.9	15.2	16.7	17.6	17.8	17.0	16.3
Netherlands	7.3	7.7	7.4	14.7	30.3	12.3	11.3	12.1	10.8
Poland	9.7	7.7	6.9	8.7	5.2	6.8	8.6	8.7	8.1
Portugal	0.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Romania	5.0	3.9	6.2	7.0	6.6	6.6	6.2	6.1	5.1
Russian Federation	9.1	8.8	8.7	10.1	10.4	9.7	10.6	13.5	12.1
Slovakia	4.7	4.6	5.1	5.7	5.3	5.5	6.4	5.9	4.8
Spain	6.3	6.6	6.2	5.8	6.1	6.2	5.8	5.7	5.6
Turkey	4.1	3.6	5.8	5.5	5.4	4.6	5.6	6.2	6.9
Ukraine	7.4	6.3	5.0	7.6	3.3	3.0	2.0	3.6	3.0
United Kingdom	16.8	15.4	13.3	16.1	15.3	16.1	16.4	17.4	15.3
Other	0.6	0.3	0.5	2.1	2.7	3.6	3.6	3.6	3.6
Total	188.2	168.1	175.1	184.5	204.4	181.6	192.6	196.6	186.4
Total	500.5	499.1	529.6	581.7	673.1	714.1	772.3	838.0	899.6

a Natural weight.

Sources: United Nations Conference on Trade and Development, Trust Fund on Iron Ore, *Iron Ore Statistics,* Geneva; United Nations Conference on Trade and Development, *Review of Iron Ore Statistics,* Geneva; United Nations Conference on Trade and Development, Trust Fund on Iron Ore, *The Iron Ore Market, 2008-2010* , Geneva.

292 Iron ore prices

	Australian export unit value a		Negotiated b	
			Fines	Lump
	A$/t	US$/t	USc/dltu	USc/dltu
1965	8.26	9.22	na	na
1966	8.38	9.34	na	na
1967	8.36	9.32	12.00	15.50
1968	8.67	9.66	12.00	15.50
1969	8.69	9.67	12.00	15.50
1970	8.04	8.97	12.00	15.50
1971	7.69	8.75	11.90	15.10
1972	7.29	8.69	11.80	15.00
1973	6.19	8.81	11.70	14.90
1974	7.04	10.15	13.30	14.80
1975	9.32	12.21	15.40	17.30
1976	10.23	12.53	17.40	19.30
1977	12.06	13.38	17.70	21.20
1978	12.06	13.81	20.20	21.70
1979	12.87	14.39	21.20	24.70
1980	14.59	16.63	23.10	24.30
1981	15.79	18.15	27.60	26.10
1982	19.88	20.20	29.70	31.20
1983	21.23	19.14	34.80	34.20
1984	18.87	16.58	30.45	40.00
1985	22.98	16.07	26.67	34.85
1986	24.33	16.25	27.05	30.87
1987	21.54	15.05	25.97	31.55
1988	18.68	14.60	24.67	28.78
1989	20.53	16.21	23.68	28.78
1990	23.55	18.34	26.76	33.76
1991	25.92	20.12	31.03	39.15
1992	27.18	19.16	33.49	41.48
1993	25.93	17.59	31.85	38.84
1994	21.75	15.84	28.35	35.34
1995	22.49	16.59	27.15	35.89
1996	22.68	17.68	28.78	37.68
1997	24.29	18.01	29.10	37.68
1998	29.23	18.34	29.92	38.79
1999	25.63	16.53	26.63	34.83
2000	28.14	16.38	27.79	36.84
2001	33.38	17.31	28.98	38.03
2002	31.33	17.04	28.28	36.13
2003	27.15	17.69	30.83	39.35
2004	29.40	21.61	35.99	45.93
2005	46.26	35.21	61.72	78.77
2006	58.06	43.63	73.45	93.74
2007	60.92	51.04	80.43	102.64
2008	97.40	82.99	144.67	201.69
2009	na	na	97.00	112.00

a Australia commenced commercial exports of iron ore in 1964. **b** Negotiated Japanese fiscal year hematite ores, fob. USc/dmtu from 2004. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra; International Monetary Fund, *International Financial Statistics,* Washington DC; TEX Report Co. Ltd, *Iron Ore Manual,* Tokyo.

293 Summary of Australian statistics for lead

	Production				Exports d		
	Mine a	Bullion b	Refined c	Consumption	Volume	Value	Price e
	kt	kt	kt	kt	kt	$m	$/t
1964	381	80	203	63	350	73	235.5
1965	368	68	193	64	340	86	276.6
1966	371	75	193	65	354	79	248.8
1967	382	103	191	66	335	80	217.5
1968	389	118	175	66	334	87	218.6
1969	453	156	186	71	342	97	259.2
1970	457	171	180	62	401	123	282.1
1971	404	162	163	63	338	87	239.1
1972	396	139	180	63	320	87	241.3
1973	403	150	190	74	329	107	275.2
1974	375	144	193	72	315	155	389.4
1975	408	152	158	72	298	126	324.2
1976	397	161	182	75	359	157	358.6
1977	432	156	182	77	339	226	531.8
1978	400	152	204	74	369	236	563.2
1979	422	169	215	72	351	437	1 031.2
1980	398	160	200	79	344	570	843.3
1981	388	163	208	66	329	315	662.5
1982	455	182	219	56	397	334	622.4
1983	481	183	196	56	409	383	592.2
1984	441	179	199	59	427	358	515.3
1985	498	183	200	59	430	358	568.1
1986	445	188	156	60	412	361	604.5
1987	489	197	202	62	388	512	867.6
1988	462	191	193	60	420	490	885.7
1989	495	183	212	61	338	382	892.8
1990	565	195	212	58	398	464	1 123.6
1991	579	182	220	56	425	331	801.6
1992	580	231	232	58	542	460	813.6
1993	510	221	221	62	496	334	670.7
1994	505	197	212	78	465	368	810.8
1995	455	164	215	77	479	429	912.6
1996	527	191	204	67	488	489	1 074.7
1997	526	179	203	63	517	431	919.2
1998	618	164	173	54	578	544	914.3
1999	677	162	239	56	696	571	860.2
2000	699	139	223	41	656	576	854.9
2001	759	195	237	41	717	709	1 017.8
2002	694	187	268	39	751	706	1 025.6
2003	688	169	270	38	723	638	950.2
2004	674	140	232	39	715	907	1 356.0
2005	766	159	230	28	815	1 205	1 597.8
2006	668	118	206	27	669	1 368	1 995.5
2007	641	125	202	25	620	2 051	3 282.5
2008	650	167	221	23	604	1 709	2 885.9

a Total metallic content of minerals produced. **b** Metal content. **c** Primary lead production (excludes scrap). **d** Quantities refer to the total metallic content of all ores and concentrates, intermediate products and refined metal; the value of lead contained in other mine and smelter products (for example, in zinc concentrates) is included in the value of the metal in which it is exported. **e** BHAS, 99.97–99.99 per cent, fob/for Port Pirie.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

294 Australian supply and disposal of lead

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Production									
Mine **a**	kt	744	695	677	682	762	642	641	596
Bullion **b**	kt	201	181	143	153	141	114	152	405
Refined									
Primary	kt	275	267	247	234	234	191	203	614
Secondary	kt	34	36	40	39	39	33	39	38
Exports									
Ores and concentrates	kt	380	366	417	417	502	422	308	382
	$m	323.3	288.7	387.2	490.4	710.8	854.5	757.2	616.8
Bullion	kt	153	150	113	164	140	112	169	147
	$m	194.8	164.8	141.9	245.8	235.3	268.1	595.1	431.8
Refined metal	kt	236	269	231	243	244	215	193	261
	$m	210.6	203.4	198.8	305.1	349.7	456.6	674.4	560.1
Consumption c	kt	39	38	38	33	28	32	32	32
Export unit value									
Ores and concentrates	A$/t	850.2	788.9	927.6	1 176.6	1 415.0	2 025.5	2 462.1	1 613.5
Bullion	A$/t	1 276.7	1 097.3	1 253.4	1 498.9	1 679.2	2 401.5	3 528.5	2 935.2
Refined	A$/t	891.2	755.5	860.9	1 256.0	1 431.1	2 120.7	3 494.1	2 147.9

a Total metallic content of minerals produced. **b** Metal content. **c** Refined metal only.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

295 Volume of Australian exports of lead, by destination a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Ores and concentrates b								
Belgium	64	57	50	30	24	34	34	23
China	74	42	64	83	138	127	67	60
Japan	48	31	43	22	43	40	37	45
Korea, Rep. of	100	130	98	98	110	69	80	63
United States	6	na	na	na	na	0	0	0
Other	12	4	8	31	16	8	18	32
Total	304	264	263	264	331	280	235	222
Bullion								
United Kingdom	148	151	133	150	164	120	103	148
Total c	148	151	133	150	164	120	103	148
Refined metal								
Chinese Taipei	30	30	34	12	6	8	5	6
Hong Kong, China	12	13	17	11	15	17	21	6
India	21	20	13	23	32	36	37	29
Indonesia	16	13	17	11	12	11	5	12
Japan	na	na	na	na	na	0	0	0
Korea, Rep. of	28	33	42	49	19	35	44	35
Malaysia	13	15	18	13	9	11	12	19
South Africa	11	12	11	13	12	9	11	12
Thailand	16	21	25	14	26	20	17	16
United States	37	53	20	na	21	9	0	0
Other	23	53	70	65	93	62	72	83
Total	207	263	267	211	245	218	222	218

a Excludes slags and residues and scrap. **b** Lead content of lead ores and concentrates only. **c** Includes a substantial amount of contained silver, for which separate details are not available. **na** Not available.

Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; International Lead–Zinc Study Group, *Lead and Zinc Statistics,* Lisbon, Portugal.

296 World production, consumption, stocks and prices of lead

	Production						
		Refined metal					
	Mine a	Primary	Secondary b	Total	Consumption	Stocks b	Price c
	kt	kt	kt	kt	kt	kt	US$/t
1963	2 543	2 664	796	3 460	3 429	411	172.2
1964	2 604	2 695	910	3 605	3 633	370	275.0
1965	2 784	2 756	958	3 714	3 670	365	312.5
1966	2 937	2 885	940	3 825	3 847	368	258.5
1967	2 961	2 925	959	3 884	3 861	459	224.7
1968	3 034	3 094	1 044	4 138	4 200	338	236.9
1969	3 295	3 894	1 148	4 542	4 431	414	285.6
1970	3 443	3 616	1 287	4 688	4 502	500	303.8
1971	3 476	3 388	1 261	4 614	4 671	479	252.9
1972	3 585	3 491	1 324	4 803	4 863	470	303.8
1973	3 673	3 580	1 426	4 991	5 218	375	428.2
1974	3 642	3 593	1 462	5 042	5 173	523	591.5
1975	3 570	3 442	1 410	4 828	4 742	576	412.4
1976	3 464	3 539	1 487	5 049	5 183	482	452.8
1977	3 646	3 662	1 707	5 372	5 486	466	618.1
1978	3 622	3 697	1 738	5 459	5 583	396	658.0
1979	3 589	3 716	1 903	5 622	5 683	458	1 204.4
1980	3 495	3 600	1 815	5 417	5 429	525	910.3
1981	3 342	3 560	1 798	5 309	5 345	518	736.9
1982	3 366	3 641	1 649	5 210	5 179	560	543.9
1983	3 265	3 637	1 561	5 198	5 189	560	425.1
1984	3 126	3 470	1 829	5 299	5 312	535	444.3
1985	3 248	3 539	1 835	5 374	5 315	427	394.2
1986	3 082	3 345	1 891	5 236	5 380	480	406.9
1987	3 152	3 386	2 047	5 433	5 464	400	596.1
1988	3 151	3 475	2 102	5 577	5 527	443	656.3
1989	3 110	3 362	2 348	5 710	5 558	356	677.4
1990	3 110	3 087	2 369	5 456	5 411	540	820.0
1991	3 097	3 071	2 262	5 325	5 226	583	559.0
1992	3 047	3 238	2 268	5 437	5 174	735	541.0
1993	2 700	3 176	2 303	5 479	5 225	788	406.0
1994	2 707	2 968	2 483	5 462	5 488	750	549.0
1995	2 750	3 091	2 649	5 740	5 849	611	631.0
1996	3 006	3 074	2 784	5 822	5 987	438	774.0
1997	3 030	3 127	2 905	6 033	6 040	440	624.0
1998	2 990	3 095	2 918	6 010	6 049	420	528.6
1999	2 966	3 291	2 990	6 280	6 246	467	502.6
2000	3 046	3 546	3 109	6 655	6 518	440	453.9
2001	3 008	3 521	3 072	6 594	6 510	436	475.9
2002	2 830	3 560	3 110	6 670	6 649	483	452.6
2003	3 111	3 647	3 117	6 762	6 848	407	515.1
2004	3 129	3 776	3 181	6 954	7 294	294	886.5
2005	3 422	4 376	3 247	7 623	7 786	287	967.3
2006	3 525	4 740	3 322	7 924	8 063	270	1 289.2
2007	3 623	4 757	3 425	8 117	8 182	265	2 580.4
2008	3 896	5 172	3 499	8 671	8 665	306	2 092.4

a Metal content. **b** Western world refined metal. **c** Average London Metal Exchange cash price, midday, standard grade, minimum 99.97 per cent.
Sources: ABARE, *Australian Mineral Statistics,* Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; International Lead–Zinc Study Group, *Lead and Zinc Statistics,* Lisbon, Portugal; London Metal Exchange.

297 World lead production, by region and country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Mine								
Africa	150	130	102	117	112	116	94	106
Morocco	77	62	41	44	46	53	36	34
South Africa	51	50	40	37	42	48	42	46
Americas	1 092	1 024	1 029	985	1 020	1 013	1 050	1 126
Canada	154	97	81	77	79	83	75	99
Mexico	149	139	139	118	135	135	137	141
Peru	289	297	308	306	319	313	329	345
United States	463	449	458	439	436	429	444	410
Asia	728	772	1 104	1 154	1 320	1 529	1 605	1 769
China	599	641	955	997	1 142	1 331	1 402	1 543
India	32	32	44	51	60	69	78	84
Kazakhstan	43	43	44	44	31	48	40	39
Korea, Dem. Rep. of	9	10	20	20	20	25	35	33
Other	45	43	41	42	67	56	50	70
Australia	714	658	648	642	715	621	589	594
Europe	324	245	228	230	256	246	284	301
Bulgaria	16	24	17	13	13	10	15	15
Ireland	45	32	50	65	72	62	57	50
Poland	53	57	55	53	51	50	47	48
Sweden	88	44	51	55	60	56	63	64
Other	122	88	55	44	60	68	102	124
Total	3 008	2 830	3 111	3 129	3 422	3 525	3 623	3 896
Refined b								
Africa	125	144	138	100	130	121	121	116
Americas	2 087	2 092	2 092	2 005	2 049	2 080	2 066	2 073
Canada	231	252	223	241	230	250	237	259
Mexico	236	232	239	242	256	253	255	255
Peru	118	120	112	119	122	120	117	114
United States	1 376	1 364	1 392	1 262	1 293	1 303	1 303	1 280
Other	111	124	126	141	148	154	154	165
Asia	2 209	2 361	2 630	3 002	3 463	3 808	3 898	4 400
China	1 195	1 325	1 564	1 934	2 391	2 715	2 788	3 206
India	63	78	71	49	59	104	124	138
Japan	302	286	295	283	275	280	276	279
Kazakhstan	159	152	141	144	135	116	118	145
Korea, Rep. of	211	243	230	243	256	240	260	270
Other	278	277	323	349	347	353	332	362
Australia	271	302	307	273	268	241	238	261
Europe	1 893	1 761	1 589	1 569	1 704	1 661	1 779	1 812
France	230	203	101	104	90	88	88	82
Germany	375	378	357	411	418	379	405	415
Italy	227	196	214	202	211	191	212	200
Spain	122	116	102	105	110	129	128	145
United Kingdom	382	368	320	243	304	298	275	303
Other	557	500	495	504	571	576	671	667
Other countries	9	10	6	5	9	13	15	9
Total	6 594	6 670	6 762	6 954	7 623	7 924	8 117	8 671

a Lead content by analysis of lead ores and concentrates plus the lead content of other ores and concentrates known to be intended for lead recovery. **b** Includes primary and secondary lead.

Source: International Lead–Zinc Study Group, *Lead and Zinc Statistics*, Lisbon, Portugal.

298 Volume of world lead trade, by major countries

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Exports								
Ores and concentrates a								
Australia	304	264	263	264	331	280	235	222
Belgium	58	64	51	68	58	66	58	71
Canada	58	42	8	1	0	0	17	11
Ireland	49	31	49	64	65	57	56	53
Peru	151	179	178	186	227	209	187	252
South Africa	38	45	39	44	51	40	68	65
Sweden	68	36	34	34	35	29	32	38
United States	185	245	257	295	387	302	303	278
Refined lead								
Australia	207	263	267	211	245	218	222	218
Belgium	81	62	75	62	90	71	84	79
Bulgaria	68	58	60	54	69	65	66	80
Canada	144	163	149	150	161	184	168	112
China	448	399	438	448	455	538	244	35
France	61	56	11	5	5	23	12	16
Germany	145	133	100	79	114	122	119	139
Mexico	13	9	12	9	18	22	46	81
Morocco	52	70	58	21	50	41	40	34
Peru	115	109	109	113	118	117	117	116
Sweden	52	58	66	63	63	69	60	49
United Kingdom	89	100	62	38	51	87	68	80
United States	17	31	92	59	46	53	52	69
Imports								
Ores and concentrates a								
Belgium	61	69	48	72	78	72	65	58
Canada	53	68	70	93	60	38	48	65
China	255	216	374	454	567	662	697	795
France	109	88	0	0	0	0	0	0
Germany	146	122	108	121	122	109	127	128
Italy	66	63	52	59	65	39	67	51
Japan	117	117	109	94	102	94	93	110
Korea, Rep. of	145	138	151	143	156	145	154	141
United Kingdom	8	0	0	0	0	0	0	0
Refined lead								
Austria	40	42	38	30	12	15	12	20
Chinese Taipei	121	122	98	125	98	101	78	54
France	74	74	101	86	106	121	115	97
Germany	157	136	134	89	111	127	116	99
Italy	77	107	61	95	67	99	94	86
Korea, Rep. of	131	147	153	157	159	121	110	92
Malaysia	74	77	125	62	34	44	35	33
Singapore	89	86	17	41	50	115	64	71
Spain	114	171	119	150	171	149	138	113
Thailand	48	65	79	77	68	81	68	54
United Kingdom	31	29	20	35	27	51	29	19
United States	270	211	176	199	298	333	267	313

a Metal content.

Source: International Lead–Zinc Study Group, *Lead and Zinc Statistics,* Lisbon, Portugal.

299 Summary of Australian statistics for limestone

	Production	Exports		Imports	
		Volume	Value	Volume	Value
	kt	t	$'000	kt	$'000
1969-70	9 996	na	na	511	708
1970-71	10 335	na	na	713	1 018
1971-72	10 494	na	na	605	1 001
1972-73	11 224	na	na	1 130	1 890
1973-74	11 046	na	na	1 432	2 572
1974-75	10 854	na	na	1 490	3 775
1975-76	10 583	na	na	1 527	4 475
1976-77	10 552	na	na	1 100	4 433
1977-78	10 924	na	na	1 380	7 085
1978-79	11 450	na	na	1 317	6 522
1979-80	11 730	na	na	1 077	4 928
1980-81	11 983	na	na	1 323	6 345
1981-82	12 698	15	1	977	4 344
1982-83	10 131	80	6	833	4 393
1983-84	9 608	35	8	940	5 381
1984-85	8 570	76	8	1 022	7 292
1985-86	10 747	21	10	996	10 794
1986-87	10 803	63	7	859	10 065
1987-88	10 614	30	6	1 004	11 480
1988-89	12 915	24	8	1 038	10 656
1989-90	13 283	15	17	na	9 382
1990-91	12 566	65	16	971	10 194
1991-92	na	258	49	1 161	12 412
1992-93	15 895	1 729	165	819	11 859
1993-94	na	18 893	1 145	1 011	17 156
1994-95	na	463	206	1 038	14 618
1995-96	na	133 080	1 889	991	14 777
1996-97	na	178 758	2 241	1 027	12 712
1997-98	na	226 529	2 724	1 576	15 391
1998-99	na	170 795	2 500	1 066	15 881
1999-00	15 853	229 934	4 515	705	10 540
2000-01	14 743	213 469	4 101	665	10 835
2001-02	15 215	241 526	4 683	595	9 995
2002-03	18 333	242 446	5 132	582	9 170
2003-04	17 152	332 931	6 516	547	8 695
2004-05	18 366	331 515	6 568	473	7 218
2005-06	18 293	177 610	4 254	475	7 130
2006-07	19 143	171 945	4 242	567	7 575
2007-08	na	745	734	693	8 182
2008-09	na	15 608	2 136	438	7 841

a Excludes Western Australia. **b** Excludes Queensland and Western Australia. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, Mining Operations, cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; state mines departments and their equivalents; ABARE.

300 Australian production of limestone, by state

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia
	kt	kt	kt	kt	kt	kt	kt
1961-62	2 471	1 233	706	361	1 422	324	6 518
1962-63	2 565	1 248	711	356	1 599	351	6 829
1963-64	2 743	1 415	803	462	1 567	358	7 348
1964-65	2 850	1 483	818	555	1 587	343	7 637
1965-66	2 738	1 831	886	571	1 478	350	7 854
1966-67	2 749	2 024	1 038	710	1 617	351	8 489
1967-68	2 729	1 849	1 198	745	1 583	504	8 608
1968-69	2 955	2 058	1 240	996	1 801	559	9 608
1969-70	3 155	2 022	1 242	1 201	1 853	523	9 996
1970-71	3 224	2 200	1 470	1 175	1 782	486	10 335
1971-72	3 403	2 127	1 590	1 301	1 484	581	10 494
1972-73	3 656	2 248	1 740	1 227	1 719	634	11 224
1973-74	3 779	2 192	1 758	1 157	1 562	599	11 046
1974-75	3 295	2 255	1 872	1 378	1 508	545	10 854
1975-76	3 096	2 068	1 959	1 104	1 720	635	10 583
1976-77	2 787	2 105	1 952	1 221	1 827	659	10 552
1977-78	2 903	2 245	1 802	1 365	1 890	718	10 924
1978-79	3 315	1 653	2 224	1 369	2 136	754	11 450
1979-80	3 496	2 211	1 951	1 232	1 120	720	11 730
1980-81	3 620	2 249	1 842	1 382	2 119	771	11 983
1981-82	3 417	2 303	2 235	1 762	2 061	910	12 698 **a**
1982-83	2 881	2 143	1 478	1 203	1 826	581	10 131 **b**
1983-84	3 234	2 507	1 634	na	1 469	763	9 608 **c**
1984-85	3 222	2 749	na	na	1 798	800	8 570 **d**
1985-86	3 420	2 776	1 687	na	2 012	852	10 747 **c**
1986-87	3 429	2 463	2 160	na	1 942	809	10 803 **c**
1987-88	3 411	2 580	1 880	na	1 918	826	10 614 **c**
1988-89	3 667	2 684	1 987	1 739	1 918	920	12 915
1989-90	3 972	2 639	2 121	1 699	1 889	963	13 283
1990-91	3 318	2 346	2 309	1 738	1 903	951	12 566
1991-92	3 410	na	2 369	2 054	2 014	na	na
1992-93	3 529	4 566	2 432	2 104	2 429	835	15 895
1993-94	na	na	2 485	2 147	2 666	na	na
1994-95	na	na	2 596	2 195	2 456	na	na
1995-96	3 746	na	na	2 612	1 729	na	na
1996-97	3 953	na	2 127	2 353	2 760	na	na
1997-98	3 887	na	1 994	2 280	2 476	na	na
1998-99	4 194	na	2 407	3 046	2 272	na	na
1999-00	4 164	2 127	2 552	3 008	2 580	1 843	15 853
2000-01	4 031	1 776	689	3 835	2 478	1 894	14 743
2001-02	4 077	992	2 776	3 196	2 164	1 934	15 215
2002-03	4 534	1 228	2 791	4 884	2 852	1 961	18 333
2003-04	4 561	1 201	2 830	4 614	1 983	1 924	17 152
2004-05	4 813	1 133	3 101	4 001	3 475	1 764	18 366
2005-06	4 856	1 316	2 954	4 009	3 124	2 034	18 293
2006-07	4 489	1 565	3 954	3 805	3 411	1 918	19 143
2007-08	4 814	1 996	na	na	3 195	2 109	na

a Includes 10 000 tonnes for the Northern Territory. **b** Includes 18 000 tonnes for the Northern Territory. **c** Excludes Western Australia. **d** Excludes Queensland and Western Australia. **na** Not available.

Sources: ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, Mining Operations, cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; state mines departments and their equivalents; ABARE.

301 Australian imports of limestone and lime

	Limestone				Lime	
			Total			
	Japan	Other	Volume	Value	Volume	Value
	kt	kt	kt	$'000	t	$'000
1969-70	511	0	511	708	na	na
1970-71	713	0	713	1 018	na	na
1971-72	605	0	605	1 001	na	na
1972-73	1 130	0	1 130	1 890	na	na
1973-74	1 432	0	1 432	2 572	na	na
1974-75	1 449	41	1 490	3 775	na	na
1975-76	1 526	0	1 527	4 475	na	na
1976-77	1 099	0	1 100	4 433	na	na
1977-78	1 332	48	1 380	7 085	na	na
1978-79	1 269	48	1 317	6 522	na	na
1979-80	978	99	1 077	4 928	na	na
1980-81	1 275	48	1 323	6 345	3 445	355
1981-82	946	31	977	4 344	8 158	1 050
1982-83	833	0	833	4 393	1 999	273
1983-84	940	0	940	5 381	28 026	2 145
1984-85	1 022	0	1 022	7 292	16 927	1 556
1985-86	996	0	996	10 794	230	103
1986-87	859	0	859	10 065	511	322
1987-88	1 004	0	1 004	11 480	470	211
1988-89	1 038	0	1 038	10 656	467	275
1989-90	na	na	na	9 382	478	372
1990-91	969	3	971	10 194	189	105
1991-92	1 120	41	1 161	12 412	369	114
1992-93	777	42	819	11 859	449	182
1993-94	948	63	1 011	17 156	334	125
1994-95	916	122	1 038	14 618	1 659	374
1995-96	986	5	991	14 777	342	103
1996-97	1 010	17	1 027	12 712	3 444	431
1997-98	1 498	78	1 576	15 391	309	82
1998-99	943	123	1 066	15 881	426	102
1999-00	680	25	705	10 540	289	74
2000-01	615	50	665	10 835	2 786	397
2001-02	553	42	595	9 995	2 848	435
2002-03	525	56	582	9 170	307	106
2003-04	473	75	547	8 695	556	87
2004-05	415	58	473	7 218	1 176	191
2005-06	420	55	475	7 130	618	204
2006-07	503	64	567	7 575	2 605	291
2007-08	648	45	693	8 182	1 108	177
2008-09	387	52	438	7 841	7 587	1 640

na Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

302 Summary of Australian statistics for manganese

	Mine production (ore)	Exports		Prices b
		Ore	Ferromanganese a	
	kt	kt	kt	US$/mtu
1962	73	64	0	76
1963	37	17	0	68
1964	62	54	0	70
1965	102	67	0	78
1966	318	144	0	80
1967	558	320	0	73
1968	744	565	0	64
1969	903	664	0	53
1970	751	631	0	53
1971	1 051	794	0	64
1972	1 165	na	0	62
1973	1 522	1 513	na	76
1974	1 522	1 203	1	116
1975	1 555	1 132	na	139
1976	2 154	1 711	1	142
1977	1 389	811	13	148
1978	1 257	936	19	141
1979	1 724	1 157	32	135
1980	2 020	1 328	23	164
1981	1 449	900	16	172
1982	1 127	906	17	164
1983	1 370	1 004	29	137
1984	1 849	1 460	19	137
1985	2 003	1 403	20	139
1986	1 649	1 145	44	138
1987	1 854	1 306	47	128
1988	1 986	1 553	41	165
1989	2 119	1 620	27	285
1990	1 950	1 600	43	396
1991	1 390	1 075	20	400
1992	1 239	902	46	377
1993	1 887	1 720	59	267
1994	1 985	1 590	76	212
1995	1 905	1 630	73	204
1996	2 109	1 740	59	212
1997	2 136	1 541	41	206
1998	1 501	1 067	57	204
1999	1 899	1 213	na	191
2000	1 658	1 411	na	186
2001	1 961	1 591	na	199
2002	2 189	1 836	na	199
2003	2 564	2 308	na	199
2004	3 431	1 518	na	199
2005	3 830	2 929	na	327
2006	4 549	4 207	na	260
2007	5 265	4 840	na	357
2008	4 812	4 002	na	1 410

a Data became confidential in 1999. **b** Annual average of free market prices; Manganese ore: 48-50 % Mn. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; UNCTAD Commodity Price Bulletin.

303 Australian supply and disposal of manganese

		2001	2002	2003	2004	2005	2006	2007	2008
Production									
Manganese ore	kt	1 961	2 189	2 564	3 431	3 830	4 549	5 265	4 812
Exports									
Manganese ore **s**	kt	1 591	1 836	2 308	1 518	2 929	4 207	4 840	4 002
Imports									
Ferromanganese	kt	5.8	6.0	6.9	9.8	7.3	8.4	9.0	10.7
	$m	6.3	5.4	5.8	12.5	11.4	9.8	10.1	33.8
Ferrosilicon and silicomanganese	kt	28.1	30.7	31.7	33.5	37.3	34.7	41.0	45.1
	$m	33.2	34.5	31.6	35.3	42.2	43.2	49.8	80.0
Japanese negotiated **a**	US$/mtu	2.03	2.11	1.97	2.12	2.45	3.98	3.00	3.00

a High grade ore (48 per cent Mn) to Japan for Japanese fiscal year commencing 1 April. **s** ABARE estimate.
Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

304 World production of manganese ore, by country

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Australia	1 961	2 189	2 564	3 431	3 830	4 549	5 265	4 812
Brazil	1 970	2 529	2 544	3 143	3 200	3 128	1 866	1 700
China	5 300	5 300	5 300	5 300	7 500	8 000	8 000	8 500
Gabon	1 791	1 856	2 000	2 460	2 859	3 000	3 300	3 250
Georgia	98	103	174	219	252	329	325	325
Ghana	1 077	1 136	1 509	1 594	1 715	1 659	1 089	1 167
India	1 483	1 625	2 018	2 149	2 163	1 910	2 348	2 701
Kazakhstan	1 385	1 835	2 361	2 318	2 233	2 531	2 482	2 198
Mexico	259	172	294	357	350	336	401	421
South Africa	3 271	3 082	3 799	4 207	4 612	5 213	5 341	6 807
Ukraine	2 740	2 762	2 523	2 278	2 226	2 245	2 390	1 975
Others	416	690	254	331	419	384	510	653
Total	21 752	23 279	25 340	27 786	31 357	33 283	33 317	34 510

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; World Bureau of Metal Statistics, *World Metal Statistics Yearbook,* London.

305 Summary of Australian statistics for nickel

	Production a							
		Smelter and refinery b						
	Mine	Intermediate products c	Refined nickel class 2 d	Refined nickel class 1 e	Exports volume fs	Exports value s	Imports	Price g
	kt	kt	kt	kt	kt	$m	$m	A$/t
1971	35.5	0.0	0.0	15.0	na	na	11.9	2 576.9
1972	35.5	0.0	0.0	16.5	na	na	8.3	2 583.7
1973	40.1	5.8	0.0	19.8	na	na	13.3	2 370.3
1974	45.9	14.6	0.0	20.5	na	96.0	12.8	2 653.7
1975	75.8	32.2	10.3	22.6	na	172.6	12.1	3 489.6
1976	82.5	32.0	18.0	21.8	na	260.9	18.5	4 059.6
1977	85.9	33.2	17.4	16.7	na	252.5	21.0	4 691.2
1978	82.4	32.7	18.7	18.6	na	222.1	25.1	4 026.4
1979	69.7	38.7	17.4	21.9	na	327.2	21.6	5 354.2
1980	74.3	32.5	17.9	17.4	na	427.0	30.4	5 728.3
1981	74.3	32.9	19.3	23.2	na	388.1	21.4	5 197.7
1982	87.6	49.4	20.6	25.3	na	393.7	19.7	4 771.7
1983	76.6	49.8	12.3	29.5	na	321.6	7.2	5 205.2
1984	76.9	51.1	13.1	25.6	na	386.0	15.2	5 420.7
1985	85.8	51.6	17.9	23.0	na	498.6	17.5	7 020.7
1986	76.7	49.1	20.4	21.6	na	440.3	22.3	5 813.7
1987	74.6	47.8	19.9	24.6	na	390.0	24.1	6 973.9
1988	58.0	40.0	21.1	20.3	62.1	633.5	13.7	18 164.3
1989	63.1	41.6	21.9	18.3	65.0	851.7	20.2	16 886.4
1990	67.8	49.2	22.3	25.2	73.7	666.5	30.2	11 422.9
1991	67.6	54.8	24.9	27.8	82.7	682.5	37.6	10 511.2
1992	57.9	47.8	25.9	29.5	75.4	768.7	48.5	9 823.6
1993	106.3	43.9	26.0	35.4	95.3	574.3	49.4	7 801.1
1994	193.2	68.4	23.0	43.5	111.4	765.0	57.3	8 702.9
1995	192.1	75.9	18.6	58.3	122.9	1 188.6	71.8	11 154.4
1996	183.2	76.8	12.6	61.4	132.0	1 081.0	70.0	9 628.5
1997	185.3	85.8	14.8	58.9	144.4	1 094.4	66.0	9 341.5
1998	192.1	100.1	15.3	64.3	171.6	985.7	66.0	7 376.6
1999	183.4	79.7	10.2	73.4	149.9	1 117.9	60.4	9 327.4
2000	169.2	100.9	10.2	98.7	187.8	2 366.8	80.8	14 851.6
2001	195.5	35.0	8.5	115.5	197.4	2 076.2	88.1	11 476.6
2002	188.2	32.5	9.5	120.8	200.3	2 199.4	89.8	12 448.7
2003	191.2	46.5	11.8	115.8	213.1	2 686.7	92.1	14 766.4
2004	186.8	42.9	10.2	112.4	204.0	2 673.2	104.5	18 826.6
2005	188.9	55.5	9.7	112.6	220.9	2 984.8	112.2	19 365.0
2006	185.0	48.0	11.4	105.1	199.8	4 242.1	180.2	32 290.0
2007	184.9	52.8	14.2	100.3	194.8	7 144.4	282.9	44 482.4
2008	199.2	31.1	19.4	89.5	209.8	4 172.7	223.0	24 782.9

a Total metallic content of minerals produced. **b** Includes imported ores for processing at the Yabulu refinery in Queensland. **c** Includes matte and speiss for further refining. Incomplete series from 2001. **d** Product with a nickel content of less than 99 per cent. Includes ferronickel, oxides and oxide sinter. Excludes nickel–cobalt sulphides. **e** Products with a nickel content of 99 per cent or more. **f** Total metallic content. **g** London Metal Exchange average cash settlement price for refined nickel, melting grade, in Australian dollar equivalent. **s** ABARE estimate. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* AGPS, Canberra; International Nickel Study Group, *World Nickel Statistics,* Lisbon, Portugal; World Bureau of Metal Statistics, *World Metal Statistics,* London; London Metal Exchange.

306 World production, consumption and prices of nickel

	Production				
	Mine s	Smelter/refinery s	Stocks a	Consumption s	Price b
	kt	kt	kt	kt	US$/t
1962	398	395	na	358	1 761.0
1963	393	374	na	384	1 742.0
1964	422	411	na	441	1 742.0
1965	462	440	na	473	1 735.0
1966	443	429	na	512	1 739.0
1967	508	493	na	524	1 936.0
1968	580	524	na	537	2 075.0
1969	547	517	na	549	2 363.0
1970	702	645	na	625	2 846.0
1971	718	655	na	577	2 932.0
1972	662	624	na	618	3 080.0
1973	719	703	na	696	3 373.0
1974	792	765	na	751	3 825.0
1975	794	741	171	627	4 570.0
1976	814	790	179	728	4 973.0
1977	830	767	247	701	5 203.0
1978	684	651	149	755	4 609.0
1979	721	720	87	811	5 986.0
1980	786	788	204	774	6 530.3
1981	765	762	218	718	5 973.3
1982	687	695	202	722	4 848.5
1983	718	745	183	761	4 692.0
1984	815	822	126	852	4 761.5
1985	879	848	131	834	4 910.3
1986	844	821	126	838	3 883.0
1987	889	857	92	909	4 871.3
1988	928	900	85	930	14 191.8
1989	972	918	97	911	13 334.8
1990	983	931	88	926	8 895.0
1991	946	921	113	886	8 158.3
1992	897	886	176	809	6 923.5
1993	908	809	226	785	5 293.0
1994	877	825	236	871	6 339.2
1995	1 007	919	148	984	8 228.8
1996	1 051	953	144	943	7 506.0
1997	1 073	1 012	156	1 016	6 927.2
1998	1 117	1 034	157	1 009	4 629.1
1999	1 058	1 028	124	1 082	6 014.8
2000	1 177	1 082	93	1 123	8 645.6
2001	1 225	1 160	100	1 104	5 951.0
2002	1 248	1 180	97	1 175	6 769.9
2003	1 264	1 192	99	1 219	9 621.6
2004	1 327	1 252	98	1 246	13 835.9
2005	1 388	1 293	112	1 248	14 739.6
2006	1 486	1 352	87	1 392	24 262.3
2007	1 595	1 430	125	1 326	37 273.1
2008	1 509	1 396	155	1 278	21 115.8

a Commercial stocks excluding those held by the former Soviet Union. **b** London Metal Exchange cash settlement price for refined nickel, melting grade. Prior to 1980, US producer price for electrolytic cathodes. **s** ABARE estimates prior to 1989. **na** Not available.

Sources: International Nickel Study Group, *World Nickel Statistics*, Lisbon, Portugal; World Bureau of Metal Statistics, *World Metal Statistics*, London; ABARE; London Metal Exchange.

307 World nickel smelter/refinery production, by region and country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa	52.9	55.0	54.0	54.8	55.5	56.0	48.8	42.1
South Africa b	33.4	32.7	37.6	41.4	42.4	41.6	34.4	30.2
Zimbabwe	19.5	22.3	16.4	13.3	13.1	14.4	14.4	11.9
Americas	274.1	290.4	281.4	313.2	308.4	324.5	330.7	312.9
Brazil	22.5	23.7	24.6	26.2	30.3	31.2	31.5	30.2
Canada	140.6	144.5	124.4	151.5	139.7	153.7	162.6	175.8
Colombia	38.4	44.0	47.9	48.8	52.8	51.3	49.4	41.6
Cuba	41.2	39.2	40.1	39.6	39.6	42.0	41.5	35.6
Dominican Republic	22.3	23.5	27.2	29.5	28.7	29.7	29.1	18.8
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Venezuela	9.0	15.5	17.2	17.5	17.4	16.6	16.6	10.9
Asia	213.5	220.3	238.9	249.4	269.8	303.0	379.3	376.1
China	49.5	53.5	64.7	72.6	98.0	136.0	199.3	200.3
Indonesia	10.3	8.9	8.9	7.3	6.4	14.5	18.5	17.6
Japan	153.7	157.9	165.3	169.5	165.5	152.5	161.5	158.2
Europe	445.5	433.7	451.4	468.5	485.6	500.1	515.3	515.8
Austria	1.5	1.0	1.0	1.3	0.6	0.7	0.9	0.8
Finland	54.6	55.3	51.0	49.6	40.8	47.3	55.0	56.7
France	13.0	11.4	11.1	9.6	12.7	13.3	13.2	13.2
Greece	17.7	19.2	18.0	18.1	19.2	17.7	18.7	16.7
Macedonia c	3.0	5.2	5.5	5.1	7.8	10.9	15.0	15.1
Norway	68.2	68.5	77.2	71.4	84.9	80.9	87.6	88.7
United Kingdom	33.8	33.8	24.2	38.6	37.1	38.0	34.1	41.0
Serbia	0.0	0.0	0.0	0.0	0.0	0.0	0.8	7.1
Russian Federation	252.2	239.3	263.4	262.8	270.0	273.3	272.0	257.7
Ukraine	1.5	0.0	0.0	12.0	12.5	18.0	18.0	18.8
Oceania	170.0	179.0	178.3	165.6	169.0	165.1	159.5	146.4
Australia	124.1	130.4	127.6	122.6	122.3	116.5	114.5	108.9
New Caledonia (Fr)	45.9	48.7	50.7	43.0	46.7	48.6	45.0	37.5
World total	1 160.0	1 180.1	1 192.2	1 252.1	1 293.2	1 351.8	1 430.3	1 395.8

a Includes the metal content of smelter/refinery production of electrolytic nickel, nickel pellets, briquettes, steel making powder, nickel salts, chemical grade nickel oxide, ferronickel, nickel oxide sinter and utility nickel. **b** Includes Bophuthatswana production. **c** Former Yugoslavian Republic of Macedonia.
Sources: International Nickel Study Group, *World Nickel Statistics,* Lisbon, Portugal; World Bureau of Metal Statistics, *World Metal Statistics,* London; ABARE.

308 World nickel mine production, by region and country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa	67.7	73.2	80.9	73.5	76.7	79.1	71.5	74.5
Botswana	23.9	26.7	31.0	25.2	27.7	30.0	27.6	34.9
South Africa **b**	36.4	38.8	42.1	40.5	42.4	41.6	37.9	31.7
Zimbabwe	7.4	7.8	7.8	7.8	6.6	7.5	6.0	7.9
Americas	391.5	398.8	393.7	424.8	446.8	494.5	517.8	475.2
Brazil **c**	34.2	36.8	37.8	37.8	36.0	42.6	38.4	38.4
Canada	194.1	189.3	162.8	186.5	198.4	233.5	254.8	259.6
Colombia	53.0	58.5	70.8	75.1	89.0	94.1	100.5	77.0
Cuba	76.5	75.2	78.0	78.0	77.4	78.0	78.4	70.5
Dominican Republic **c**	22.3	23.5	27.2	30.0	29.0	29.7	29.1	18.8
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Venezuela	11.4	15.5	17.0	17.5	17.0	16.6	16.6	10.9
Asia	176.7	200.3	226.4	222.7	233.1	278.8	350.6	328.8
China	51.5	54.6	60.6	63.0	59.8	68.9	67.5	68.4
Indonesia	102.1	121.6	143.9	142.7	150.0	150.0	188.4	180.3
Kazakhstan	0.0	0.0	0.0	0.0	1.2	1.0	1.2	0.8
Philippines	23.1	24.1	22.0	17.0	22.2	58.9	93.5	79.3
Europe	265.8	267.5	270.7	300.8	328.9	344.8	354.3	328.1
Finland	2.7	2.5	3.4	3.4	3.4	3.0	3.6	3.3
Greece **c**	20.8	22.7	21.4	21.7	23.2	21.7	21.2	18.6
Macedonia **d**	3.0	5.2	5.5	5.3	7.8	10.9	15.0	15.1
Norway	2.8	2.1	0.3	0.4	0.3	0.4	0.0	0.4
Russian Federation	235.0	235.0	240.0	264.0	280.0	286.0	288.0	267.5
Serbia	0.0	0.0	0.0	0.0	0.0	0.0	0.8	7.1
Ukraine	1.5	0.0	0.0	6.0	6.0	12.0	12.0	8.0
Oceania	313.1	288.1	303.2	305.0	300.8	288.0	310.1	301.8
Australia	195.5	188.2	191.2	186.8	188.9	185.0	184.9	199.2
New Caledonia (Fr)	117.6	99.9	112.0	118.3	112.0	103.0	125.2	102.6
World total	1 224.5	1 248.2	1 263.8	1 326.8	1 388.2	1 486.3	1 595.1	1 509.3

a Nickel content of all ores and concentrates. **b** Includes Bophuthatswana production. **c** Figures refer to nickel content of ferronickel. **d** Former Yugoslavian Republic of Macedonia.

Sources: International Nickel Study Group, *World Nickel Statistics,* Lisbon, Portugal; World Bureau of Metal Statistics, *World Metal Statistics,* London; ABARE.

309 World primary refined nickel consumption, by region and country [a]

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa	31.2	35.9	45.5	45.5	32.0	42.0	33.6	27.0
South Africa	30.0	34.7	44.0	44.0	30.5	40.5	31.5	24.9
Other	1.2	1.2	1.5	1.5	1.5	1.5	2.1	2.1
Americas	170.7	159.7	159.0	164.6	173.7	182.7	171.4	160.5
Brazil	21.1	23.6	25.3	23.3	23.5	24.6	23.0	20.7
Canada	14.8	10.5	10.0	8.0	8.7	7.8	7.6	7.0
Mexico	2.0	1.6	2.0	2.2	2.5	2.7	3.2	3.0
United States	129.1	120.6	117.6	128.6	136.1	144.8	134.6	126.6
Other	3.2	2.9	4.1	2.5	2.9	2.8	3.0	3.2
Asia	441.5	501.2	550.4	579.6	592.1	677.7	690.9	688.3
China	83.0	93.6	125.0	150.0	190.0	255.0	330.0	360.0
Chinese Taipei	81.0	91.0	90.9	85.0	76.0	88.0	69.5	55.0
Hong Kong, China	4.5	4.7	5.5	5.8	5.0	5.0	4.8	4.8
India	25.0	25.5	26.0	27.4	30.0	33.0	33.0	32.0
Japan	161.5	191.2	192.8	192.5	172.8	183.2	169.0	157.6
Korea, Rep. of	75.4	83.2	98.0	103.2	99.0	93.0	62.5	56.0
Thailand	2.2	2.2	2.0	2.4	2.6	2.6	2.8	2.8
Turkey	1.9	1.8	2.0	2.4	3.3	3.2	3.0	2.8
Other	7.0	8.0	8.2	10.9	13.4	14.7	16.3	17.3
Europe	458.3	476.0	461.0	454.3	447.2	485.8	414.3	399.6
Austria	5.6	4.8	5.0	5.5	6.5	7.0	8.1	8.4
Belgium–Luxembourg	28.2	32.5	39.0	40.7	46.0	54.0	41.1	43.2
Czech Republic	2.4	2.0	2.0	2.3	1.8	2.0	3.0	2.5
Finland	38.6	40.6	52.0	53.0	50.0	55.0	36.0	34.5
France	51.0	55.3	43.6	34.0	30.5	32.7	28.9	29.7
Germany	110.2	106.6	99.7	99.6	96.1	105.5	96.5	90.9
Italy	57.0	66.0	64.9	61.9	60.0	68.0	53.8	45.1
Norway	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Poland	2.4	2.4	2.0	1.9	1.8	2.1	2.3	2.4
Russian Federation	28.0	27.0	25.6	26.0	26.0	24.7	26.0	27.0
Spain	43.8	47.0	47.0	45.0	45.0	51.0	44.0	40.0
Sweden	36.6	37.9	34.8	36.0	34.5	38.0	36.5	31.5
Switzerland	0.5	0.5	0.7	0.7	0.7	0.7	0.8	0.8
Ukraine	4.8	4.8	4.5	4.1	4.7	5.5	5.4	5.0
United Kingdom	37.5	34.4	28.6	33.3	32.8	30.0	30.2	28.4
Other	10.0	12.5	10.2	8.5	9.1	7.9	1.3	8.5
Oceania	2.0	2.0	2.7	2.0	2.8	2.9	2.9	2.9
Australia	1.6	1.6	2.3	1.6	2.4	2.5	2.5	2.5
New Zealand	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
World total	1 103.7	1 174.8	1 218.6	1 245.9	1 248.4	1 392.3	1 326.0	1 278.3

a Metal content. The consumption of primary unwrought nickel including refined nickel and nickel contained in other smelter/refinery products.

Sources: International Nickel Study Group, *World Nickel Statistics,* Lisbon, Portugal; World Bureau of Metal Statistics, *World Metal Statistics,* London; ABARE.

310 Summary of Australian statistics for primary petroleum a

	Production of crude oil condensate and LPG	Exports of crude oil and other refinery feedstocks b	Exports of liquefied petroleum gas	Imports of crude oil and other refinery feedstocks	Production of natural gas and ethane c	Exports of liquefied natural gas ds	Imports of natural gas
	ML	ML	ML	ML	Gm^3	Mt	kt
1966-67	645	na	na	22 543	0.00	0	0
1967-68	1 902	na	na	23 013	0.01	0	0
1968-69	2 236	na	na	23 897	0.06	0	0
1969-70	4 919	na	na	23 176	0.78	0	0
1970-71	15 688	241	661	13 913	1.96	0	0
1971-72	20 266	1 090	1 193	11 174	2.63	0	0
1972-73	22 464	330	1 672	10 004	3.74	0	0
1973-74	25 223	305	1 984	10 469	4.45	0	0
1974-75	25 306	234	2 000	10 171	4.88	0	0
1975-76	26 059	243	1 950	9 702	5.45	0	0
1976-77	27 128	206	2 253	10 116	6.50	0	0
1977-78	28 287	221	2 855	11 214	7.18	0	0
1978-79	28 067	371	3 031	10 407	8.01	0	0
1979-80	26 823	127	2 764	11 263	9.24	0	0
1980-81	26 077	86	2 569	11 450	10.66	0	0
1981-82	25 419	44	2 622	12 460	11.80	0	0
1982-83	24 978	61	2 334	11 780	11.92	0	0
1983-84	29 960	1 056	2 851	8 553	12.49	0	0
1984-85	34 820	5 819	2 620	7 294	13.37	0	0
1985-86	35 750	5 051	2 977	6 186	14.69	0	0
1986-87	35 431	5 702	2 675	7 724	15.08	0	0
1987-88	35 187	6 453	2 402	9 577	15.68	0	0
1988-89	32 080	4 789	2 177	12 058	16.15	0	0
1989-90	36 003	7 202	1 983	11 603	19.84	2.01	0
1990-91	35 755	8 830	1 507	13 389	20.79	3.40	0
1991-92	35 171	8 967	1 568	15 332	22.21	4.66	0
1992-93	34 776	10 098	1 483	19 421	23.57	4.98	0
1993-94	32 960	9 538	1 290	20 296	25.67	6.03	0
1994-95	35 158	11 445	1 189	20 639	28.57	7.02	0
1995-96	34 365	10 899	1 469	23 703	29.27	7.48	0
1996-97	35 302	12 401	2 421	24 768	28.85	7.49	0
1997-98	38 862	14 785	2 824	25 017	30.02	7.65	0
1998-99	32 265	14 291	2 486	29 729	30.43	7.82	0
1999-00	42 279	20 877	2 857	26 936	31.02	7.92	0
2000-01	44 398	24 044	2 785	26 489	31.48	7.53	0
2001-02	42 467	23 936	3 211	27 308	32.09	7.60	0
2002-03	39 704	20 950	3 194	27 959	33.39	7.83	0
2003-04	35 352	17 526	2 916	23 499	33.49	7.91	0
2004-05	31 939	15 731	2 844	26 056	37.74	10.59	0
2005-06	29 038	13 026	2 800	24 418	39.31	12.03	953
2006-07	33 359	15 965	2 824	25 345	41.24	14.33	4 268
2007-08	29 760	15 975	2 589	26 223	42.15	13.68	4 032
2008-09	31 718	16 588	2 500	24 303	44.67	15.41	4 752

a Export volumes for primary petroleum up to June 1977 are direct from ABS overseas trade reports. As a result of changes in ABS classifications from July 1977, other statistics are taken from Department of Resources, Energy and Tourism and ABARE publications. **b** Before 1983 exports were principally semiprocessed and re-export feedstocks. **c** Includes ethane, methane, noncommercial natural gas and coal seam gas. **d** 1 million tonnes (Mt) of LNG is approximately equal to 1.31 billion cubic metres (Gm^3) of gas; production began in 1989-90. **s** ABARE estimate. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Overseas Trade, Part 1 – Exports and Imports,* cat. no. 5409.0, Canberra; DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics),* Canberra.

311 Summary of Australian statistics for refined petroleum products a

	Production	Domestic consumption b	Imports Volume	Imports Value	Exports c Volume	Exports c Value	Bunkers d
	ML	ML	ML	$m	ML	$m	$m
1965-66	20 353	20 953	1 899	na	1 099	na	na
1966-67	23 110	22 734	1 227	na	1 365	na	na
1967-68	25 229	24 837	1 123	na	1 374	na	na
1968-69	26 651	27 423	1 741	na	970	na	na
1969-70	27 884	29 317	2 860	na	1 440	na	na
1970-71	28 846	30 355	3 256	63	1 740	23	43
1971-72	29 524	31 754	3 978	78	2 321	46	44
1972-73	30 575	32 518	4 126	75	1 846	42	42
1973-74	33 853	36 587	4 422	133	2 488	96	70
1974-75	34 066	36 637	4 083	247	1 954	146	136
1975-76	34 106	36 991	4 009	290	2 192	144	137
1976-77	35 744	39 042	4 193	347	1 904	190	190
1977-78	36 992	39 813	4 104	360	1 956	224	na
1978-79	36 671	38 921	4 215	450	2 344	306	na
1979-80	36 654	39 315	4 540	710	1 882	427	na
1980-81	35 292	37 937	3 748	770	1 990	577	na
1981-82	35 877	37 676	2 939	629	1 955	539	na
1982-83	34 692	35 511	2 666	608	2 427	707	438
1983-84	35 586	36 929	2 526	559	2 925	803	394
1984-85	35 924	37 204	2 823	683	2 207	641	460
1985-86	35 171	36 260	2 761	712	2 383	673	437
1986-87	34 826	37 713	4 078	732	2 270	459	338
1987-88	37 579	39 395	3 319	629	2 738	563	406
1988-89	38 210	41 173	3 342	664	2 769	520	371
1989-90	39 424	41 678	3 621	930	2 422	520	416
1990-91	40 487	41 468	1 819	727	2 952	787	631
1991-92	41 440	41 804	2 146	455	3 819	769	522
1992-93	42 933	43 349	3 940	634	3 711	830	568
1993-94	43 104	44 561	3 057	606	3 507	747	512
1994-95	44 421	46 746	3 479	676	3 289	719	511
1995-96	46 343	48 193	3 522	765	4 101	933	586
1996-97	46 872	47 829	4 286	955	5 041	1 147	547
1997-98	47 400	48 395	3 263	766	4 941	1 097	505
1998-99	47 030	48 973	4 129	868	4 236	866	397
1999-00	47 630	50 450	4 632	1 375	4 116	1 202	666
2000-01	47 690	50 010	4 781	1 845	4 564	1 844	899
2001-02	46 677	51 260	4 655	1 625	3 409	1 234	760
2002-03	46 723	51 906	5 497	2 050	3 140	1 198	775
2003-04	43 486	52 906	10 542	3 594	2 474	918	696
2004-05	44 555	54 017	11 188	5 121	1 846	844	951
2005-06	40 679	55 151	14 172	8 608	2 082	1 195	1 322
2006-07	43 652	na	14 018	7 784	1 752	1 098	1 295
2007-08	44 086	na	17 982	12 730	1 807	1 323	1 457
2008-09	44 111	na	19 697	13 133	1 162	787	1 537

a Export and import values up to June 1977 are direct from ABS overseas trade reports. As a result of changes in ABS classifications from July 1977, other statistics are taken from Department of Industry, Energy and Tourism and ABARE publications, with ABARE estimates of import values used from 1977-78 to 1980-81. **b** Includes fuels not marketed commercially and domestic sales of all ships and aircraft stores. **c** Excludes LPG. **d** Ships' and aircraft stores. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Overseas Trade, Part 1 – Exports and Imports,* cat. no. 5409.0, Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics).*

312 Australian production of primary petroleum

	Crude oil a	Condensate b	Crude oil and condensate	Liquefied petroleum gas	Natural gas c	Ethane
	ML	ML	ML	ML	Gm^3	Gm^3
1969-70	4 882	na	4 882	37	0.78	0.00
1970-71	14 936	na	14 936	752	1.96	0.00
1971-72	19 038	na	19 038	1 228	2.63	0.00
1972-73	20 668	na	20 668	1 796	3.71	0.03
1973-74	23 193	na	23 193	2 030	4.40	0.05
1974-75	23 134	na	23 134	2 172	4.82	0.06
1975-76	23 827	na	23 827	2 232	5.38	0.07
1976-77	24 598	na	24 598	2 530	6.40	0.10
1977-78	25 369	na	25 369	2 918	7.05	0.13
1978-79	24 896	na	24 896	3 171	7.86	0.14
1979-80	23 711	na	23 711	3 112	9.09	0.15
1980-81	23 093	na	23 093	2 984	10.52	0.14
1981-82	22 386	na	22 386	3 033	11.65	0.15
1982-83	21 085	984	22 069	2 909	11.75	0.17
1983-84	25 732	1 096	26 828	3 132	12.31	0.18
1984-85	29 241	1 715	30 956	3 864	13.17	0.20
1985-86	29 782	1 952	31 734	4 016	14.50	0.20
1986-87	29 457	2 047	31 504	3 927	14.90	0.18
1987-88	28 551	2 713	31 264	3 923	15.48	0.20
1988-89	25 574	2 681	28 255	3 825	15.96	0.19
1989-90	28 744	3 250	31 994	4 009	19.65	0.19
1990-91	28 661	3 294	31 955	3 800	20.61	0.18
1991-92	27 780	3 529	31 309	3 862	22.02	0.19
1992-93	27 037	3 666	30 703	4 073	23.37	0.19
1993-94	25 216	3 730	28 945	4 015	25.48	0.19
1994-95	26 795	4 395	31 190	3 969	28.37	0.20
1995-96	24 058	6 193	30 251	4 113	29.06	0.20
1996-97	24 164	6 885	31 049	4 253	28.42	0.43
1997-98	25 779	8 183	33 961	4 901	29.45	0.57
1998-99	19 937	7 960	27 897	4 368	29.87	0.56
1999-00	29 594	7 861	37 447	4 832	30.41	0.61
2000-01	32 671	7 169	39 839	4 558	31.00	0.48
2001-02	29 945 s	7 875 s	37 820 s	4 647	31.68	0.41
2002-03	26 492 s	8 532 s	35 023 s	4 681	32.98	0.41
2003-04	23 198 s	7 515 s	30 713 s	4 639	33.11	0.38
2004-05	20 259 s	7 052 s	27 311 s	4 628	37.34	0.41
2005-06	17 247 s	7 069 s	24 316 s	4 722	38.85	0.46
2006-07	21 405 s	7 404 s	28 809 s	4 550	40.77	0.47
2007-08	18 832	6 957	25 789	3 971	41.65	0.50
2008-09	20 109	7 680	27 788	3 930	44.10	0.56

a 58 030 million litres equals 1 million barrels a day. **b** Before 1982-83, condensate production is included in crude oil. **c** Includes methane, noncommercial natural gas and coal seam gas. **s** ABARE estimate. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics*, Canberra; Bureau of Resource Economics, *Australian Energy Statistics, Australia: 1961-62 to 1998-99*, AGPS, Canberra; DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics*), Canberra.

313 Australian production of refined petroleum products

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	ML	ML	ML	ML	ML	ML	ML	ML	ML
Automotive gasoline	17 886	17 999	17 984	17 375	17 913	16 528	17 732	17 079	17 159
Automotive diesel oil	13 212	13 064	13 335	12 544	12 822	10 154	11 055	12 177	12 231
Aviation turbine fuel	5 837	5 390	5 149	4 964	5 325	5 216	5 332	5 182	5 494
Fuel oil	1 951	1 684	1 441	1 105	1 092	1 048	942	979	872
Liquefied petroleum gas **a**	1 795	1 718	1 657	1 062	995	1 125	1 387	1 515	1 477
Industrial and marine diesel fuel	98	105	117	84	22	31	21	3	13
Bitumen	693	725	751	678	1 091	831	1 356	1 452	1 294
Lubricants	641	564	521	259	202	163	146	121	114
Aviation gasoline	137	147	134	114	144	119	119	119	105
Heating oil	194	192	195	118	106	102	86	102	69
Other **a**	5 245	5 088	5 439	5 183	4 844	5 363	5 475	5 356	5 283
Total products	47 690	46 677	46 723	43 486	44 555	40 679	43 652	44 086	44 111

a Includes byproducts of petrochemical and downstream processing.

Sources: ABARE, *Australian Energy Projections 1961-62 to 1998-99*, Canberra; DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics*), Canberra.

314 Australian consumption of petroleum

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Crude oil and other refinery feedstock									
Stock	days **a**	29	26	26	23	23	23	23	na
Refinery input	ML	42 911	44 548	39 949	40 334	36 895	39 465	38 346	38 808
Refined products									
Automotive gasoline	ML	18 669	18 874	19 962	19 876	19 048	19 251	19 234	18 734
Automotive diesel oil	ML	13 441	13 888	14 461	15 185	15 804	17 028	18 245	18 587
Aviation turbine fuel	ML	4 603	4 250	4 329	4 730	5 359	5 837	6 070	6 173
Fuel oil	ML	1 777	1 423	1 466	1 595	1 586	1 513	1 583	1 423
Liquefied petroleum gas	ML	4 178	3 851	3 569	3 386	4 050	4 038	4 024	3 996
Industrial and marine diesel fuel	ML	46	18	17	15	19	15	11	16
Bitumen	ML	755	671	742	812	805	808	785	809
Lubricants	ML	555	569	618	470	451	421	435	437
Aviation gasoline	ML	97	90	90	91	86	90	88	96
Heating oil	ML	50	48	46	34	25	15	12	7
Kerosene	ML	75	24	22	12	27	32	43	25
Other	ML	1 068	1 012	953	939	973	699	258	311
Total products	ML	45 313	44 718	46 276	47 145	48 234	49 746	50 788	50 614

a Days of forward consumption.

Sources: DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics*), Canberra.

315 Australian production of primary petroleum, by basin

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	ML	ML	ML	ML	ML	ML	ML	ML
Crude oil								
Adavale	0	2	0	0	0	0	0	0
Amadeus	72	59	136	132	53	55	50	55
Bonaparte	5 987	4 806	3 037	1 868	1 403	1 470	826	812
Bowen–Surat	39	27	28	24	23	21	16	19
Canning	4	4	3	2	2	2	4	7
Carnarvon								
Barrow Island	580	547	502	448	390	390	356	728
North West Shelf	9 315	8 842	8 564	7 859	4 524	5 850	4 063	2 961 s
Other	4 855	4 284	3 688	3 831	5 854	7 044	7 202	8 307 s
Cooper–Eromanga								
Queensland	432	450	387	529	432	791	901	854
South Australia	490	413	445	401	489	1 116	1 354	2 025
Gippsland	8 164	6 937	6 019	4 647	3 681	3 850	3 392	3 922
Otway	0	0	0	0	0	0	0	0
Perth	5	119	387	517	395	816	668	418
Total	29 945	26 492	23 198	20 259	17 247	21 405	18 832	20 109 s
Condensate								
Adavale	0	1	0	0	0	0	0	0
Amadeus	0	0	0	0	0	0	0	0
Bonaparte	0	0	46	307	394	394	33	0 s
Bowen–Surat	13	12	15	23	20	21	19	21
Canning	0	0	0	0	0	0	0	0
Carnarvon								
Barrow Island	366	349	203	120	0	8	0	0
North West Shelf	5 869	6 686	5 840	5 041	5 265	5 692	5 572	6 436 s
Other	110	101	142	250	202	134	143	44
Cooper–Eromanga								
Queensland	216	239	242	270	205	167	163	163
South Australia	378	349	176	221	208	239	193	176
Gippsland	898	769	836	813	770	744	804	738
Otway	23	23	13	7	3	2	28	99
Perth	1	2	1	1	2	3	2	2
Total	7 875	8 532	7 515	7 052	7 069	7 404	6 957	7 680 s
Liquefied petroleum gas								
Adavale	0	0	0	0	0	0	0	0
Amadeus	0	0	0	0	0	0	0	0
Bonaparte	0	0	0	0	0	0	0	0
Bowen–Surat	18	18	20	24	23	24	24	24
Canning	0	0	0	0	0	0	0	0
Carnarvon								
Barrow Island	0	0	0	0	0	0	0	0
North West Shelf	2 028	1 911	1 817	1 963	2 160	2 067	1 500	1 582
Other	0	0	0	0	0	0	0	0
Cooper–Eromanga								
Queensland	0	0	0	0	0	0	0	0
South Australia	768	783	827	663	597	551	557	560
Gippsland	1 799	1 970	1 976	1 977	1 942	1 908	1 883	1 628
Otway	0	0	0	0	0	0	6	136
Perth	0	0	0	0	0	0	0	0
Total	4 612	4 682	4 639	4 628	4 722	4 550	3 971	3 929

Continued

315 Australian production of primary petroleum, by basin continued

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	GL	GL	GL	GL	GL	GL	GL	GL
Naturally occurring ethane and natural gas a								
Adavale	15	9	8	10	12	12	12	2
Amadeus	471	452	424	479	494	532	541	537
Bonaparte	0	0	0	0	0	0	0	0
Bowen–Surat	518	641	613	696	641	552	438	211
Canning	0	0	0	0	0	0	0	0
Carnarvon								
Barrow Island	452	1 116	1 023	545	1 172	1 937	1 804	1 694
North West Shelf	16 561	17 753	17 827	21 437	22 947	23 803	24 460	27 326
Other	1 359	1 113	1 533	2 364	1 430	1 145	956	467
Cooper–Eromanga								
Queensland	0	0	19	0	0	0	0	0
South Australia	6 308	5 753	4 288	4 149	4 004	3 791	3 227	3 021
Gippsland	6 355	6 432	7 487	7 477	7 274	7 606	8 005	7 017
Otway	316	100	260	281	161	80	16	5
Perth	188	197	178	236	338	313	279	224
Total	32 543	33 568	33 659	37 674	38 473	39 771	39 737	40 504

a Does not include methane or ethane produced from other than natural gas fields or non commercial production. **s** ABARE estimate.

Sources: DRET, *Australian Petroleum Statistics* Canberra; APPEA; Energy Quest.

316 Volume of Australian trade in petroleum

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Exports									
Automotive gasoline	ML	1 186	1 058	774	774	714	771	628	244
Diesel fuel	ML	948	1 052	872	367	419	288	462	357
Aviation turbine fuel	ML	549	645	528	240	127	120	149	106
Fuel oil	ML	293	95	81	201	490	209	257	188
Aviation gasoline	ML	71	52	36	38	85	81	96	56
Kerosene	ML	2	0	0	0	0	0	0	0
Lubricants	ML	169	182	136	174	199	231	178	181
Other	ML	190	56	45	52	48	52	35	29
Total refined products	ML	3 409	3 140	2 474	1 846	2 082	1 752	1 807	1 162
Liquefied petroleum gas **a**	ML	3 211	3 194	2 916	2 844	2 800	2 824	2 589	2 500
Bunkers **b**	ML	2 267	2 238	2 216	2 207	2 163	2 156	2 169	2 217
Crude oil and other refinery feedstock	ML	23 936	20 950	17 526	15 731	13 026	15 965	15 975	16 588
Liquefied natural gas **cs**	MT	7.600	7.826	7.914	10.589	12.029	14.332	13.678	15.410
Imports									
Automotive gasoline	ML	1 436	1 673	3 242	3 131	3 687	2 912	3 533	4 087
Diesel fuel	ML	1 280	1 627	3 374	3 944	6 122	5 439	7 470	8 246
Aviation turbine fuel	ML	225	429	681	983	817	1 045	1 846	2 026
Fuel oil	ML	557	611	1 285	1 281	1 418	1 363	1 625	1 682
Lubricants	ML	57	216	195	327	371	365	396	369
Liquefied petroleum gas	ML	588	299	785	540	599	748	965	1 002
Other	ML	511	642	979	981	1 158	2 146	2 147	2 285
Total refined products	ML	4 655	5 497	10 542	11 188	14 172	14 018	17 982	19 697
Crude oil and other refinery feedstock	ML	27 308	27 959	23 499	26 056	24 418	25 345	26 223	24 303
Natural gas	kt	0	0	0	0	953	4 268	4 032	4 752

a Mostly naturally occurring. **b** Ship and aircraft stores. **c** 1 tonne of LNG is approximately equal to 2174 litres of LNG. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics*), Canberra.

317 Value of Australian trade in petroleum

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	$m	$m	$m	$m	$m	$m	$m	$m
Exports								
Automotive gasoline	389	367	280	339	419	468	444	171
Diesel fuel	308	366	292	166	238	188	363	225
Aviation turbine fuel	184	228	172	108	80	74	120	69
Fuel oil	70	29	21	51	215	84	130	96
Aviation gasoline	33	29	20	26	54	69	73	45
Kerosene	1	0	0	0	0	0	0	0
Lubricants	164	141	100	112	139	157	152	146
Other products	85	39	33	41	52	57	41	34
Total refined products	1 234	1 198	918	844	1 195	1 098	1 323	787
Liquefied petroleum gas	721	855	647	804	1 002	1 038	1 182	1 044
Bunkers **a**	760	775	696	951	1 322	1 295	1 457	1 537
Crude oil and other refinery feedstock	6 390	6 402	5 055	6 330	6 638	8 317	10 484	8 755
Liquefied natural gas	2 613	2 607	2 174	3 199	4 416	5 222	5 854	10 086
Imports								
Automotive gasoline	448	569	1 168	1 463	2 342	1 872	2 719	2 784
Diesel fuel	414	561	1 134	1 933	4 071	3 466	6 155	6 317
Aviation turbine fuel	68	146	220	483	527	668	1 505	1 393
Fuel oil	143	180	313	364	569	536	831	867
Lubricants	126	190	206	288	418	495	477	629
Liquefied petroleum gas	116	76	166	143	198	261	436	382
Other products	310	327	387	447	635	1 285	1 331	2 927
Total refined products	1 625	2 050	3 594	5 121	8 608	7 784	12 730	13 133
Crude oil and other refinery feedstock	7 458	8 611	6 595	9 996	12 822	13 360	17 149	14 721
Natural gas	0	0	0	0	152	800	724	2 166

a Ships and aircraft stores.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, canberra; DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics),* Canberra.

318 Australian exports of petroleum, by destination a

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity									
Crude oil and other refinery feedstock									
China	ML	1 160	1 699	2 389	732	404	518	972	1 009
Chinese Taipei	ML	1 920	580	125	916	346	446	343	403
Japan	ML	3 168	3 402	2 079	1 927	2 201	1 957	2 280	2 485
Korea, Rep. of	ML	5 521	4 012	3 778	2 787	2 725	3 873	3 701	4 395
New Zealand	ML	1 426	784	722	1 425	465	1 045	600	321
Singapore	ML	6 215	6 567	3 948	2 861	3 110	3 752	3 089	3 543
United States	ML	2 674	2 944	1 808	1 154	297	190	1 157	1 421
Other	ML	1 851	962	2 677	3 929	3 478	4 183	3 833	3 011
Total	ML	23 936	20 950	17 526	15 731	13 026	15 965	15 975	16 588
Liquefied petroleum gas									
China	ML	441	154	696	598	393	308	465	354
Japan	ML	2 575	2 783	2 109	2 081	2 142	1 821	1 587	1 474
Korea, Rep. of	ML	127	234	0	81	0	384	178	292
Other	ML	68	23	111	84	264	311	359	380
Total b	ML	3 211	3 194	2 916	2 844	2 800	2 824	2 589	2 500
Refined products									
Fiji	ML	473	384	122	7	62	4	3	2
Japan	ML	71	26	29	53	74	84	71	56
New Zealand	ML	1 247	1 250	828	1 113	716	872	837	400
Singapore	ML	367	246	127	471	771	576	505	424
Other Pacific	ML	921	861	776	156	274	131	275	256
United States	ML	153	99	123	0	37	6	3	0
Other	ML	177	273	468	45	148	81	113	25
Total	ML	3 409	3 140	2 474	1 846	2 082	1 752	1 807	1 162
Value c									
Crude oil and other refinery feedstock									
China	$m	316	528	671	309	219	266	654	469
Chinese Taipei	$m	508	179	33	372	172	237	223	190
Japan	$m	854	1 058	582	782	1 111	1 033	1 474	1 400
Korea, Rep. of	$m	1 490	1 217	1 057	1 091	1 366	1 968	2 398	2 302
New Zealand	$m	406	256	238	602	256	583	421	212
Singapore	$m	1 597	1 956	1 118	1 080	1 481	1 864	1 972	1 680
United States	$m	693	883	527	473	149	100	843	725
Other	$m	525	324	828	1 620	1 884	2 266	2 500	1 777
Total	$m	6 390	6 402	5 055	6 330	6 638	8 317	10 484	8 755
Liquefied petroleum gas									
China	$m	96	36	159	169	129	107	204	145
Japan	$m	580	755	466	595	766	668	726	590
Korea, Rep. of	$m	30	59	0	18	0	150	89	154
Other	$m	15	6	22	21	107	113	162	154
Total b	$m	721	855	647	804	1 002	1 038	1 182	1 044
Refined products									
Fiji	$m	161	140	43	8	43	5	5	3
Japan	$m	25	14	13	22	40	43	41	40
New Zealand	$m	437	460	310	516	463	557	639	302
Singapore	$m	112	95	41	170	375	311	309	225
Other Pacific	$m	367	349	294	103	177	119	237	203
United States	$m	56	39	47	0	20	3	1	1
Other	$m	76	101	170	24	78	60	92	14
Total	$m	1 234	1 198	918	844	1 195	1 098	1 323	787

a Does not include LNG exports or ships and aircraft stores. **b** Includes confidential exports. **c** Actual values are used and aggregated for each category.

Sources: DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics*), Canberra; ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; ABARE.

319 Australian imports of petroleum, by source

	Unit	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity									
Crude oil and other refinery feedstock									
Indonesia	ML	6 795	5 380	4 012	3 328	3 929	3 391	3 289	3 667
Malaysia	ML	2 290	2 299	4 073	4 761	3 976	3 730	4 103	4 461
New Zealand	ML	1 089	990	708	663	638	635	1 974	2 313
Other Middle East	ML	42	334	42	158	199	118	43	40
Papua New Guinea	ML	2 208	1 683	1 189	1 717	2 386	2 059	2 190	1 349
Qatar	ML	646	191	0	77	0	106	0	0
Saudi Arabia	ML	3 004	3 680	1 517	3 101	1 602	1 151	573	775
Singapore	ML	554	720	597	652	830	841	713	555
United Arab Emirates	ML	2 305	2 294	2 207	1 917	863	2 971	3 660	2 918
Viet Nam	ML	5 652	6 699	5 778	6 560	6 708	6 677	6 318	5 278
Other	ML	2 724	3 691	3 376	3 122	3 287	3 665	3 360	2 947
Total	ML	27 308	27 959	23 499	26 056	24 418	25 345	26 223	24 303
Natural gas a	kt	0	0	0	0	953	4 268	4 032	4 752
Refined products									
Indonesia	ML	80	57	281	162	98	17	11	45
Korea, Rep. of	ML	289	144	279	237	961	821	785	1 704
Malaysia	ML	27	45	97	93	220	8	316	184
Middle East	ML	474	140	1 036	588	691	642	1 044	1 050
New Zealand	ML	42	17	3	4	84	96	40	215
Singapore	ML	2 110	2 832	5 905	7 339	8 452	7 681	10 215	10 217
United States	ML	462	407	434	423	456	378	421	473
Other **b**	ML	1 171	1 855	3 370	2 334	2 926	3 099	3 961	4 388
Total	ML	4 657	5 498	11 405	11 179	13 887	12 742	16 794	18 276
Value									
Crude oil and other refinery feedstock									
Indonesia	$m	1 846	1 671	1 141	1 335	2 108	1 779	2 215	2 120
Malaysia	$m	647	735	1 199	1 924	2 180	2 042	2 711	2 722
New Zealand	$m	309	316	212	275	349	351	1 332	1 340
Other Middle East	$m	12	101	12	59	103	55	23	31
Papua New Guinea	$m	601	527	347	711	1 283	1 113	1 460	846
Qatar	$m	191	58	0	24	0	46	0	0
Saudi Arabia	$m	758	1 074	408	1 114	775	535	322	412
Singapore	$m	149	225	152	202	368	381	396	318
United Arab Emirates	$m	674	664	584	659	446	1 551	2 294	1 671
Viet Nam	$m	1 528	2 095	1 584	2 517	3 493	3 566	4 188	3 346
Other	$m	743	1 146	956	1 174	1 716	1 942	2 208	1 915
Total	$m	7 458	8 611	6 595	9 996	12 822	13 360	17 149	14 721
Natural gas a	$m	0	0	0	0	152	800	724	2 166
Refined products									
Indonesia	$m	23	17	92	75	59	6	6	34
Korea, Rep. of	$m	101	56	108	126	642	543	649	1 208
Malaysia	$m	11	18	36	49	134	10	271	125
Middle East	$m	94	39	260	165	260	224	496	429
New Zealand	$m	12	6	3	4	37	47	26	119
Singapore	$m	684	1 000	2 061	3 532	5 534	4 957	8 183	7 788
United States	$m	321	277	236	250	299	285	339	519
Other **b**	$m	379	637	798	921	1 795	2 510	3 485	5 077
Total	$m	1 625	2 050	3 594	5 122	8 760	8 583	13 454	15 298

a International waters. **b** Includes confidential imports of refined products.

Sources: DRET, *Australian Petroleum Statistics* (previously *Major Energy Statistics*), Canberra; ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; ABARE.

320 World crude oil supply, demand and prices a

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Supply									
OPEC b	mbd	30.1	28.6	30.7	32.8	34.2	34.3	34.9	35.9
Non-OPEC									
Asia Pacific	mbd	3.1	3.3	3.3	3.4	3.3	3.3	4.3	4.3
China	mbd	3.3	3.4	3.4	3.5	3.6	3.7	3.7	3.8
Europe	mbd	8.4	8.5	8.3	8.3	7.9	7.7	7.8	7.7
Mexico	mbd	3.6	3.6	3.8	3.8	3.8	3.7	3.5	3.2
Middle East and Africa	mbd	4.9	5.1	5.0	5.3	5.6	5.7	4.2	4.2
North America	mbd	10.9	11.0	10.8	10.8	10.4	10.6	10.8	10.7
Russian Federation	mbd	7.0	7.7	8.5	9.2	9.5	9.7	10.1	10.0
South America	mbd	3.8	3.9	4.0	4.1	4.3	4.4	4.3	4.1
Total c	mbd	76.7	76.6	79.7	83.0	84.5	85.4	85.7	86.5
Demand									
Africa	mbd	2.5	2.7	2.7	2.8	2.9	3.0	3.1	3.2
China	mbd	4.7	5.0	5.6	6.4	6.7	7.3	7.6	7.9
Japan and Korea, Rep. of	mbd	7.5	7.6	7.8	7.5	7.5	7.4	7.3	7.0
Latin America	mbd	6.9	6.8	6.6	7.0	7.2	7.4	7.8	8.0
Middle East	mbd	4.9	5.4	5.4	5.8	6.0	6.3	6.5	7.1
North America	mbd	21.9	22.2	22.6	23.4	23.4	23.3	23.3	22.1
Russian Federation	mbd	2.5	2.5	2.5	2.6	2.7	2.8	2.9	3.0
Western Europe 4 d	mbd	8.4	8.3	8.3	8.3	8.2	8.2	8.0	8.0
Other Asia Pacific	mbd	8.4	8.9	9.1	9.7	9.9	10.2	10.6	10.8
Other Europe	mbd	9.1	8.7	8.7	8.9	9.3	9.4	9.5	9.4
Total	mbd	76.8	78.0	79.3	82.4	83.7	85.1	86.5	86.3
OECD stocks e	days	54	50	50	51	52	54	52	58
Prices									
West Texas Intermediate	US$/bbl	26.12	26.14	31.08	41.51	56.66	66.05	72.35	99.67
Brent	US$/bbl	24.64	24.95	28.88	38.30	54.58	65.16	72.41	96.99
Dubai	US$/bbl	22.92	23.75	26.81	34.16	50.08	61.89	68.31	94.45
World trade weighted average	US$/bbl	23.14	23.67	27.25	34.41	49.57	60.21	68.30	94.60

a Includes crude oil, marine bunkers, refinery fuel, nonconventional oil and natural gas liquids. **b** Includes natural gas liquids produced by OPEC (around 4.5 million barrels a day). **c** Includes around 1.8 million barrels a day net gain in the processing of primary fuels other than crude oil. **d** France, Germany, Italy and United Kingdom. **e** Industry stocks measured in days of forward consumption at 31 December.

Sources: BP Statistical Review of World Energy; International Energy Agency, *Monthly Oil Market Report,* OECD, Paris; Energy Information Administration, US Department of Energy, Washington DC.

321 Prices for crude oil, by origin a

	World trade weighted b	Dubai c	Brent d	WTI e	Gippsland f	Tapis g
	US$/bbl	US$/bbl	US$/bbl	US$/bbl	US$/bbl	US$/bbl
1991 quarter						
March	17.98	16.20	20.73	21.96	na	na
June	16.56	15.57	18.82	20.77	na	na
September	17.61	16.89	19.90	21.66	na	na
December	18.57	17.53	20.57	21.78	na	na
1992 quarter						
March	16.37	15.61	17.95	18.90	na	na
June	18.49	17.80	20.03	21.21	na	na
September	19.04	18.25	20.09	21.65	na	na
December	18.08	17.14	19.20	20.50	na	na
1993 quarter						
March	16.87	15.85	18.22	19.83	na	na
June	16.95	15.92	18.22	19.74	na	na
September	15.16	14.38	16.50	17.80	na	na
December	14.02	13.50	15.03	16.43	na	na
1994 quarter						
March	13.34	12.71	13.96	14.83	na	na
June	15.28	14.84	16.06	17.85	na	na
September	16.45	15.83	16.69	18.47	na	na
December	16.15	15.62	16.54	17.66	na	na
1995 quarter						
March	16.90	16.31	16.90	18.36	na	na
June	17.80	16.95	18.08	19.32	na	na
September	15.98	15.32	16.17	17.86	na	na
December	16.55	15.80	16.94	18.13	na	na
1996 quarter						
March	18.13	16.48	18.61	19.75	na	na
June	19.09	17.26	19.50	21.75	na	na
September	20.22	18.91	20.90	22.38	na	na
December	22.75	21.50	23.60	24.71	na	na
1997 quarter						
March	20.69	19.44	21.18	22.84	na	na
June	17.53	17.48	18.02	19.98	na	na
September	17.59	17.68	18.53	19.78	na	na
December	17.80	17.99	18.72	19.92	na	na
1998 quarter						
March	12.78	12.39	14.03	15.92	14.35	16.70
June	11.95	12.24	13.27	14.62	13.96	14.44
September	11.87	12.49	12.46	14.16	12.99	12.72
December	11.11	11.53	11.16	12.88	12.20	13.47
1999 quarter						
March	10.93	11.11	11.34	13.15	11.98	11.63
June	15.33	15.29	15.49	17.66	16.15	14.50
September	20.10	19.75	20.61	21.74	21.19	19.69
December	23.46	22.75	24.12	24.55	24.29	23.89
2000 quarter						
March	26.33	24.41	26.93	28.91	26.75	26.52
June	26.31	25.17	26.89	28.97	27.79	27.16
September	28.79	27.66	30.43	31.66	31.82	31.36
December	28.58	27.68	29.68	31.96	31.10	29.77

Continued

321 Prices for crude oil, by origin a continued

	World trade weighted b	Dubai c	Brent d	WTI e	Gippsland f	Tapis g
	US$/bbl	US$/bbl	US$/bbl	US$/bbl	US$/bbl	US$/bbl
2001 quarter						
March	24.33	23.67	25.79	28.72	26.81	27.87
June	25.57	25.17	27.38	27.88	28.18	27.89
September	24.24	24.03	25.30	26.70	25.26	26.46
December	18.40	18.41	19.42	20.41	20.26	23.24
2002 quarter						
March	19.78	20.10	21.09	21.55	21.04	21.22
June	23.95	24.39	25.07	26.30	25.49	25.61
September	25.54	25.54	26.91	28.30	26.98	27.24
December	25.41	25.16	26.81	28.29	27.99	28.28
2003 quarter						
March	29.71	28.39	31.49	34.00	32.34	32.46
June	24.37	24.44	26.03	29.02	27.04	27.23
September	27.25	26.57	28.38	30.19	29.19	29.53
December	27.67	27.67	29.43	31.15	30.92	31.23
2004 quarter						
March	29.60	29.54	32.03	35.33	34.38	34.50
June	32.78	33.28	35.32	38.28	37.45	37.54
September	36.50	36.22	41.54	43.88	44.51	44.63
December	38.74	35.55	43.85	48.29	45.52	47.12
2005 quarter						
March	42.34	41.41	47.62	49.88	50.17	49.73
June	47.13	47.98	51.63	53.08	53.23	55.23
September	56.50	55.36	61.63	63.18	62.19	64.72
December	52.33	52.87	56.87	60.01	58.90	60.84
2006 quarter						
March	56.28	57.93	61.79	63.29	65.42	67.49
June	63.87	64.82	69.59	70.46	71.90	73.77
September	65.70	65.96	69.60	70.44	73.04	75.43
December	54.99	57.24	59.59	59.90	61.43	63.32
2007 quarter						
March	52.50	55.45	57.76	58.05	62.19	63.55
June	64.62	64.80	68.76	64.89	73.45	74.99
September	71.46	69.98	74.75	75.24	77.39	79.64
December	84.64	82.83	88.45	90.47	89.35	93.34
2008 quarter						
March	93.00	90.71	96.16	97.22	100.73	102.29
June	118.79	117.23	122.13	123.97	126.34	128.82
September	110.10	108.53	114.51	114.50	121.34	125.81
December	56.50	52.00	54.50	58.80	56.73	60.79
2009 quarter						
March	40.25	39.19	41.20	41.70	45.81	48.09
June	57.34	55.81	58.52	60.31	60.38	61.33

a Based on daily prices unweighted and averaged over the period using posted or official selling prices with Rotterdam spot prices for Middle East and North Sea crudes after 1980. **b** Quarterly averages of weekly rates; average contract selling prices fob of internationally traded crude oils only, weighted by estimated export volume. **c** Middle East crude, 32 API gravity. **d** North Sea crude, 38 API gravity. **e** North American crude, 40 API gravity. **f** Australian crude, 42 API gravity. Price series discontinued in 1988. **g** Malaysia tapis blend 44 API. **na** Not available.

Sources: ABARE averaging of daily prices using: Middle East Petroleum and Economic Publications, *International Crude Oil and Product Prices,* London; Department of Resources, Energy and Tourism, *Australian Energy Statistics,* AGPS, Canberra; Energy Information Administration, US Department of Energy, Washington DC; *Platts Oilgram Price Reports,* London; Reuterlink; Tokyo Commodity Exchange.

322 Summary of Australian statistics for salt

	Production	Exports		
		Volume	Value	Unit value a
	kt	kt	$m	$/t
1962	545	76	0.7	9.21
1963	591	122	0.8	6.56
1964	554	119	0.8	6.72
1965	665	115	0.6	5.22
1966	655	95	0.5	5.26
1967	714	89	0.5	5.62
1968	914	228	0.9	3.95
1969	1 680	775	2.1	2.71
1970	3 071 b	2 331	8.2	3.52
1971	3 788 b	2 815	9.0	3.20
1972	3 340 b	2 417	7.0	2.90
1973	4 204	3 475	10.6	3.05
1974	5 009	4 211	15.4	3.66
1975	4 660	3 652	17.5	4.79
1976	5 489	4 258	26.9	6.32
1977	4 716	4 057	29.5	7.27
1978	5 873	4 654	32.9	7.07
1979	5 215	4 513	33.3	7.38
1980	5 665	4 515	44.3	9.81
1981	6 716	3 964	44.0	11.10
1982	4 811	4 144	55.2	13.32
1983	5 170	4 535	69.4	15.30
1984	5 695	4 783	74.7	15.62
1985	5 835	5 166	97.4	18.85
1986	6 131	5 213	102.0	19.57
1987	6 486	2 745 c	56.0 c	20.40
1988	6 958 b	6 206	117.2	18.89
1989	7 070 d	6 194	121.5	19.61
1990	7 229 d	6 466	136.3	21.08
1991	7 768 d	7 061	165.6	23.46
1992	7 693 d	7 028	174.9	24.89
1993	7 553 d	6 982	185.5	26.56
1994	7 792 d	7 259	174.1	23.99
1995	8 298 d	7 649	176.5	23.08
1996	7 993 d	7 651	166.6	21.77
1997	8 883 d	8 187	190.9	23.32
1998	9 033 d	8 701	233.4	26.82
1999	9 888 d	8 418	213.7	25.38
2000	8 847 d	8 257	221.7	26.85
2001	9 254 d	8 817	267.1	30.29
2002	9 961 d	9 504	259.6	27.32
2003	10 526 d	10 114	200.6	19.83
2004	11 088 d	11 181	194.6	17.40
2005	12 219 d	11 488	228.3	19.87
2006	11 478 d	10 911	240.2	22.01
2007	10 855 d	10 613	233.6	22.01
2008	11 160 d	10 937	237.9	21.75

a Average export unit value of all salt, bulk, bagged and table. **b** Excludes Victoria. **c** Excludes salt, common, in bulk from 1 January to 30 June. **d** Excludes Victoria and the Northern Territory.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

323 Australian supply and disposal of salt

	Unit	2002	2003	2004	2005	2006	2007	2008
Production								
Queensland	kt	217	230	143	50	115	195	160
South Australia	kt	577	560	556	620	647	560	600
Western Australia **a**	kt	9 167	9 736	10 388	11 549	10 716	10 101	10 400
Total	kt	9 961	10 526	11 088	12 219	11 478	10 855	11 160
Exports (all types)								
Total	kt	9 504	10 114	11 181	11 488	10 911	10 613	10 937
	$m	260	201	195	228	240	234	238
Imports								
Common salt	t	17 285	15 157	16 578	15 369	18 033	14 582	15 522
	$'000	4 445	4 540	5 280	5 762	5 906	6 632	6 894

a Sales.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

324 World production of salt, by country

	2001	2002	2003	2004	2005	2006	2007	2008
	Mt	Mt	Mt	Mt	Mt	Mt	Mt	Mt
Argentina	1.3	1.1	1.7	1.4	1.8	1.9	2.0	na
Australia	9.3	10.0	10.5	11.1	12.2	11.5	10.9	11.2
Brazil	5.6	6.1	6.6	6.6	6.7	7.3	6.9	7.0
Canada	13.7	12.3	14.0	14.1	14.5	15.0	11.8	12.0
Chile	6.0	3.5	6.2	4.9	4.9	6.0	4.4	5.0
China **a**	34.5	36.0	34.4	37.1	44.5	54.0	59.8	60.0
Egypt	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
France	7.6	6.8	7.4	7.6	7.0	7.0	6.1	6.0
Germany	12.7	13.7	14.0	15.5	18.7	17.5	19.8	19.0
India	14.3	17.9	14.9	14.8	15.5	15.5	16.0	15.8
Iran	1.5	1.5	1.6	1.8	2.0	2.0	2.0	2.0
Italy	3.6	3.6	3.6	3.6	3.6	3.0	2.2	2.2
Japan	1.4	1.3	1.3	1.2	1.2	1.2	1.1	na
Mexico	8.5	7.8	7.5	8.6	9.2	8.2	8.4	8.4
Netherlands **b**	5.7	5.8	6.0	5.9	5.0	5.0	5.0	5.0
Poland	3.5	3.6	3.6	4.0	5.0	5.0	4.4	4.4
Romania	2.2	2.3	2.4	2.4	2.4	2.4	2.5	2.5
Russian Federation	2.8	2.8	2.8	2.8	2.8	2.8	2.2	2.2
Spain	3.8	3.9	4.0	3.9	3.2	3.9	4.6	4.6
Turkey	1.8	2.2	2.2	2.3	2.2	2.2	2.7	2.7
Ukraine	2.3	2.3	2.9	3.3	2.3	3.5	5.5	5.5
United Kingdom	6.0	5.7	5.9	6.2	5.8	5.8	5.8	5.8
United States **c**	42.2	40.3	43.7	46.4	45.1	44.3	44.5	46.0
Other	19.6	20.6	21.3	22.3	31.8	26.4	26.0	30.3
Total	212.3	213.3	220.8	230.3	250.0	256.0	257.0	260.0

a Marketable salt. **b** Includes the Antilles. **c** Includes Puerto Rico. **na** Not available.

Sources: Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; British Geological Survey, *World Mineral Statistics,* Nottingham, England; US Department of the Interior, US Geological Survey, *Mineral Yearbook,* Washington DC; ABARE.

325 Summary of Australian statistics for silica

	Production	Exports a		Imports	
	Volume	Volume	Value	Volume	Value
	kt	kt	$'000	t	$'000
1964-65	337	na	na	44	55
1965-66	354	na	na	533	33
1966-67	446	na	na	478	na
1967-68	550	na	na	438	31
1968-69	652	na	na	624	37
1969-70	879	178 **b**	575 **b**	785 **b**	53 **b**
1970-71	1 112	211 **b**	736 **b**	1 126 **b**	85 **b**
1971-72	1 058	219 **b**	658 **b**	1 000 **b**	86 **b**
1972-73	1 259	557 **b**	1 836 **b**	696	259
1973-74	1 443 **c**	555 **b**	1 838 **b**	846	74
1974-75	1 219	513 **b**	2 193 **b**	1 121	119
1975-76	1 381	389 **b**	1 867 **b**	343	52
1976-77	1 224	495 **b**	3 030 **b**	441	77
1977-78	1 290	467 **b**	3 112 **b**	283	45
1978-79	1 768	647	4 896	368	77
1979-80	1 828	649	5 762	199	49
1980-81	1 743	383	4 075	569	169
1981-82	1 813	519	5 399	3 678	589
1982-83	1 928	670	6 879	2 464	647
1983-84	2 242	686	7 430	3 087	550
1984-85	2 091	895	9 972	1 267	648
1985-86	2 091	1 137	13 590	852	567
1986-87	2 361	1 094	13 249	535	397
1987-88	2 667	1 577	20 973	3 633	609
1988-89	2 795 **d**	1 660	23 319	3 473	523
1989-90	3 116 **d**	2 226	34 848	2 029	282
1990-91	3 835 **d**	2 398	37 685	6 835	667
1991-92	3 347 **e**	2 547	40 175	9 025	1 205
1992-93	3 570 **e**	2 488	41 825	2 231	906
1993-94	na	2 600	43 083	1 130	631
1994-95	4 576	3 007	49 163	2 431	989
1995-96	na	3 227	49 538	1 731	1 153
1996-97	na	3 074	52 062	4 237	2 681
1997-98	na	3 280	61 616	3 495	2 306
1998-99	na	2 986	58 401	2 704	975
1999-00	4 266	3 232	64 567	2 427	1 159
2000-01	3 997	3 213	75 376	2 658	1 455
2001-02	4 472	2 629	57 598	4 084	1 933
2002-03	4 046	2 794	59 900	4 330	2 004
2003-04	4 404	2 687	62 290	3 477	1 572
2004-05	4 145	1 844	52 643	2 708	1 375
2005-06	4 393	1 839	59 009	2 325	1 360
2006-07	5 314	2 313	71 290	3 114	1 779
2007-08	na	2 281	64 413	2 577	1 462
2008-09	na	2 028	69 502	2 157	1 516

a Includes quartz sand from July 1999, data not available separately. **b** Year ended 30 June. **c** Excludes Western Australia. **d** Excludes Victoria. **e** Excludes Tasmania and Victoria. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* Bureau of Mineral Resources, Canberra; state mines departments and their equivalents; ABARE.

326 Australian production of silica, by state

	New South Wales	Victoria	Queensland	Western Australia	South Australia	Tasmania	Australia	
	kt	kt	kt	kt	kt	kt	kt	
1963	176.7	na	32.5	10.1	25.3	2.7	247.3	a
1964	241.9	na	38.2	10.2	25.4	13.8	329.6	a
1965	234.9	na	46.2	9.4	36.4	10.1	337.0	a
1966	234.1	na	39.4	28.7	46.2	5.5	353.9	a
1967	289.1	na	70.2	42.4	35.1	8.7	445.6	a
1968	283.6	na	164.5	20.9	67.1	14.3	550.4	a
1969	315.4	na	208.9	49.7	49.4	28.3	651.7	a
1970	335.2	114.5	295.0	39.3	43.2	51.8	879.1	
1971	430.2	108.1	405.7	57.8	74.0	36.7	1 112.4	
1972	464.2	98.8	395.4	20.9	60.5	18.1	1 058.0	
1973	459.7	109.0	568.1	27.4	66.2	28.1	1 258.5	
1974	474.9	141.8	712.4	na	75.2	38.4	1 442.8	b
1975	392.9	142.6	544.1	28.3	77.6	33.3	1 218.8	
1976	511.7	166.3	516.5	40.6	118.7	27.7	1 381.4	
1977	410.3	199.4	458.7	78.1	104.4	51.5	1 224.3	
1978	417.3	184.3	520.2	91.2	114.8	53.1	1 289.7	
1979	544.9	196.2	627.3	217.7	91.7	89.9	1 767.6	
1980	588.1	255.3	670.7	148.1	99.9	65.5	1 827.6	
1981	548.5	288.2	581.4	168.1	120.4	36.5	1 743.1	
1982	557.5	361.0	563.7	144.0	146.8	40.1	1 813.2	
1983	471.5	348.5	627.4	322.8	114.5	43.3	1 927.8	
1984	448.4	406.9	866.7	352.6	124.4	43.1	2 242.1	
1985	338.5	273.7	924.6	373.1	143.4	37.1	2 090.5	
1986	412.3	267.0	839.4	390.4	141.3	40.9	2 091.3	
1987	464.8	224.0	1 079.2	386.0	147.2	59.5	2 360.7	
1988	457.6	218.7	1 467.0	348.9	96.8	78.0	2 667.0	
1988-89	480.2	na	1 682.6	364.5	109.7	158.0	2 794.9	a
1989-90	574.0	na	1 802.0	478.0	112.0	150.0	3 116.0	a
1990-91	551.1	na	2 145.1	861.7	104.4	172.3	3 834.6	a
1991-92	552.5	na	2 019.8	654.6	119.8	na	3 346.7	c
1992-93	495.0	na	2 421.0	518.0	136.0	na	3 570.0	c
1993-94	na	na	2 494.2	568.4	na	na	na	
1994-95	565.0	220.0	2 828.7	614.5	174.0	174.0	4 576.0	
1995-96	636.2	na	na	741.9	132.0	na	na	
1996-97	699.1	na	2 680.5	700.2	157.0	na	na	
1997-98	489.4	na	2 851.1	821.5	131.0	na	na	
1998-99	438.4	na	2 087.2	583.0	126.1	na	na	
1999-00	442.2	443.0	2 637.0	599.6	114.8	139.9	4 265.8	
2000-01	433.5	78.0	2 619.0	557.3	145.3	163.4	3 996.5	
2001-02	452.0	530.9	2 488.0	653.0	185.0	163.3	4 472.2	
2002-03	491.7	20.1	2 406.3	752.5	246.4	128.9	4 046.0	
2003-04	398.1	476.6	2 510.4	644.2	239.1	135.2	4 403.6	
2004-05	504.5	564.1	1 902.7	700.2	320.1	153.0	4 144.8	
2005-06	661.1	338.3	2 087.0	778.1	337.9	190.8	4 393.2	
2006-07	1 215.9	371.6	2 583.4	630.5	328.0	185.0	5 314.5	
2007-08	na	na	na	675.1	na	205.2	na	

a Excludes Victoria. **b** Excludes Western Australia. **c** Excludes Tasmania and Victoria. **na** Not available.

Sources: ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* Bureau of Mineral Resources, Canberra; state mines departments and their equivalents; ABARE.

327 Australian imports of silica based products

	Silicon		Ferrosilicon		Ferrosilicomanganese		Piezoelectric crystals
	Volume	Value	Volume	Value	Volume	Value	Value
	t	$'000	t	$'000	t	$'000	$'000
1964	1 593	466	10 348	1 167	na	na	na
1965	638	194	13 211	1 747	na	na	na
1966	na	142	7 620	1 061	na	na	na
1967	na	422	9 440	1 379	na	na	na
1968	na	na	6 327	923	na	na	na
1969	na	625	7 722	1 180	na	na	na
1970	na	621	13 603	2 272	na	na	na
1971	3 403	1 192	12 281	2 073	na	na	112
1972	1 950	688	9 771	1 794	na	na	259
1973	2 366	777	9 202	1 526	na	na	159
1974	2 496	1 047	14 286	3 048	na	na	330
1975	2 602	2 723	21 578	8 528	na	na	558
1976	1 845	1 229	14 258	5 249	na	na	467
1977	3 896 a	2 982 a	6 437	3 114	390 a	200 a	738 a
1978	2 006 a	1 492 a	6 363	2 893	414	271	536 a
1979	2 573 a	2 950 a	7 149	3 640	488	392	819 a
1980	4 888 a	5 749 a	14 598	8 856	532	376	971 a
1981	3 093 a	3 553 a	9 716	4 675	217	180	1 040 a
1982	2 961	3 685	10 761	6 222	193	127	1 886
1983	2 695	4 064	7 174	4 280	336	300	1 859
1984	4 572	7 422	9 461	5 273	774	709	2 402
1985	4 914	9 447	13 890	7 153	940	1 183	3 782
1986	5 852	10 461	11 469	6 873	392	558	3 407
1987	5 083	11 853	12 897	8 894	656	913	4 106
1988	3 759	6 592	9 095	7 533	433	571	3 444
1988-89	3 714	8 062	14 100	12 065	293	401	4 347
1989-90	2 908	10 160	21 507	18 566	205	308	4 470
1990-91	2 443	10 545	19 330	13 929	231	316	3 475
1991-92	2 301	11 469	13 229	11 460	913	922	8 486
1992-93	3 611	11 910	24 738	21 091	932	832	4 423
1993-94	3 025	11 393	35 732	31 342	510	548	6 114
1994-95	2 863	15 083	32 593	25 699	377	375	6 607
1995-96	4 899	14 862	34 506	38 060	288	482	7 951
1996-97	3 226	10 408	52 952	38 258	279	468	6 305
1997-98	3 054	11 369	36 016	39 544	199	304	6 485
1998-99	4 110	15 289	32 044	33 968	451	752	9 431
1999-00	4 887	14 683	29 189	27 749	329	474	12 066
2000-01	5 966	23 530	29 004	33 006	468	723	20 325
2001-02	3 857	13 719	28 965	34 115	259	439	8 509
2002-03	6 437	21 935	29 692	30 695	240	368	8 863
2003-04	6 134	19 553	35 474	35 501	540	817	9 716
2004-05	6 284	21 039	34 877	38 631	398	714	13 092
2005-06	9 518	26 979	32 653	37 898	297	570	7 307
2006-07	13 256	31 324	36 775	46 249	444	837	7 312
2007-08	18 258	42 111	46 025	60 583	377	826	6 947
2008-09	9 814	36 427	31 671	69 467	324	730	6 975

a Year ended 30 June. **na** Not available.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review*, AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964*, Bureau of Mineral Resources, Canberra.

328 Summary of Australian statistics for silver

	Production		Exports a		
	Mine	Refinery	Volume	Value	Price b
	t	t	t	$m	$/kg
1970	808	374	304	na	59.39
1971	678	328	203	na	47.92
1972	681	313	219	na	49.75
1973	707	261	115	na	60.08
1974	670	256	112	na	104.75
1975	726	283	134	na	109.17
1976	779	255	100	na	115.17
1977	856	280	136	na	135.00
1978	813	299	76	na	153.00
1979	832	320	85	na	319.25
1980	777	355	85	na	598.00
1981	744	376	90	na	297.17
1982	907	357	234	na	253.67
1983	1 033	329	222	na	411.33
1984	972	302	164	na	299.75
1985	1 086	329	167	na	285.33
1986	1 023	336	192	na	264.58
1987	1 119	362	178	na	325.83
1988	1 134	359	26 c	26 d	275.75
1989	1 075	376	23 c	28 d	229.67
1990	1 173 s	419	16 c	43 d	205.92
1991	1 180 s	387	106 c	38 d	175.58
1992	1 218 s	369	200 c	49 d	181.25
1993	1 152 s	357	257 c	60 d	212.25
1994	1 045 s	363	190 c	53 d	240.92
1995	939 s	346	192 c	52 d	234.06
1996	974 s	220	316 c	73 d	222.42
1997	1 107 s	174	215 c	54 d	220.70
1998	1 473 s	292	365 c	123 d	291.56
1999	1 715 s	437	428 c	117 d	268.62
2000	2 059	404	427	138	285.31
2001	1 970	584	524	159	287.72
2002	2 070	644	540	154	290.78
2003	1 868	649	432	109	258.89
2004	2 224	650	477	150	308.13
2005	2 417	701	528	170	308.28
2006	1 728	634	421	209	492.71
2007	1 879	625	413	214	512.81
2008	1 926	664	347	212	558.67

a Refined silver only. **b** Pasminco Metals, fob/fot Port Pirie. **c** Refined bullion only. **d** Includes refined bullion, powder, unwrought silver and semi-manufactured forms. **s** ABARE estimate. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Australian Associated Press Financial News Wire; Factiva.

329 Australian supply and disposal of silver

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Production									
Mine									
New South Wales	t	133	88	82	92	101	94	69	73
Queensland	t	1 545	1 760	1 582	1 914	2 065	1 385	1 527	1 584
Western Australia	t	107	68	70	51	88	96	112	100
South Australia	t	34	26	20	34	38	30	27	30
Tasmania	t	104	78	67	89	82	88	105	99
Northern Territory	t	48	50	46	45	43	35	37	40
Total **s**	t	1 970	2 070	1 868	2 224	2 417	1 728	1 879	1 926
Refinery	t	584	644	649	650	701	634	625	664
Exports									
Refined silver									
India	t	190	192	124	92	66	47	83	1
Japan	t	178	143	204	267	216	191	180	179
Korea, Rep. of	t	42	34	34	37	60	80	60	66
Singapore	t	72	5	9	20	20	3	4	3
United Kingdom	t	0	42	0	0	50	1	1	0
Other	t	41	125	62	59	116	99	86	99
Total	t **a**	524	540	432	477	528	421	413	347
	$m **b**	159	154	109	150	170	209	214	212
Silver content of lead bullion	t	441	455	402	453	498	70	117	124
Prices									
World	USc/troy oz	434.98	460.04	487.65	664.98	731.23	1157.25	1 339.34	1 501.94
Australia **c**	A$/kg	287.72	290.78	258.89	308.13	308.28	492.71	512.81	558.67

a Refined bullion only. **b** Includes refined bullion, powder, unwrought silver and semimanufactured forms. **c** Pasminco Metals, fob/fot Port Pirie. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Australian Associated Press Financial News Wire; Factiva; London Bullion Market Association.

330 World mine production of silver

	2000	2001	2002	2003	2004	2005	2006	2007	2008
	t	t	t	t	t	t	t	t	t
Australia **s**	2 059	1 970	2 070	1 868	2 224	2 417	1 728	1 879	1 926
Bolivia	434	410	450	465	407	420	473	525	1 069
Brazil	130	130	130	130	130	130	130	130	130
Canada	1 212	1 320	1 408	1 309	1 337	1 124	995	860	727
Chile	1 245	1 349	1 205	1 313	1 360	1 400	1 607	1 936	1 404
China	1 330	1 908	2 000	2 000	2 000	2 000	2 000	2 000	2 000
Indonesia	335	348	289	377	377	283	182	205	201
Japan	104	80	81	79	76	54	11	14	13
Kazakhstan	927	982	893	827	773	883	806	722	682
Korea, Dem. Rep. of	200	50	11	22	22	22	22	22	22
Mexico	2 483	2 760	2 749	2 569	2 569	2 894	2 970	3 135	3 241
Morocco	290	240	277	200	181	210	246	246	246
Peru	2 438	2 571	2 870	2 921	3 060	3 193	3 471	3 494	3 686
Poland	1 164	1 231	1 342	1 332	1 373	1 262	1 265	1 240	1 216
Russian Federation	400	400	400	400	400	400	400	400	400
South Africa	144	112	111	87	71	88	87	70	75
Spain	115	55	13	2	4	5	5	5	5
Sweden	329	306	321	341	320	310	292	323	291
United States	2 017	1 740	1 350	1 240	1 250	1 230	1 139	1 260	1 233
Uzbekistan	150	150	150	150	150	150	150	150	150
Other	830	950	888	882	827	1 035	1 086	1 173	1 119
Total **a**	18 134	19 012	19 006	18 515	18 910	19 510	19 065	19 790	19 837

a Excludes countries for which data are not available. **s** ABARE estimate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London.

331 Summary of Australian statistics for talc

		Exports a			Imports a	
	Production b	Volume	Value	Unit value	Volume	Value
	t	t	$'000	$/t	t	$'000
1964	15 439	5 264	177	33.69	2 351	75
1965	19 695	6 887	234	33.98	2 404	68
1966	21 616	7 758	231	29.78	2 903	62
1967	20 431	8 787	277	31.52	2 199	74
1968	37 860	24 875	661	26.57	3 590	117
1969	52 259	34 134	863	25.28	1 823	77
1970	47 517	31 037	791	25.49	3 441	164
1971	41 280	32 662	861	26.36	4 091	197
1972	43 849	32 051	897	27.99	1 186	69
1973	50 850	36 179	996	27.53	1 109	66
1974	63 992	51 325	1 428	27.82	1 606	10
1975	67 242	45 457	1 527	33.59	947	72
1976	77 447	62 306	2 425	38.92	370	62
1977	112 920	87 271	4 052	46.43	335	65
1978	137 553	107 177	5 338	49.81	527	103
1979	138 266	107 849	6 330	58.69	420	86
1980	159 962	83 059	5 286	63.64	382	82
1981	74 840	82 641	5 529	66.90	329	105
1982	143 325	80 512	5 428	67.42	93	30
1983	167 009	131 914	8 401	63.69	147	68
1984	179 709	163 370	10 810	66.17	215	111
1985	132 074	122 306	9 577	78.30	352	196
1986	179 467	183 357	15 028	81.96	151	85
1987	206 865	129 656	11 012	84.93	266	189
1988	201 740	168 758	13 073	77.47	509	223
1988-89	208 998	126 597	9 447	74.62	578	216
1989-90	234 579	200 870	18 158	90.39	631	297
1990-91	173 803	137 260	12 770	93.03	528	237
1991-92	179 678	152 009	13 717	90.24	563	298
1992-93	172 273	119 830	14 184	118.36	629	372
1993-94	154 073	152 297	15 440	101.38	534	328
1994-95	125 701	133 060	12 672	95.23	1 053	353
1995-96	176 163	182 600	17 388	95.22	1 066	423
1996-97	185 601	143 227 c	12 861 c	89.80	1 262	451
1997-98	199 315	1 614 c	572 c	354.23	1 341	578
1998-99	190 037	3 333 c	1 053 c	315.82	886	695
1999-00	178 545	184 559	20 391	110.48	1 115	893
2000-01	173 446	135 771	24 298	178.96	1 234	707
2001-02	160 741	144 216	21 768	150.94	1 058	630
2002-03	165 980	148 281	22 040	148.63	1 742	856
2003-04	123 080	132 782	18 884	142.22	1 992	750
2004-05	150 923	129 756	19 104	147.23	1 853	827
2005-06	na	125 730	17 247	137.17	3 538	1 556
2006-07	na	100 098	13 769	137.55	6 326	3 255
2007-08	na	109 440	15 142	138.36	7 952	3 413
2008-09	na	70 778	10 346	146.18	7 761	4 021

a Includes pyrophyllite. **b** Excludes pyrophyllite. **c** Excludes uncrushed product from 1 June 1997 to 31 May 1999. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* Bureau of Mineral Resources, Canberra; state mines departments and their equivalents; ABARE.

332 Australian production of talc and pyrophyllite, by state

	Talc				Pyrophyllite
	New South Wales	South Australia	Western Australia	Australia	New South Wales
	t	t	t	t	t
1964	1 388	8 533	5 518	15 439	723
1965	1 710	10 783	7 202	19 695	0
1966	1 426	6 611	13 580	21 616	266
1967	2 169	7 303	10 958	20 431	564
1968	2 153	10 586	25 121	37 860	985
1969	2 925	12 459	36 876	52 259	3 165
1970	1 162	14 559	31 796	47 517	7 707
1971	698	11 506	29 076	41 280	6 596
1972	650	11 336	31 863	43 849	12 299
1973	765	14 088	35 997	50 850	12 820
1974	430	12 773	50 789	63 992	15 845
1975	280	12 975	53 987	67 242	15 145
1976	305	16 892	60 250	77 447	14 650
1977	90	16 391	96 439	112 920	16 039
1978	105	14 070	123 378	137 553	9 401
1979	150	15 565	122 551	138 266	19 209
1980	77	16 414	143 471	159 962	11 002
1981	76	21 046	53 718	74 840	8 146
1982	0	20 497	122 828	143 325	9 467
1983	63	14 913	152 033	167 009	9 569
1984	145	18 588	160 976	179 709	7 051
1985	239	16 804	115 031	132 074	7 317
1986	38	18 061	161 368	179 467	8 588
1987	120	17 471	189 274	206 865	6 036
1988	126	18 840	182 774	201 740	3 932
1988-89	155	13 536	195 307	208 998	3 436
1989-90	88	14 228	220 263	234 579	2 965
1990-91	136	12 107	161 560	173 803	1 032
1991-92	0	10 787	168 891	179 678	1 260
1992-93	0	13 484	158 789	172 273	1 175
1993-94	na	13 016	141 057	154 073	na
1994-95	27	12 950	112 724	125 701	777
1995-96	0	14 751	161 412	176 163	595
1996-97	0	8 061	177 540	185 601	337
1997-98	0	8 018	191 297	199 315	702
1998-99	0	8 428	181 609	190 037	347
1999-00	0	9 410	169 135	178 545	1 727
2000-01	0	9 126	164 320	173 446	0
2001-02	0	8 372	152 369	160 741	868
2002-03	0	8 616	157 364	165 980	0
2003-04	0	6 440	116 640	123 080	0
2004-05	0	7 919	143 004	150 923	0
2005-06	0	5 109	na	na	0
2006-07	0	4 697	na	na	0
2007-08	0	1 090	na	na	0

na Not available.

Sources: ABS, *Mineral Production, Australia,* cat. no. 8405.0, Canberra; ABS, *The Australian Mining Industry,* cat. no. 8414.0, Canberra; ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Kalix, Z., Fraser, L.M. and Rawson, R.I., *Australian Mineral Industry: Production and Trade, 1842–1964,* Bureau of Mineral Resources, Canberra; state mines departments and their equivalents; ABARE.

333 Australian exports of talc, by destination a

	Belgium	Japan	Nether-lands	New Zealand	Korea, Rep. of	United States	Other	Total Volume	Total Value
	t	t	t	t	t	t	t	t	$'000
1962	na	na	412	1 116	na	na	na	5 068	164
1963	na	na	0	1 259	na	na	na	4 090	142
1964	na	na	217	1 049	na	na	na	5 264	177
1965	na	na	1 852	1 421	na	na	na	6 887	234
1966	na	na	4 864	1 198	na	na	na	7 758	231
1967	na	78	6 971	1 235	na	na	503	8 787	277
1968	na	190	19 026	1 285	na	na	4 374	24 875	661
1969	na	9 976	22 236	1 474	na	na	448	34 134	863
1970	na	16 445	12 786	1 567	na	na	239	31 037	791
1971	na	20 754	10 048	1 740	na	na	120	32 662	861
1972	na	14 953	14 991	2 029	na	na	78	32 051	897
1973	na	20 061	14 346	1 661	na	na	111	36 179	996
1974	na	30 889	18 703	1 644	na	na	89	51 325	1 428
1975	na	28 329	12 163	2 060	na	na	2 905	45 457	1 527
1976	na	39 050	15 107	2 802	na	na	5 347	62 306	2 425
1977	na	66 557	13 422	2 461	na	na	4 831	87 271	4 052
1978	na	90 577	11 291	1 860	na	na	3 449	107 177	5 338
1979	na	85 511	12 868	3 099	na	na	6 371	107 849	6 330
1980	3 150	64 152	13 500	1 868	na	na	389	83 059	5 286
1981	6 096	60 406	6 215	2 917	na	na	7 007	82 641	5 529
1982	12 597	51 096	10 063	2 419	na	na	4 337	80 512	5 428
1983	5 004	93 988	14 655	1 325	5 023	9 990	1 929	131 914	8 401
1984	11 213	119 678	14 327	1 988	14 167	0	1 997	163 370	10 810
1985	20 051	66 765	14 980	1 848	15 420	0	3 242	122 306	9 577
1986	15 007	120 312	15 252	1 069	15 745	14 003	1 969	183 357	15 028
1987	8 084	84 701	5 001	1 079	9 311	15 472	6 008	129 656	11 012
1988	12 112	124 843	11 960	669	0	18 030	1 144	168 758	13 073
1988-89	5 000	107 482	5 507	548	0	7 019	1 041	126 597	9 447
1989-90	21 754	137 648	13 565	366	4 648	18 510	4 379	200 870	18 158
1990-91	6 000	87 984	35 167	476	0	6 003	1 630	137 260	12 770
1991-92	5 255	103 279	30 200	421	0	4 728	8 126	152 009	13 717
1992-93	17 002	70 331	14 630	686	0	8 166	9 015	119 830	14 184
1993-94	6 317	94 451	37 356	689	0	10 911	2 573	152 297	15 440
1994-95	6 300	68 657	46 800	679	0	9 300	1 324	133 060	12 672
1995-96	12 803	85 375	48 300	797	680	30 100	4 545	182 600	17 388
1996-97 **b**	6 300	69 029	45 625	669	4 815	5 262	11 527	143 227	12 861
1997-98 **b**	0	0	0	910	3	0	701	1 614	572
1998-99 **b**	0	1 200	0	944	99	0	1 090	3 333	1 053
1999-00	2 501	65 101	78 939	1 013	43	12 400	24 562	184 559	20 391
2000-01	0	62 567	57 550	1 138	129	0	14 387	135 771	24 298
2001-02	0	55 436	61 767	2 574	178	4 200	20 061	144 216	21 768
2002-03	0	42 547	78 318	1 625	21	6 300	19 470	148 281	22 040
2003-04	0	28 261	77 958	3 928	0	20	22 615	132 782	18 884
2004-05	0	15 811	87 257	3 146	38	6 010	17 494	129 756	19 104
2005-06	9 100	25 300	73 080	2 405	38	21	15 786	125 730	17 247
2006-07	0	33 815	44 550	2 345	25	3 721	15 642	100 098	13 769
2007-08	10 679	30 065	58 650	1 066	0	0	8 980	109 440	15 142
2008-09	29 194	30 414	9 602	471	0	0	1 097	70 778	10 346

a Includes pyrophyllite. **b** Excludes uncrushed product from 1 June 1997 to 31 May 1999. **na** Not available.

Sources: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

334 Australian imports of talc, by source a

	Norway	United Kingdom	United States	Other	Total Volume	Total Value
	t	t	t	t	t	$'000
1962	34	na	64	na	2 156	72
1963	41	na	119	na	2 591	81
1964	61	na	135	na	2 351	75
1965	82	na	139	na	2 404	68
1966	19	na	256	na	2 903	62
1967	13	na	381	na	2 199	74
1968	40	na	469	na	3 590	117
1969	9	na	442	na	1 823	77
1970	23	na	560	2 858	3 441	164
1971	31	na	732	3 328	4 091	197
1972	65	na	765	356	1 186	69
1973	86	na	647	376	1 109	66
1974	97	na	355	1 154	1 606	10
1975	2	na	244	701	947	72
1976	62	na	188	120	370	62
1977	26	na	186	123	335	65
1978	51	na	236	240	527	103
1979	41	na	168	211	420	86
1980	23	na	187	172	382	82
1981	60	na	228	41	329	105
1982	22	na	49	22	93	30
1983	27	29	82	9	147	68
1984	39	61	111	4	215	111
1985	46	47	248	11	352	196
1986	43	61	36	11	151	85
1987	66	47	107	46	266	189
1988	31	17	431	30	509	223
1988-89	45	34	338	161	578	216
1989-90	25	23	571	13	631	297
1990-91	58	75	368	28	528	237
1991-92	17	65	451	29	563	298
1992-93	30	99	354	146	629	372
1993-94	35	50	297	152	534	328
1994-95	20	46	287	700	1 053	353
1995-96	4	24	305	733	1 066	423
1996-97	11	44	185	1 022	1 262	451
1997-98	14	42	218	1 068	1 341	578
1998-99	6	24	224	632	886	695
1999-00	8	5	280	822	1 115	893
2000-01	39	0	250	945	1 234	707
2001-02	59	0	168	830	1 058	630
2002-03	16	4	185	1 537	1 742	856
2003-04	0	1	412	1 578	1 992	750
2004-05	1	2	344	1 506	1 853	827
2005-06	16	1	771	2 750	3 538	1 556
2006-07	16	4	717	5 590	6 326	3 255
2007-08	0	5	1 094	6 853	7 952	3 413
2008-09	19	5	507	7 231	7 761	4 021

a Includes pyrophyllite. **na** Not available.

Sources: ABS, *International Trade*, Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review*, AGPS, Canberra.

335 World mine production of talc, by country a

	Australia	Brazil	China b	Japan	Korea, Rep. of	United States	Other	Total
	kt	kt	kt	kt	kt	kt	kt	kt
1961	15	na	150	635	na	692	914	2 708
1962	15	na	150	589	na	700	931	2 712
1963	14	na	150	654	na	730	993	2 857
1964	16	na	150	1 055	na	807	1 032	3 485
1965	20	na	150	1 008	na	783	1 038	3 444
1966	22	na	150	1 109	na	812	1 003	3 526
1967	21	na	150	1 370	na	819	1 003	3 831
1968	39	na	150	1 689	na	869	1 058	4 298
1969	55	112	150	1 705	180	934	1 280	4 490
1970	55	130	150	1 676	204	932	1 413	4 940
1971	48	130	150	1 895	212	932	1 203	4 950
1972	56	130	150	1 507	236	1 005	1 290	4 764
1973	64	90	150	1 564	417	1 131	1 457	5 272
1974	80	201	150	1 542	443	1 170	1 276	5 272
1975	82	221	270	1 192	416	841	1 430	4 872
1976	92	247	300	1 345	496	963	1 532	5 415
1977	129	254	150	1 359	605	1 093	1 601	5 641
1978	147	240	150	1 272	665	1 202	1 577	5 723
1979	157	366	150	1 709	778	1 318	1 889	6 847
1980	171	413	916	1 749	719	1 125	1 946	7 529
1981	83	503	898	1 545	565	1 218	1 912	7 224
1982	153	384	898	1 492	591	1 030	1 780	6 838
1983	177	396	950	1 466	632	967	1 982	7 070
1984	187	413	952	1 498	848	1 023	2 177	7 615
1985	139	425	1 000	1 434	932	1 151	2 257	7 855
1986	188	425	1 000	1 334	900	1 181	2 190	7 735
1987	213	600	na	1 260	900	1 120	3 763	7 856
1988	206	400	na	1 266	850	1 249	3 678	7 649
1989	212	620	1 000	1 286	800	1 253	2 279	7 980
1990	238	720	1 000	1 293	910	1 267	2 823	8 251
1991	175	570	2 300	1 295	840	1 037	2 715	8 932
1992	181	480	2 650	1 123	760	997	2 673	8 864
1993	173	440	2 700	1 090	750	968	2 579	8 700
1994	na	440	2 400	999	710	935	2 396	7 880
1995	126	460	2 400	994	730	1 060	1 380	7 150
1996	177	510	2 400	965	820	994	2 324	8 190
1997	186	625	2 350	1 010	810	1 050	2 439	8 470
1998	200	452	2 300	965	822	971	2 340	8 050
1999	190	452	3 900	800	875	925	2 328	9 470
2000	180	452	3 500	743	776	851	3 138	9 640
2001	173	450	3 500	668	1 100	853	2 176	8 920
2002	162	450	3 600	665	1 100	775	2 118	8 870
2003	166	400	3 600	640	940	869	2 305	8 920
2004	123	570	3 000	585	958	857	2 336	8 320
2005	151	607	3 000	431	900	856	2 305	8 250
2006	na	769	2 400	275	744	769	2 663 c	7 620
2007	na	645	2 400	375	740	645	2 775 c	7 580
2008	na	na	na	na	na	na	na c	na

a Includes pyrophyllite. **b** Excludes Hong Kong. **c** Includes Australia. **na** Not available.

Sources: ABS, *Mining Operations, Australia,* cat. no. 8415.0, Canberra; BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra; US Department of the Interior, US Geological Survey, *Mineral Commodity Summaries,* Washington DC; ABARE.

336 Summary of Australian statistics for tin

	Production		Exports		
	Mine a	Refinery	Volume b	Value	Price c
	t	t	t	$m	A$/t
1963	2 860	2 626	97	0	2 506.0
1964	3 642	3 021	253	1	3 416.0
1965	3 849	3 179	633	2	3 892.0
1966	4 807	3 640	1 327	4	3 570.0
1967	5 586	3 594	1 690	5	3 339.0
1968	6 537	3 692	3 238	8	3 125.0
1969	8 177	4 156	4 075	10	3 427.0
1970	8 828	5 211	4 681	14	3 669.0
1971	10 035	6 333	5 249	14	3 497.0
1972	11 997	7 027	8 129	23	3 761.0
1973	10 801	6 904	7 414	21	4 802.0
1974	10 481	6 714	6 755	30	8 167.0
1975	9 577	5 254	6 977	32	6 841.0
1976	10 611	5 603	5 670	30	7 650.0
1977	10 634	5 561	7 405	60	10 788.0
1978	11 864	5 129	9 071	89	12 867.0
1979	12 571	5 423	8 450	103	15 419.0
1980	11 588	4 819	8 919	118	16 795.0
1981	12 233	4 286	8 622	98	14 244.0
1982	12 093	3 105	7 779	92	12 764.0
1983	9 252 d	2 913	6 692	120	12 995.0
1984	7 923 d	2 899	6 577	83	12 217.0
1985	6 363 d	2 683	5 667	85	12 161.0
1986	8 508 d	1 399	7 512	58	11 581.0
1987	7 691	563	7 163	60	12 004.0
1988	7 009	439	7 376	60	11 299.0
1989	7 709	424	7 511	85	13 352.0
1990	7 425	312	6 187	55	9 913.0
1991	5 380	268	5 770	35	9 054.0
1992	6 609	240	6 569	45	8 549.1
1993	8 057	222	8 161	53	7 589.8
1994	7 400	320	7 234	44	7 502.4
1995	8 656	570	8 574	59	8 432.0
1996	8 733	481	8 779	56	7 892.3
1997	10 326	646	10 160	63	7 611.5
1998	10 174	655	10 066	73	8 831.9
1999	10 011	586	10 556	70	8 373.8
2000	9 115	735	9 057	67	9 335.9
2001	9 840	1 094	9 325	66	8 646.7
2002	7 017	791	6 995	43	7 469.4
2003	3 864	597	2 885	18	7 514.4
2004	1 196	467	218	0	11 583.3
2005	2 308	594	2 573	16	9 687.4
2006	1 477	572	1 022	8	11 647.9
2007	2 071	118	2 533	31	17 344.3
2008	1 783	0	2 783	45	21 707.5

a Metallic content. **b** Tin content of all ores, concentrates, slags, residues and refined tin. **c** London Metal Exchange cash settlement price for refined tin, 99.75 per cent purity, expressed in Australian dollars; between 1 January 1986 and 31 May 1989, Kuala Lumpur Tin Market. **d** Excludes content of copper–tin concentrate.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; London Metal Exchange.

337 Australian supply and disposal of tin

	Unit	2001	2002	2003	2004	2005	2006	2007	2008
Production									
Mine a									
New South Wales	t	0	750	1 031	429	0	0	0	0
Queensland	t	0	0	0	0	282	2 396	2 031	704
Tasmania	t	8 961	5 609	2 282	396	1 832	0	0	1 079
Western Australia	t	879	659	552	371	476	387	40	0
Total	t	9 840	7 017	3 864	1 196	2 308	1 477	2 071	1 783
Refinery	t	1 094	791	597	467	594	572	118	0
Exports									
Tin ore and concentrate									
Malaysia	t	5 728	1 199	605	41	3 696	1 180	3 301	2 715
Thailand	t	9 426	10 342	4 123	0	0	6	729	4 169
Other	t	0	0	0	0	40	0	0	1 021
Total	t	15 154	11 541	4 728	41	3 736	1 186	4 030	7 905
	$m	66.08	43.36	18.41	0.25	16.29	7.69	30.81	45.29
Refined									
Malaysia	t	1	0	65	180	539	302	181	0
Thailand	t	0	0	0	0	0	0	0	0
United States	t	0	0	0	0	0	0	0	0
Other	t	96	12	4	15	21	13	36	1
Total	t	97	12	69	195	560	315	217	1
	$m	0.53	0.17	0.25	1.06	0.70	2.29	2.78	0.14
Tin content of primary materials exported b	t	9 325	6 995	2 885	218	2 573	1 022	2 533	2 783
Prices c									
World	US$/t	4 483.6	4 062.0	4 896.3	8 512.0	7 382.0	8 780.0	14 533.3	18 495.5

a Metallic content. **b** Tin content of all ores, concentrates, slags, residues and refined tin. **c** London Metal Exchange cash settlement price for refined tin, 99.75 per cent purity.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London; London Metal Exchange.

338 World mine production of tin in concentrates, by country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Australia	9.8	7.0	3.9	1.2	2.3	1.5	2.1	1.8
Bolivia	12.0	13.2	16.4	18.1	18.6	17.7	16.0	16.0
Brazil	13.0	12.0	12.2	12.2	11.7	9.5	12.6	9.6
China	99.4	81.0	101.8	118.2	121.6	126.3	147.3	121.2
Indonesia	56.3	78.6	64.0	78.4	120.0	117.5	102.0	96.0
Kazakhstan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Laos	0.8	1.1	0.4	0.4	0.6	0.6	0.7	0.7
Malaysia	5.0	4.2	3.4	2.7	2.9	2.4	2.3	3.4
Myanmar	0.6	0.3	0.6	0.4	0.7	0.9	0.9	1.1
Nigeria	1.3	0.9	0.9	0.9	0.9	0.9	2.4	2.4
Peru	38.2	38.8	40.2	41.6	42.1	38.5	39.0	39.0
Portugal	1.2	0.3	0.2	0.2	0.2	0.0	0.0	0.0
Rwanda	0.4	0.2	1.5	3.6	4.5	3.8	4.6	3.6
Russian Federation	5.5	4.3	3.7	3.0	2.8	2.8	2.8	2.8
Thailand	2.5	1.1	0.9	0.7	0.2	0.2	0.2	0.2
Viet Nam	1.7	1.7	2.1	3.5	5.4	5.4	5.4	5.4
Other s	– 0	1.3	2.5	5.9	8.1	7.4	12.2	11.0
Total s	247.5	246.1	254.6	291.0	342.7	335.3	350.4	312.4

a Recoverable tin content of ores and concentrates produced. **s** ABARE estimate; excludes some small producer countries.
Sources: ABARE, *Australian Mineral Statistics,* Canberra; World Bureau of Metal Statistics, *World Metal Statistics,* London.

339 Summary of Australian statistics for titanium

	Ilmenite concentrate				Rutile concentrate			
	Production a	Exports			Production a	Exports		
	Volume	Volume	Value	Unit value	Volume	Volume	Value	Unit value
	kt	kt	$m	$/t	kt	kt	$m	$/t
1963	205 b	155	1.5	9.7	185	157	10.6	67.5
1964	309 b	250	2.3	9.2	185	197	14.1	71.6
1965	448 b	367	3.5	9.5	221	243	17.1	70.4
1966	522	362	3.7	10.2	251	235	17.8	75.7
1967	554	391	3.9	10.0	270	263	19.7	74.9
1968	562	402	4.1	10.2	293	290	21.9	75.5
1969	721	576	6.0	10.4	326	304	25.5	83.9
1970	886	648	6.6	10.2	371	374	34.8	93.0
1971	814	657	6.7	10.2	375	325	35.8	110.2
1972	707	410	4.4	10.7	313	354	41.1	116.1
1973	720	650	7.2	11.1	335	336	40.5	120.5
1974	817	739	8.8	11.9	319	345	48.2	139.7
1975	991	534	6.8	12.7	348	319	60.0	188.1
1976	959	951	13.5	14.2	390	347	72.5	208.9
1977	1 033	1 083	17.5	16.2	325	247	53.5	216.6
1978	1 255	994	16.1	16.2	257	371	69.2	186.5
1979	1 181	907	15.2	16.8	275	318	69.3	217.9
1980	1 385	1 059	20.1	19.0	312	315	88.8	281.9
1981	1 321	908	21.4	23.6	231	216	64.1	296.8
1982	1 149	879	22.3	25.4	221	199	50.9	255.8
1983	893	817	23.0	28.2	163	218	54.0	247.7
1984	1 493	1 173	33.9	28.9	170	192	58.0	302.1
1985	1 419	1 152	39.7	34.5	212	212	83.5	393.9
1986	1 238	1 034	48.5	46.9	216	230	116.4	506.1
1987	1 349	1 046	61.0	58.3	249	257	149.9	583.7
1988	1 610	1 046	68.3	65.3	231	238	137.5	576.9
1989	1 690	1 001	72.6	72.5	243	252	165.0	655.0
1990	1 616	1 041	82.8	79.5	244	186	143.9	775.3
1991	1 466	977	82.0	84.0	192	175	124.1	708.8
1992	1 787	945	76.6	81.1	183	196	111.6	568.5
1993	1 795	962	79.4	82.6	187	182	98.9	543.3
1994	1 777	1 084	89.7	82.8	233	209	113.4	541.3
1995	1 980	1 075	98.0	91.1	204	221	132.1	598.0
1996	2 030	1 062	103.4	97.4	192	169	128.5	761.3
1997	2 233	1 350	137.2	101.6	245	208	150.3	724.1
1998	2 413	1 286	141.4	110.0	233	218	176.1	807.9
1999	1 976	1 051	135.0	128.4	182	157	117.7	747.2 s
2000	2 146	1 148	159.8	139.2	207	189	146.4	776.4 s
2001	2 019	915	144.2	157.6	207	188	165.8	880.2 s
2002	1 954	969	138.6	143.1	219	204	171.7	840.4 s
2003	2 006	868	104.6	120.4	173	164	112.2	685.9 s
2004	1 920	756	76.6	101.4	163	147	98.2	666.4 s
2005	2 030	714	71.4	100.0	177	168	130.6	775.6 s
2006	2 358	905	99.5	110.0	232	231	191.5	827.9 s
2007	2 340	874	100.1	114.5	312	346	276.0	797.4 s
2008	2 082	1 019	119.7	117.5	325	438	271.3	618.8 s

a Ex mine. **b** Despatches. **s** ABARE estimate. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

340 World ilmenite production, by country

	Australia a	India	Malaysia	Norway	Ukraine s	United States	Other s	Total s
	kt	kt	kt	kt	kt	kt	kt	kt
1962	182	138	103 b	245 c	144	727	923	2 470
1963	205	26	149 b	242	153	806	1 079	2 660
1964	309	11	131 b	272	163	908	1 516	3 310
1965	448	30	124 b	284	174	879	1 591	3 530
1966	522	34	118 b	370	185	876	1 635	3 740
1967	554	42	91 b	427	197	874	1 565	3 750
1968	562	59	126 b	402	210	888	1 723	3 970
1969	721	48	133 b	491	224	845	1 728	4 190
1970	886	79	223 b	579	238	787	2 537	5 340
1971	814	140 c	156 b	595	254	618	2 559	5 150
1972	707	165 c	153 b	610	270	659	2 195	4 770
1973	720	185 c	154 b	750	288	735	2 247	5 090
1974	817	132 c	154 b	844	307	685 c	2 246	5 200
1975	991	140 c	112 b	516 c	327	632	1 990	4 725
1976	959	150 c	180 b	759	381	590	2 249	5 280
1977	1 033	185 c	185 b	823	399	576	1 988	5 200
1978	1 255	185 c	187 b	763	408	535	2 141	5 490
1979	1 181	160	187 b	820	408	580	2 162	5 520
1980	1 385	160	189 b	828	417	498	2 439	5 940
1981	1 321	189	173 b	656	426	462	2 954	6 200
1982	1 149	190	77 b	552	431	239	2 642	5 300
1983	893	180	223 b	544	435	235	1 777	4 300
1984	1 493	150	177 b	661	440	240	2 906	6 100
1985	1 419	143	247 b	736	445	240	3 756	7 000
1986	1 238	140	415	804	450	240	3 599	6 900
1987	1 349	140	509	852	454	240	4 496	8 200
1988	1 610	140 d	506 d	898 d	460	240 d	4 164	8 030
1989	1 690	160 d	520 d	930 d	460	240 d	5 116	9 140
1990	1 616	305 d	250 d	814 d	350	255 d	4 109	7 699
1991	1 466	270 d	200 d	625 d	350	220 d	3 641	6 773
1992	1 787	215 d	338 d	708 d	200	240 d	4 296	7 784
1993	1 795	260	279	713	180	240	4 030	7 497
1994	1 777	290	155	826	150	315	4 139	7 652
1995	1 980	290	179	833	180	330	4 201	7 993
1996	2 030	330	101	747	270	300	4 653	8 431
1997	2 233	305	167	558	162	270	4 815	8 510
1998	2 413	368	67	590	192	360	5 247	9 237
1999	1 976	395	100	590	230	389	5 091	8 764
2000	2 146	416	110	750	260	418	5 488	9 593
2001	2 019	457	170	750	319	437	5 908	10 063
2002	1 954	522	185	790	356	410	5 883	10 103
2003	2 006	632	142	850	420	474	5 603	10 127
2004	1 920	691	114	870	448	506	5 766	10 315
2005	2 030	619	148	816	470	511	6 405	10 999
2006	2 358	685	90	850	470	461	6 860	11 774
2007	2 340	695	50	870	585	330	7 127	11 997
2008	2 082	620	50	890	470	329	6 890	11 330

a Includes leucoxene. **b** Exports to 1985. **c** Bureau of Mineral Resources estimate. **d** DEMA Pty Ltd estimates. **s** ABARE estimate. **na** Not available.
Sources: British Geological Survey, *World Mineral Statistics,* Keyworth, Nottingham, United Kingdom; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; Metal Bulletin, *Prices and Data,* Surrey, England; Mining Journal, *Mining Annual Review,* London; TZ Minerals International, *Mineral Sands Annual Review,* Surrey, England; TZ Minerals International, *Mineral Sands Report,* Surrey, England; US Department of the Interior, Bureau of Mines, *Mineral Commodity Summaries,* Washington DC; ABARE.

341 World rutile concentrate and titaniferous slag production, by country

	Rutile concentrate						Titaniferous slag a	
	Australia	Sierra Leone	South Africa	United States	Other s	Total s	Canada	South Africa
	kt	kt	kt	kt	kt	kt	kt	kt
1964	185	0	0	7	22	214	494	0
1965	221	0	0	5	22	248	495	0
1966	251	0	0	5	22	278	476	0
1967	270	24 b	0	5	23	322	547	0
1968	293	14 b	0	2	24	333	610	0
1969	326	28 b	0	0	26	380	680	0
1970	371	44 b	0	0	25	440	766	0
1971	375	12	0	0	25	412	774	0
1972	313	0	0	0	28	341	835	0
1973	335	0	0	8 b	27	370	855	0
1974	319	0	0	6 b	26	351	845	0
1975	348	0	0	10 b	28	386	748	0
1976	390	0	0	8 b	26	424	812	0
1977	325	0	0	7	30	362	691	0
1978	257	0	20	4	35	316	848	100
1979	275	7	42	0	40	364	476	316
1980	312	47	48	10	38	456	875	379
1981	231	51	50	15	40	387	762	408
1982	221	48	47	15	33	364	653	420
1983	163	72	56	18	34	343	612	420
1984	170	91	56	20	33	371	726	417
1985	212	81	55	30 b	35	413	844	435
1986	216	97	60	30 b	37	440	850	435
1987	249	113	56	30 b	35	480	915	632
1988	231	126	55	25 s	38	475	1 025	700
1989	243	128	61	25 s	42	499	1 035	692
1990	244	144	60	29 s	39	516	1 046	672
1991	192	155	90	27 s	79	543	701	808
1992	183	149	95	29 s	65	521	753	884
1993	187	150	100	21	64	522	653	892
1994	233	144	90	24	56	547	765	772
1995	204	0	92	19	50	365	816	988
1996	192	0	108	32	55	387	954	1 065
1997	245	0	108	35	32	420	914	1 075
1998	233	0	108	35	45	421	1 033	1 083
1999	182	0	118	37	46	383	928	1 100
2000	207	0	123	38	78	442	893	1 090
2001	207	0	122	30	83	438	990	1 030
2002	219	0	134	22	82	455	864	975
2003	173	0	102	25	73	373	677	790
2004	163	0	104	22	90	379	690	867
2005	177	0	116	27	98	418	731	1 020
2006	232	74	125	10	87	528	800	1 050
2007	312	74	119	0	100	605	827	1 095
2008	325	74	125	0	85	609	871	1 065

a Source changed to TZ Minerals International from 1991. **b** Bureau of Mineral Resources estimate. **s** ABARE estimate. **na** Not available.

Sources: British Geological Survey, *World Mineral Statistics,* Keyworth, Nottingham, United Kingdom; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; TZ Minerals International, *Mineral Sands Annual Review,* Surrey, England; TZ Minerals International, *Mineral Sands Report,* Surrey, England; US Department of the Interior, Bureau of Mines, *Mineral Commodity Summaries,* Washington DC.

342 Summary of Australian statistics for uranium

	Production a	Exports		
		Volume b	Value	Unit value
	t	t	$m	$/kg U_3O_8
1961-62	1 362	na	na	na
1962-63	1 193	na	na	na
1963-64	367	na	na	na
1964-65	na	na	na	na
1965-66	na	na	na	na
1966-67	na	na	na	na
1967-68	na	na	na	na
1968-69	na	na	na	na
1969-70	na	na	na	na
1970-71	na	na	na	na
1971-72	na	na	na	na
1972-73	na	na	na	na
1973-74	na	na	na	na
1974-75	na	na	na	na
1975-76	484	na	na	na
1976-77	480	750	26.9	35.87
1977-78	696	1 452	87.0	59.92
1978-79	951	1 317	102.3	77.68
1979-80	1 837	1 210	98.4	81.32
1980-81	3 944	1 625	120.0	73.85
1981-82	5 968	5 460	415.0	76.01
1982-83	4 334	3 233	296.0	91.56
1983-84	5 836	3 259	312.1	95.77
1984-85	4 327	3 441	317.0	92.12
1985-86	4 450	3 210	296.0	92.21
1986-87	4 505	4 364	389.0	89.14
1987-88	4 193	4 552	411.0	90.29
1988-89	4 507	5 061	402.6	79.54
1989-90	4 089	4 812	314.8	65.42
1990-91	4 367	6 129	331.7	54.12
1991-92	4 329	4 729	244.8	51.76
1992-93	2 686	2 289	122.6	53.55
1993-94	2 733	3 992	193.3	48.42
1994-95	2 622	4 069	187.9	46.18
1995-96	5 088	5 286	241.8	45.75
1996-97	5 975	5 701	245.2	43.01
1997-98	5 788	6 415	288.2	44.93
1998-99	6 387	5 989	287.8	48.05
1999-00	8 217	8 025	366.6	45.68
2000-01	9 549	9 722	497.3	51.15
2001-02	7 823	7 367	360.7	48.96
2002-03	9 172	9 593	427.0	44.52
2003-04	9 569	9 099	364.5	40.05
2004-05	10 964	11 249	475.1	42.24
2005-06	9 974	10 253	545.8	53.24
2006-07	9 594	9 519	659.5	69.28
2007-08	10 114	10 139	886.6	87.45
2008-09	10 311	10 114	990.4	97.92

a Tonnes of uranium oxide (U_3O_8). **b** Before 1983-84, exports are tonnes of concentrate; from 1983-84, exports are tonnes of U_3O_8. **na** Not available.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra.

343 World uranium production, by country a

	Australia	Canada	Gabon	Namibia	Niger	South Africa	United States	Total b
	kt	kt	kt	kt	kt	kt	kt	kt
1970	0.25	3.52	0.40	0.00	0.00	3.17	9.90	18.90
1971	0.00	3.83	0.54	0.00	0.43	3.22	9.40	19.10
1972	0.00	4.00	0.21	0.00	0.87	3.20	9.90	20.11
1973	0.00	3.71	0.40	0.00	0.95	2.74	10.20	20.00
1974	0.00	3.42	0.44	0.00	1.12	2.71	8.90	18.70
1975	0.00	3.56	0.80	0.00	1.31	2.49	8.90	19.35
1976	0.36	4.85	0.85	0.65	1.46	2.76	9.80	23.17
1977	0.36	5.79	0.91	2.34	1.61	3.36	11.50	28.58
1978	0.52	6.80	1.02	2.70	2.06	3.96	14.20	34.12
1979	0.71	6.82	1.10	3.84	3.62	4.80	14.40	38.34
1980	1.56	7.15	1.03	4.04	4.13	6.15	16.80	44.24
1981	2.92	7.72	1.02	3.97	4.36	6.13	14.80	44.20
1982	4.42	8.08	0.97	3.78	4.26	5.82	10.30	41.46
1983	3.21	7.14	1.01	3.72	3.43	6.06	8.20	36.99
1984	4.32	11.17	0.92	3.70	3.28	5.73	5.70	38.85
1985	3.21	10.88	0.94	3.40	3.18	4.88	4.30	34.87
1986	4.15	11.72	0.90	3.30	3.11	4.60	5.20	37.21
1987	3.78	12.44	0.80	3.50	2.97	3.96	5.00	36.96
1988	3.53	12.29	0.93	3.51	2.97	3.80	5.04	36.43
1989	3.66	11.32	0.87	3.08	2.96	2.94	5.32	34.09
1990	3.53	8.73	0.70	3.21	2.83	2.49	3.42	28.36
1991	3.78	8.16	0.54	2.45	2.96	1.71	3.06	26.99
1992	2.33	9.30	0.54	1.68	2.96	1.67	2.20	23.88
1993	2.24	9.12	0.68	1.65	2.92	1.69	1.23	23.48
1994	2.20	9.69	0.65	1.90	2.98	1.69	1.40	23.64
1995	3.70	10.52	0.63	2.01	2.97	1.42	1.36	26.22
1996	4.96	11.40	0.56	2.45	3.16	1.44	1.81	29.32
1997	5.48	11.17	0.47	2.91	3.50	1.10	1.81	29.72
1998	4.89	10.92	0.73	2.78	3.71	0.97	1.81	27.57
1999	5.98	8.21	0.29	2.69	2.91	0.93	1.77	24.15
2000	7.58	10.68	0.00	2.72	2.91	0.80	1.52	27.65
2001	7.72	12.52	0.00	2.24	2.92	0.87	1.01	28.42
2002	6.85	11.60	0.00	2.33	3.08	0.83	0.90	36.05
2003	7.57	10.46	0.00	2.04	3.16	0.77	0.77	35.49
2004	8.98	11.60	0.00	3.04	3.19	0.75	0.88	40.19
2005	8.98	11.63	0.00	3.15	3.32	0.67	1.17	41.94
2006	7.60	9.86	0.00	3.07	3.44	0.53	1.81	39.60
2007	8.60	9.85	0.00	3.80	3.63	0.75	2.00	43.33
2008	na	na	na	na	na	na	na	na

a Uranium (U); excludes current and former centrally planned economies. **b** Includes other Western producers not listed.

Note: Uranium: Resources, Production and Demand publication is only released every two years.

Sources: International Atomic Energy Agency, *Uranium: Resources, Production and Demand,* Vienna; Nuexco, *Annual Review,* Denver, Colorado; World Nuclear Association.

344 World uranium consumption, by country a

	Canada	France	Germany b	Japan	United Kingdom	United States	Other	Total
	kt	kt	kt	kt	kt	kt	kt	kt
1980	1.00	3.70	2.76	4.00	1.90	7.40	3.59	24.35
1981	1.10	4.40	1.95	4.70	1.30	8.30	4.84	26.59
1982	1.30	6.00	3.20	4.70	2.20	11.80	6.90	36.10
1983	1.40	6.50	2.70	3.50	1.50	8.90	5.85	30.35
1984	1.30	6.00	3.40	5.00	1.50	10.50	6.50	34.20
1985	1.30	6.00	3.20	4.70	2.20	11.80	6.90	36.10
1986	1.40	6.20	3.30	4.80	1.50	11.85	7.22	36.27
1987	1.60	6.20	3.30	6.00	1.55	11.15	7.70	37.50
1988	1.70	6.50	3.30	6.40	1.70	14.19	6.77	40.56
1989	1.80	7.20	3.30	6.60	1.90	14.50	7.39	42.69
1990	1.90	7.20	3.30	6.90	2.00	11.40	7.64	40.34
1991	1.90	7.30	3.30	7.10	2.00	16.00	8.30	45.90
1992	1.90	7.80	3.20	7.60	2.33	17.30	7.31	47.44
1993	1.90	7.90	3.20	8.10	2.04	17.30	9.34	49.77
1994	1.90	8.90	3.00	7.70	2.43	15.60	9.90	49.43
1995	1.90	8.90	3.30	7.70	2.51	18.40	9.74	52.45
1996	1.80	8.90	3.20	8.70	2.62	17.40	9.81	52.43
1997	1.80	8.60	2.90	7.50	2.62	21.30	8.41	53.13
1998	1.20	8.20	3.10	7.81	2.36	17.70	12.33	52.69
1999	1.30	8.20	3.10	9.29	2.36	18.10	12.19	54.54
2000	1.80	8.88	3.35	7.50	2.25	20.57	12.84	57.19
2001	1.80	8.57	3.20	11.10	2.25	18.42	12.32	57.66
2002	1.40	8.57	3.20	7.84	1.93	22.70	13.23	58.87
2003	1.70	8.57	3.20	8.38	1.76	22.80	13.32	59.73
2004	1.70	7.19	3.00	7.14	1.91	24.15	22.24	67.32
2005	1.70	7.19	2.90	8.67	1.50	22.88	22.01	66.84
2006	1.80	7.19	3.71	7.94	2.17	22.89	20.81	66.50
2007	1.90	9.00	3.49	8.79	1.90	22.83	21.21	69.11
2008	na	na	na	na	na	na	na	na

a Annual reactor related requirements; excludes current and former centrally planned economies. **b** West Germany until 1991; unified Germany from 1992.

Note: Uranium: Resources, Production and Demand publication is only released every two years.

Source: International Atomic Energy Agency, *Uranium: Resources, Production and Demand,* Vienna.

345 Uranium prices a

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Av.
1974	7.70	7.90	8.00	9.00	9.50	10.50	11.50	12.00	12.50	14.00	14.75	15.00	11.03
1975	16.00	16.00	18.00	20.00	21.00	23.00	24.70	26.00	26.00	28.50	30.00	35.00	23.68
1976	35.20	37.00	39.25	40.00	40.00	40.00	40.00	40.40	41.00	41.00	41.50	41.00	39.70
1977	41.35	41.50	41.60	41.60	42.00	42.25	42.25	42.25	42.40	42.75	43.20	43.20	42.20
1978	42.90	43.25	43.25	43.25	43.40	43.40	43.40	43.10	43.25	43.00	43.25	43.25	43.23
1979	43.25	43.25	43.25	43.25	43.25	43.00	42.70	42.70	42.20	42.20	41.00	40.75	42.57
1980	40.00	38.00	35.00	32.00	32.00	31.50	31.50	30.00	28.50	28.00	28.00	27.00	31.79
1981	25.00	25.00	25.00	25.00	25.00	24.25	23.50	23.50	23.50	23.50	23.50	23.50	24.19
1982	23.00	23.00	22.50	20.75	20.50	19.25	18.25	17.00	17.00	17.50	19.75	20.25	19.90
1983	21.50	21.75	22.25	23.25	23.50	23.50	24.00	24.00	24.00	23.50	22.50	22.00	22.98
1984	20.50	17.50	17.00	17.75	17.75	17.50	17.50	17.50	17.50	16.00	15.50	15.25	17.27
1985	15.00	15.00	15.00	14.25	15.00	15.00	15.75	16.00	16.00	16.50	16.75	17.00	15.60
1986	17.00	17.00	17.25	17.25	17.00	17.00	17.00	17.00	17.00	17.00	16.75	16.75	17.00
1987	16.65	16.75	17.00	17.00	17.00	17.20	17.20	17.00	16.75	16.75	16.75	16.50	16.88
1988	16.50	16.25	16.00	16.00	15.50	15.25	14.55	14.10	13.85	13.20	12.30	12.00	14.63
1989	11.50	11.25	10.75	10.20	9.75	9.65	9.65	9.60	9.60	9.40	9.30	9.00	9.97
1990	8.90	8.80	8.80	8.90	9.35	11.00	11.75	11.50	10.50	8.50	9.50	9.65	9.76
1991	9.20	9.40	9.40	9.00	9.25	9.10	8.75	9.00	8.25	7.50	7.40	8.75	8.75
1992	7.90	8.00	7.90	7.90	7.70	7.90	7.90	8.10	8.60	10.25	10.50	10.00	8.55
1993	9.80	10.10	10.20	10.35	10.10	10.30	9.90	10.10	10.30	10.30	10.00	9.90	10.11
1994	9.50	9.50	9.50	9.40	9.25	9.25	9.40	9.20	9.10	9.20	9.50	9.60	9.37
1995	9.70	10.35	11.00	11.50	11.75	11.75	11.90	11.90	11.80	11.80	11.80	12.25	11.46
1996	12.90	15.25	15.90	16.15	16.50	16.60	16.50	16.40	15.90	15.50	15.00	14.70	15.61
1997	14.25	13.75	13.00	12.25	11.50	10.70	10.60	10.30	10.85	12.50	12.75	12.15	12.05
1998	12.00	11.00	10.70	10.80	10.90	10.90	10.50	10.25	9.90	9.25	8.75	8.75	10.31
1999	10.50	10.50	10.85	10.85	10.65	10.40	10.30	10.10	9.90	9.70	9.70	9.60	10.25
2000	9.50	9.40	9.20	9.00	8.45	8.15	8.05	7.80	7.45	7.25	7.10	7.10	8.20
2001	7.25	7.90	8.20	8.60	8.90	8.90	8.90	9.10	9.30	9.45	9.50	9.60	8.80
2002	9.70	9.90	9.90	9.90	9.90	9.90	9.85	9.85	9.75	9.90	9.90	10.20	9.89
2003	10.20	10.20	10.10	10.75	11.00	10.90	10.90	11.30	12.20	12.75	13.75	14.50	11.55
2004	15.50	16.50	17.50	17.60	17.85	18.50	18.50	19.25	20.00	20.25	20.50	20.70	18.55
2005	21.00	21.75	22.50	24.00	29.00	29.00	29.50	30.20	31.25	33.25	34.50	36.25	28.52
2006	37.50	38.50	40.50	41.50	43.00	45.50	47.50	48.50	54.00	60.00	63.00	72.00	49.29
2007	75.00	85.00	95.00	113.00	125.00	136.00	120.00	90.00	85.00	85.00	93.00	90.00	99.33
2008	78.00	73.00	71.00	65.00	60.00	59.00	64.50	64.50	53.00	45.00	55.00	53.00	61.75
2009	48.00	45.00	42.00	44.00	49.00	52.00	47.00	46.00	42.75	49.50	na	na	na

a Restricted exchange value after 1993, using Nuexco's exchange value up to 1996 and an average of four prices after 1996, US$/lb U_3O_8.

Sources: TradeTech, *The Nuclear Review*, Denver, Colorado (previously Nuexco, *Monthly Report*); Ux Consulting.

346 Nuclear power reactors in operation

	2005 Reactors in operation a		2006 Reactors in operation a		2007 Reactors in operation a		2008 Reactors in operation a	
	No. of Units	Capacity MW(e) b	No. of Units	Capacity MW(e) b	No. of Units	Capacity MW(e) b	No. of Units	Capacity MW(e) b
Argentina	2	935	2	935	2	935	2	935
Armenia	1	376	1	376	1	376	1	376
Belgium	7	5 801	7	5 728	7	5 728	7	5 728
Brazil	2	1 901	2	1 901	2	1 901	2	1 901
Bulgaria	4	2 722	4	2 722	2	1 906	2	1 906
Canada	18	12 595	18	12 595	18	12 595	18	12 652
China	9	6 587	10	7 587	11	8 587	11	8 587
Czech Republic	6	3 472	6	3 472	6	3 472	6	3 472
Finland	4	2 676	4	2 676	4	2 969	4	2 696
France	59	63 474	59	63 473	59	63 363	59	63 473
Germany	17	20 303	17	20 303	17	20 339	17	20 339
Hungary	4	1 755	4	1 755	4	1 826	4	1 826
India	15	2 993	16	3 483	17	3 779	17	3 779
Japan	55	47 700	55	47 700	55	47 577	53	46 236
Korea, Rep. of	20	16 840	20	16 840	20	17 533	20	17 716
Lithuania	1	1 185	1	1 185	1	1 185	1	1 185
Mexico	2	1 310	2	1 310	2	1 310	2	1 310
Netherlands	1	452	1	452	1	485	1	485
Pakistan	2	425	2	425	2	400	2	400
Romania	1	655	1	655	2	1 310	2	1 310
Russian Federation	31	21 743	31	21 743	31	21 743	31	21 743
South Africa	2	1 842	2	1 842	2	1 842	4	1 686
Slovakia	6	2 472	6	2 472	5	2 064	1	696
Slovenia	1	676	1	696	1	696	2	1 842
Spain	9	7 584	8	7 442	8	7 442	8	7 448
Sweden	10	8 904	10	8 938	10	9 016	10	9 016
Switzerland	5	3 220	5	3 220	5	3 220	5	3 220
United Kingdom	23	11 852	19	10 982	19	11 035	6	4 916
Ukraine	15	13 168	15	13 168	15	13 168	15	13 168
United States	103	97 838	103	98 054	104	99 049	19	11 035
Total	441	368 340	438	369 014	439	371 462	436	371 927

a At end of year. **b** Annual electricity generating capacity in megawatts.

Source: International Atomic Energy Agency, *annual press release: IAEA releases nuclear power statistics,* Vienna; World Nuclear Association.

347 Summary of Australian statistics for zinc

	Production			Exports d		
	Mine a	Refined b	Consumption c	Volume	Value	Price e
	kt	kt	kt	kt	$m	$/t
1965	355	202	98	194	39	286.0
1966	375	198	90	241	47	270.5
1967	407	198	104	254	43	260.7
1968	416	198	102	267	44	262.0
1969	510	253	117	331	59	277.8
1970	487	268	115	390	71	295.0
1971	453	266	109	359	68	314.8
1972	507	304	114	346	80	339.8
1973	480	306	121	418	102	385.9
1974	464	284	120	374	139	543.2
1975	510	200	82	295	117	627.0
1976	462	249	86	388	159	655.7
1977	492	256	81	327	148	657.7
1978	473	295	92	465	157	533.6
1979	529	310	102	382	165	712.5
1980	495	306	100	481 f	251 f	713.1
1981	518	300	97	406	235	798.5
1982	665	296	81	521	323	849.0
1983	699	298	83	645	392	952.3
1984	677	302	77	661	469	1 187.7
1985	759	289	87	633	515	1 255.2
1986	712	303	81	662	489	1 242.3
1987	778	310	82	663	526	1 249.3
1988	760	302	90	674	631	1 560.7
1989	803	294	88	670	962	2 298.9
1990	933	303	82	825	1 159	2 094.7
1991	1 023	324	71	915	900	1 569.8
1992	1 019	332	71	995	1 135	1 816.9
1993	990	316	75	987	851	1 568.3
1994	955	323	79	978	785	1 499.9
1995	937	320	77	907	797	1 559.7
1996	1 070	326	73	983	808	1 478.4
1997	1 011	307	81	965	953	1 889.8
1998	1 063	311	93	1 002	1 025	1 806.6
1999	1 162	344	96	1 109	1 105	1 752.6
2000	1 419	493	85	1 333	1 718	2 046.7
2001	1 517	556	83	1 484	1 669	1 921.2
2002	1 469	566	87	1 544	1 485	1 614.4
2003	1 479	553	85	1 466	1 316	1 431.5
2004	1 335	470	82	1 324	1 232	1 609.3
2005	1 366	457	76	1 444	1 765	1 993.3
2006	1 362	463	86	1 283	3 792	4 342.4
2007	1 514	502	81	1 460	4 191	4 381.5
2008	1 519	499	85	1 497	2 314	2 494.2

a Metal content. **b** Excludes secondary (scrap) and zinc dust production. **c** Refined metal only. **d** Quantities refer to the total metallic content of all ores and concentrates, intermediate products and refined metal. The value of zinc contained in other mine and smelter products (for example, zinc in lead concentrates) is included in the value of the product in which it is exported. **e** EZ Industries, Prime Western, 98.5 per cent purity. Before 1968, Prime Western grade zinc at Cockle Creek. **f** Zinc export code classifications changed substantially between 1979 and 1980, creating a break in the continuity of the series.

Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

348 Australian supply and disposal of zinc

	Unit	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Production								
Mine **a**	kt	1 529	1 355	1 352	1 380	1 375	1 571	1 411
Refined								
Primary	kt	571	499	464	446	496	507	506
Secondary **b**	kt	6	6	6	6	6	6	6
Exports								
Ores and concentrates	kt	1 913	1 844	1 953	1 821	1 948	2 323	2 101
	$m	670	677	852	1 542	2 590	2 031	934
Refined metal	kt	486	396	397	388	374	411	451
	$m	757	557	614	998	1 707	1 319	923
Consumption c	kt	86	84	79	160	253	189	175
Export unit value								
Ores and concentrates	A$/t	350.3	366.9	436.2	846.7	1 329.7	874.3	444.5
Refined metal	A$/t	1 558.2	1 408.6	1 549.1	2 573.2	4 561.9	3 211.4	2 045.7

a Metal content. **b** Includes remelted zinc and direct use of secondary materials. **c** Refined metal only.
Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra.

349 Volume of Australian exports of zinc, by destination a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Ores and concentrates b								
Belgium	27	89	64	45	15	9	29	30
China	94	63	116	131	103	104	300	352
Germany	33	28	27	32	6	22	2	na
India	0	18	19	34	18	28	16	14
Italy	21	67	21	5	na	na	na	na
Japan	216	185	202	181	184	171	133	166
Korea, Rep. of	252	173	186	234	278	205	158	156
Netherlands	188	219	225	230	207	216	162	122
Thailand	32	25	24	na	19	24	52	48
United Kingdom	42	65	5	0	0	0	0	0
Other	119	84	118	103	101	107	150	108
Total	1 024	1 016	1 007	995	931	886	1 002	996
Metal								
Bangladesh	18	22	16	2	2	2	2	2
Chinese Taipei	63	61	42	39	74	79	76	84
Hong Kong, China	87	92	105	119	147	118	85	67
India	13	12	14	5	11	13	6	5
Indonesia	32	33	31	18	17	15	14	14
Malaysia	33	30	19	36	90	15	18	64
Netherlands	18	21	33	na	na	10	2	na
Saudi Arabia	15	21	24	17	8	3	16	17
Thailand	9	15	7	6	5	5	5	9
United States	89	58	8	8	na	15	0	na
Other	80	118	162	75	109	82	180	153
Total	457	483	461	325	463	357	404	415

a Excluding slags, residues and scrap. **b** Metal content. **na** Not available.
Source: ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; International Lead–Zinc Study Group, *Lead and Zinc Statistics,* Lisbon, Portugal.

350 World production, consumption, stocks and prices of zinc

	Production						
		Refined metal					
	Mine a	Primary	Secondary b	Total	Consumption c	Stocks b	Price d
	kt	kt	kt	kt	kt	kt	US$/t
1963	3 660	3 426	167	3 593	3 644	392	211.8
1964	4 083	3 683	177	3 860	3 986	390	324.0
1965	4 352	3 848	215	4 063	4 099	433	310.6
1966	4 550	4 045	242	4 287	4 292	461	280.4
1967	4 958	4 142	222	4 364	4 323	479	271.9
1968	5 113	4 613	224	4 837	4 701	452	261.7
1969	5 472	5 073	205	5 278	5 092	519	285.2
1970	5 590	4 975	259	5 234	5 013	682	294.5
1971	5 675	4 862	248	5 110	5 164	614	310.0
1972	5 866	5 247	269	5 516	5 679	586	378.4
1973	6 070	5 543	283	5 826	6 195	457	846.8
1974	6 129	5 720	274	5 994	6 000	759	1 237.5
1975	6 176	5 219	264	5 483	5 062	1 185	746.0
1976	6 249	5 545	266	5 811	5 779	1 140	711.7
1977	6 567	5 710	279	5 989	5 857	1 194	590.0
1978	6 401	5 801	237	6 038	6 329	833	593.3
1979	6 299	6 169	287	6 456	6 444	868	741.2
1980	6 108	5 958	285	6 243	6 289	787	761.3
1981	6 004	5 969	318	6 287	6 199	875	859.6
1982	6 275	5 701	355	6 056	6 043	800	745.7
1983	6 289	6 016	368	6 384	6 370	668	765.5
1984	6 523	6 327	351	6 678	6 539	626	891.0
1985	6 651	6 545	325	6 870	6 532	606	763.9
1986	6 534	6 085	295	6 380	6 747	615	753.1
1987	6 885	6 330	293	6 623	6 959	568	816.2
1988	6 714	6 579	299	6 878	6 848	496	1 240.5
1989	6 785	6 426	368	6 794	6 726	572	1 719.6
1990	7 309	6 296	395	7 061	6 819	534	1 520.0
1991	7 220	6 427	428	7 249	6 870	650	1 116.0
1992	7 260	6 605	425	7 028	6 532	989	1 240.0
1993	6 765	6 755	455	7 195	6 588	1 474	961.0
1994	6 810	6 700	467	7 130	6 954	1 669	998.0
1995	6 955	6 850	497	7 330	7 499	1 170	1 031.0
1996	7 287	6 919	524	7 443	7 528	913	1 025.0
1997	7 338	7 283	500	7 782	7 760	901	1 313.0
1998	7 565	7 503	518	8 021	7 883	762	1 023.0
1999	8 068	7 816	552	8 374	8 495	734	1 076.3
2000	8 839	8 382	599	8 981	9 003	662	1 128.4
2001	8 934	8 599	622	9 268	8 924	946	885.5
2002	8 892	9 082	628	9 710	9 375	1 095	778.9
2003	9 520	9 281	593	9 874	9 843	1 158	828.0
2004	9 736	9 801	552	10 353	10 639	1 039	1 047.4
2005	10 146	9 699	523	10 222	10 611	828	1 381.9
2006	10 447	10 098	557	10 655	11 016	548	3 276.0
2007	11 129	10 778	582	11 360	11 307	580	3 243.0
2008	11 702	11 096	559	11 655	11 438	764	1 878.4

a Metal content. **b** Excludes Former Soviet Union, Eastern Europe and China. **c** Refined primary metal only. **d** Average London Metal Exchange cash settlement price, registered brands, minimum 98 per cent purity.

Sources: BMR, *Australian Mineral Industry Annual Review,* AGPS, Canberra; International Lead–Zinc Study Group, *Lead and Zinc Statistics,* Lisbon, Portugal; Metallgesellschaft AG, *Metallstatistik,* Frankfurt; London Metal Exchange.

351 World zinc mine production, by region and country [a]

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa								
Algeria	7	5	2	0	0	0	0	0
Morocco	89	91	69	87	128	95	51	48
Namibia	37	41	108	202	232	208	196	204
South Africa	61	64	41	32	32	34	31	29
Tunisia	41	37	38	31	19	3	3	3
Total	236	237	258	352	412	340	281	284
Americas								
Argentina	40	37	30	27	30	30	27	31
Bolivia	145	142	145	147	160	173	214	384
Brazil	111	136	153	159	171	185	194	173
Canada	1 065	916	788	791	667	638	630	716
Chile	33	36	33	28	29	36	37	41
Honduras	48	46	44	41	43	38	29	28
Mexico	429	446	414	426	476	479	452	442
Peru	1 056	1 219	1 369	1 209	1 202	1 202	1 444	1 603
United States	842	784	768	739	748	727	803	779
Total	3 769	3 762	3 744	3 568	3 525	3 513	3 854	4 223
Asia								
China	1 572	1 624	2 029	2 391	2 547	2 844	3 048	3 186
India	222	234	305	340	472	503	539	616
Iran	105	121	111	135	156	166	75	86
Japan	45	43	45	48	41	7	0	0
Kazakhstan	320	376	392	404	364	410	446	459
Korea, Dem. Rep. of	28	32	52	62	65	75	78	48
Korea, Rep. of	5	0	0	0	0	na	0	0
Thailand	24	25	31	40	43	42	42	35
Turkey	36	43	40	39	56	59	71	73
Viet Nam	32	42	45	40	48	45	45	42
Total	2 400	2 546	3 057	3 507	3 825	4 225	4 445	4 633
Australia	1 476	1 444	1 447	1 298	1 329	1 338	1 498	1 479
Europe								
Bulgaria	11	14	12	11	11	8	10	10
Finland	20	35	39	37	41	36	39	28
Greece	32	35	3	0	4	16	21	23
Ireland	298	253	419	438	445	426	401	398
Macedonia	20	10	4	0	0	11	31	39
Poland	153	152	152	140	136	127	130	132
Romania	30	22	22	19	14	8	1	0
Russian Federation	164	162	159	162	186	178	177	204
Spain	161	70	15	0	0	na	na	0
Sweden	159	149	188	199	216	210	214	201
Total	1 052	903	1 013	1 007	1 056	1 030	1 051	1 083
Total	8 934	8 892	9 520	9 736	10 146	10 447	11 129	11 702

a Recovered metal zinc content by analysis of zinc ores and concentrates, plus the zinc content of other ores and concentrates known to be intended for zinc recovery. **na** Not available.

Source: International Lead–Zinc Study Group, *Lead and Zinc Statistics*, Lisbon, Portugal.

352 World zinc metal production, by region and country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa								
Algeria	26	34	35	33	37	33	27	31
South Africa	109	111	112	105	104	90	101	82
Total	135	147	197	260	273	257	279	260
Americas								
Argentina	40	39	39	35	37	43	43	31
Brazil	193	255	258	266	267	272	265	249
Canada	661	793	761	805	724	824	802	764
Mexico	304	306	320	337	336	285	320	321
Peru	190	170	202	196	164	175	162	190
United States	329	339	350	354	351	269	279	286
Total	1 717	1 903	1 930	1 993	1 879	1 868	1 871	1 841
Asia								
China	2 038	2 155	2 319	2 720	2 776	3 163	3 743	3 913
India	234	248	280	272	302	415	459	606
Iran	65	82	84	96	140	139	125	110
Japan	644	640	651	635	638	614	598	616
Kazakhstan	277	286	279	317	357	365	358	366
Korea, Dem. Rep. of	31	34	55	65	57	51	36	41
Korea, Rep. of	508	608	645	669	647	667	691	739
Thailand	105	105	107	103	93	84	99	102
Uzbekistan	35	30	30	30	35	47	72	70
Total	3 936	4 189	4 450	4 906	5 052	5 555	6 191	6 579
Australia	556	567	553	474	457	466	502	499
Europe								
Belgium	256	239	244	257	222	238	240	239
Bulgaria	88	82	86	102	95	95	100	102
Finland	249	235	266	285	282	282	306	298
France	329	334	253	260	209	120	125	118
Germany	357	378	388	358	335	317	295	292
Italy	179	176	123	118	121	109	102	107
Macedonia	52	56	28	na	0	na	0	na
Netherlands	206	203	223	225	225	238	219	241
Norway	145	145	142	140	148	161	157	145
Poland	175	159	154	156	137	134	142	143
Romania	52	38	51	52	57	44	58	62
Russian Federation	250	257	253	241	211	248	263	263
Spain	437	503	519	523	500	507	509	466
United Kingdom	90	98	14	na	0	na	0	na
Other	12	1	0	3	18	15	na	na
Total	2 877	2 904	2 744	2 720	2 561	2 508	2 516	2 476
Total	9 268	9 710	9 874	10 353	10 222	10 655	11 360	11 655

a Total production by smelters and refineries of zinc in marketable form or used directly for alloying, including production on toll in the reporting country, regardless of the type of source material. Remelted zinc and zinc dust are excluded. **na** Not available.

Source: International Lead–Zinc Study Group, *Lead and Zinc Statistics,* Lisbon, Portugal.

353 Volume of world zinc trade, by country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Exports								
Ores and concentrates b								
Australia	1 024	1 016	1 007	955	931	886	1 002	996
Canada	428	409	258	228	178	109	129	272
China	7	2	na	na	na	na	na	na
Ireland	305	249	417	445	410	426	393	393
Mexico	117	131	105	62	155	139	107	88
Peru	747	906	900	879	933	920	1 125	1 274
Sweden	130	140	150	188	185	205	201	193
United States	698	827	822	746	788	827	820	726
Metal								
Australia	457	483	461	325	463	357	404	415
Belgium	90	107	110	138	11	13	22	9
Canada	495	598	591	614	527	631	614	599
China	544	472	451	224	123	325	276	71
Finland	175	189	212	236	235	233	260	257
CIS	236	226	147	na	na	na	na	na
France	127	143	110	115	80	32	29	29
Korea, Rep. of	209	261	317	320	261	215	257	311
Mexico	151	161	181	189	194	148	197	203
Netherlands	284	197	421	285	325	369	323	311
Norway	113	133	126	127	135	138	131	130
Peru	121	127	137	113	103	106	90	118
Spain	94	79	246	295	334	272	220	192
Imports								
Ores and concentrates b								
Belgium	412	409	571	704	596	577	550	na
Canada	140	276	397	273	195	278	282	296
China	384	393	373	297	257	379	907	1 165
Finland	204	218	218	240	250	279	326	292
CIS	92	70	60	na	na	na	na	na
France	287	279	241	229	222	125	129	119
Germany	175	176	186	240	208	166	179	199
Italy	156	141	96	125	110	88	98	81
Japan	575	559	544	563	530	595	559	620
Korea, Rep. of	537	582	616	627	642	654	667	744
Netherlands	152	38	214	204	242	265	180	206
Spain	344	451	537	459	556	593	629	554
United Kingdom	108	115	8	0	0	0	0	0
Metal								
Belgium	233	237	222	269	48	73	209	161
Chinese Taipei	277	304	332	344	309	286	229	222
France	127	98	115	103	143	172	165	163
Germany	260	231	253	249	261	330	328	305
Italy	176	202	226	273	261	229	315	180
Japan	64	17	41	42	46	41	53	45
Korea, Rep. of	97	115	108	72	59	60	54	59
Netherlands	178	138	182	220	202	287	311	225
Singapore	204	142	68	18	12	63	54	95
United Kingdom	111	106	174	142	139	123	135	118
United States	827	878	792	868	700	895	758	725

a Metal content. **b** Metal content of zinc ores and concentrates only. **na** Not available.

Source: International Lead–Zinc Study Group, *Lead and Zinc Statistics*, Lisbon, Portugal.

354 World zinc consumption, by region and country a

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Africa								
Algeria	11	11	9	9	12	14	13	12
Egypt	16	17	16	16	16	16	17	18
Kenya	12	11	14	14	14	14	14	12
Morocco	12	12	5	14	13	12	15	13
Nigeria	9	9	12	12	12	12	12	11
South Africa	89	95	86	96	103	99	108	100
Tunisia	4	2	3	5	5	4	4	4
Other Africa	16	28	28	28	28	28	27	27
Total	169	185	173	194	204	199	210	197
Americas								
Argentina	36	37	32	46	49	50	52	50
Brazil	198	216	215	239	222	238	248	248
Canada	180	192	185	189	175	181	173	164
Chile	12	9	10	11	10	12	10	12
Colombia	20	21	20	23	23	25	23	21
Mexico	210	225	236	240	244	245	245	247
Peru	67	71	61	80	61	69	74	73
United States	1 179	1 217	1 152	1 251	1 078	1 153	1 016	1 003
Venezuela	11	12	12	16	11	18	10	19
Other America	22	23	26	28	28	26	26	25
Total	1 935	2 023	1 949	2 123	1 900	2 017	1 877	1 861
Asia								
Bangladesh	48	51	52	50	49	50	48	45
China	1 500	1 750	2 155	2 690	3 041	3 156	3 563	4 015
Hong Kong, China	6	5	5	5	5	5	5	5
India	286	310	339	362	388	430	455	485
Indonesia	88	85	79	87	83	74	81	97
Iran	62	69	70	72	76	80	85	84
Israel	11	13	10	7	11	12	9	9
Japan	633	603	619	623	602	594	588	564
Kazakhstan	34	35	35	35	35	35	35	35
Korea Dem. Rep. of	12	10	6	5	5	5	5	4
Korea, Rep. of	401	476	482	445	476	534	512	504
Malaysia	50	62	65	68	67	68	70	70
Pakistan	25	24	25	24	24	25	23	23
Philippines	33	32	19	20	12	13	12	10
Saudi Arabia	16	14	23	17	33	39	68	44
Singapore	15	16	16	16	16	17	17	16
Chinese Taipei	276	302	330	342	306	282	226	220
Thailand	103	107	116	129	116	104	105	111
Turkey	78	99	122	144	142	136	137	128
Uzbekistan	8	8	8	8	7	7	7	8
Viet Nam	40	40	45	45	47	44	56	50
Other Asia East	1	1	1	2	2	2	3	3
Other Asia West	30	32	35	36	25	33	34	33
Total	3 756	4 147	4 660	5 235	5 572	5 746	6 148	6 566

Continued

354 World zinc consumption, by region and country a continued

	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt
Europe								
Austria	48	48	49	48	48	50	50	50
Belgium	374	352	350	365	345	360	387	382
Bosnia and Herzegovina	8	7	5	5	5	5	4	4
Bulgaria	13	14	28	11	12	13	8	6
Croatia	9	9	8	8	8	8	7	6
Czech Republic	20	20	21	21	20	24	18	20
Denmark	11	11	11	11	10	11	10	12
Finland	52	53	57	52	47	53	46	45
France	327	290	291	298	275	285	275	252
Germany	549	526	539	514	511	564	543	527
Greece	26	22	20	29	17	14	27	25
Hungary	15	16	16	15	9	12	10	9
Ireland	3	5	3	3	3	8	7	5
Italy	348	374	348	389	395	313	398	318
Macedonia	10	9	8	8	7	7	6	6
Netherlands	108	114	114	115	115	116	117	105
Norway	25	29	18	14	12	25	28	17
Poland	96	88	102	103	79	100	103	85
Portugal	12	13	18	13	12	18	16	16
Romania	19	18	16	25	26	19	20	9
Russian Federation	150	153	189	163	171	199	207	195
Serbia	10	10	11	8	8	8	6	6
Slovak Republic	28	30	30	30	32	37	26	22
Slovenia	15	12	13	14	14	17	16	13
Spain	228	220	226	248	216	225	225	210
Sweden	27	33	31	42	42	54	51	45
Switzerland	19	20	11	14	12	11	14	13
Ukraine	65	65	65	65	44	44	45	44
United Kingdom	191	185	188	185	175	172	174	158
Yugoslavia	10	0	0	0	0	0	0	0
Other	12	8	8	8	8	7	10	10
Total	2 828	2 754	2 794	2 824	2 684	2 786	2 858	2 620
Oceania								
Australia	222	249	254	250	239	255	202	182
New Zealand	16	17	13	13	14	12	12	11
Total	238	266	267	263	253	268	214	194
World Total	8 793	9 377	9 843	10 639	10 611	11 016	11 307	11 438
Western World	6 785	7 118	7 115	7 417	7 063	7 302	7 138	6 912

a Total consumption of refined zinc including zinc used directly for the production of zinc alloys, regardless of the type of source material from which produced, i.e. ores, concentrates, residues, slags or scrap. Remelted zinc and zinc dust are excluded.
Source: International Lead–Zinc Study Group, *Lead and Zinc Statistics*, Lisbon, Portugal.

355 Summary of Australian statistics for zircon and monazite

	Zircon concentrate				Monazite concentrate			
	Production a	Exports b			Production a	Exports		
	Volume	Volume	Value	Unit value	Volume	Volume	Value	Unit value
	kt	kt	$m	$/t	kt	kt	$m	$/t
1964	181	196	5.1	26.0	2.1	2.1	0.2	85.7
1965	223	213	6.8	31.9	2.3	2.3	0.2	95.7
1966	232	207	9.0	43.5	2.0	2.1	0.2	114.3
1967	290	243	10.7	44.0	2.4	1.9	0.2	126.3
1968	292	262	11.0	42.0	2.1	2.6	0.4	134.6
1969	363	306	12.4	40.5	3.9	2.7	0.3	125.9
1970	389	380	13.9	36.6	4.4	4.8	0.6	129.2
1971	406	366	13.3	36.3	4.4	4.6	0.7	145.7
1972	357	386	13.8	35.8	5.1	4.6	0.6	121.7
1973	375	431	15.9	36.9	4.2	5.1	0.7	127.5
1974	368	384	32.2	83.9	3.6	3.8	0.5	142.1
1975	382	299	58.2	194.6	4.5	2.5	0.4	172.0
1976	420	345	54.5	158.0	5.3	3.2	0.5	165.6
1977	398	323	36.2	112.1	9.4	7.5	1.2	161.3
1978	392	390	29.4	75.4	15.0	11.6	2.4	205.2
1979	445	479	33.1	69.1	16.3	13.2	3.1	233.3
1980	492	502	35.1	69.9	14.1	10.3	3.4	329.1
1981	434	444	37.0	83.3	13.3	14.0	5.4	382.1
1982	462	405	43.1	106.4	9.6	15.3	6.1	400.0
1983	382	380	44.7	117.6	15.1	17.7	7.2	406.8
1984	458	438	51.8	118.3	16.3	18.1	7.6	421.5
1985	501	496	63.9	128.8	18.7	18.0	9.2	512.2
1986	452	446	74.5	167.0	14.8	14.1	9.2	651.1
1987	466	465	108.4	233.1	12.8	10.5	7.7	735.2
1988	480	464	189.6	409.0	12.2	9.7	7.6	787.5
1989	479	474	303.7	641.2	12.8	15.9	13.6	855.3
1990	443	332	205.0	616.7	11.1	11.1	9.9	894.0
1991	288	324	136.0	419.4	6.6	8.7	3.3	383.2
1992	355	310	71.6	230.8	5.6	5.7	1.7	300.0
1993	413	348	62.9	180.7	6.5	6.5	1.9	296.5
1994	511	504	124.1	246.2	2.3	2.7	0.8	290.3
1995	505	514	190.1	370.2	0.2	0.0	0.0	0.0
1996	460	424	248.3	585.8	0.0	0.0	0.0	0.0
1997	416	342	204.9	599.4	0.0	0.0	0.0	0.0
1998	401	399	225.9	566.6	0.0	0.0	0.0	0.0
1999	359	370 s	174.4 s	471.6 s	0.0	0.0	0.0	0.0
2000	374	372 s	198.0 s	532.2 s	0.0	0.0	0.0	0.0
2001	393	391 s	262.5 s	671.2 s	0.0	0.0	0.0	0.0
2002	412	407 s	279.8 s	687.6 s	0.0	1.6	0.4	249.8
2003	462	452 s	261.3 s	578.1 s	0.0	0.0	0.0	0.0
2004	441	437 s	285.0 s	652.4 s	0.0	0.0	0.0	0.0
2005	427	422 s	355.8 s	842.4 s	0.0	0.0	0.0	0.0
2006	491	485 s	446.3 s	919.7 s	0.0	0.0	0.0	0.0
2007	601	610 s	452.6 s	742.0 s	0.0	0.0	0.0	0.0
2008	550	655 s	476.1 s	726.3 s	0.0	0.0	0.0	0.0

a Ex mine. **b** All grades, bulk and bagged, before January 1992; standard grade only until June 1993; all grades until August 1999. **s** ABARE estimate.
na Not available.
Sources: ABARE, *Australian Mineral Statistics,* Canberra; ABS, *International Trade,* Australia, cat. no. 5465.0, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra.

356 World zircon production, by major producing country

	Australia	South Africa a	Ukraine	United States a	Other a	Total a
	kt	kt	kt	kt	kt	kt
1962	132	7	na	45	11	195
1963	181	2	na	45	12	240
1964	181	0	na	54	10	245 **b**
1965	223	0	na	54	8	286 **b**
1966	232	0	na	70	18	320 **b**
1967	290	0	na	60	6	356 **b**
1968	292	0	na	60	8	360 **b**
1969	363	0	na	63	9	435 **b**
1970	389	0	na	56	7	452 **b**
1971	406	1	na	60	12	479 **b**
1972	357	1	na	75	52	485 **b**
1973	375	2	na	90	33	500 **b**
1974	368	12	na	110	30	520 **b**
1975	382	12	na	100	16	510 **b**
1976	420	11	na	80	9	520 **b**
1977	398	17	na	90	15	520 **b**
1978	392	50	na	75	33	550 **b**
1979	445	50	na	70	45	610 **b**
1980	492	80	na	60	28	660 **b**
1981	434	100	73	70	36	713
1982	462	125	82	78	33	780
1983	382	127	82	64	48	703
1984	458	153	82	67	44	804
1985	501	161	86	70	67	885
1986	452	140	86	85	60	823
1987	466	140	86	90	64	837
1988	480	130	86	115	103	918
1989	479	150	85	118	111	975
1990	443	150	50	102	111	856
1991	288	200	50	103	60	701
1992	355	220	50	108	56	789
1993	413	220	50	105	47	835
1994	511	205	50	114	51	931
1995	505	245	50	115	56	971
1996	460	302	53	117	57	989
1997	416	297	55	123	64	955
1998	401	279	57	152	69	958
1999	359	310	60	188	79	996
2000	374	317	na	181	109	975
2001	393	377	na	173	102	1 050
2002	412	420	na	132	124	1 093
2003	462	370	na	144	121	1 088
2004	441	379	na	172	156	1 148
2005	427	399	na	164	199	1 189
2006	491	407	na	143	236	1 277
2007	601	375	na	121	223	1 320
2008	550	398	60	124	163	1 235

a Bureau of Mineral Resources estimates until 1987; other sources thereafter. **b** Excludes former centrally planned economies. **na** Not available.
Sources: Bureau of Mineral Resources, *Australian Mineral Industry Annual Review,* AGPS, Canberra; Bureau of Mineral Resources, *Australian Mineral Industry, Quarterly Summary Statistics,* Canberra; TZ Minerals International, *Mineral Sands Report,* Surrey, England; TZ Minerals International, *Mineral Sands Annual Review,* Surrey, England; US Department of the Interior, Bureau of Mines, *Mineral Commodity Summaries,* Washington DC; ABARE.

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