

# Commodity industries outlook

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*In the current financial year, strong global economic growth and strong demand for commodities, together with a weak Australian dollar, has been a boon for Australian exporters. The value of exports from Australia's rural sector is forecast to rise by 13 per cent to a record \$31 billion in 2000-01.*

*Although the pace of world economic activity is assumed to weaken in 2001-02, as the US economy slows, solid demand for commodities, higher Australian production and a continuing soft Australian dollar are forecast to result in a further 7 per cent boost to rural exports.*

*The recent outbreak of foot and mouth disease in Europe may result in increased opportunities for Australian livestock exporters in markets previously supplied by the European Union. The effect on Australia will ultimately depend on the spread of the disease and the industry and trade policy responses in affected countries.*

*Assuming a return to more normal seasonal conditions, and an absence of serious disease problems, sugar growers are likely to receive better returns in 2001-02.*

*Changes in the Australian dairy industry will occur as milk producers and processors adjust to the challenges posed by recent reforms of the domestic regulatory environment. Productivity improvements are expected to underpin continued increases in Australian milk production and strong demand is expected to result in higher world cheese prices.*

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## World economic outlook

With 60–70 per cent of Australia's agricultural production exported each year, developments in world markets are critical to the farm sector and the industries that service the sector. Not surprisingly, strong economic growth in the OECD region and robust economic recovery in Asia were key factors contributing to generally strong farm performance in 2000.

Increased demand provided strong support for prices of many commodities. Over the course of 2000, big price increases occurred for wheat (16 per cent), wool (27 per cent), cotton (20 per cent), sugar (70 per cent) and skim milk powder (38 per cent).

Since the beginning of 2001, emerging signs of a significant slowdown of world economic growth have been a cause for growing concern. In the light of a weaker world economic outlook, a crucial question facing commodity producers and exporters is whether commodity prices on world markets will decline sharply, leading to significantly lower export revenues and returns.

### **World economic growth assumed to ease in 2001 but then recover**

After estimated growth of 4.6 per cent in 2000 — the strongest annual growth in more than a decade — world economic growth is expected to moderate in 2001. Growth is assumed to ease to around 3.4 per cent in 2001 (table 1), but to strengthen to 3.9 per cent in 2002, partly as a result of lower interest rates in key economies.

However, there is considerable uncertainty about how the world economy may ultimately behave. The key risk is associated with the economic prospects for the world's largest economy, the United States. Over the past few months, much attention has been focused on the possibility of a sharper than expected slowdown of economic growth in that country. The United States accounts for around a quarter of the world economy and, hence, a significant slowdown in US economic activity could markedly influence economic performance elsewhere in the world.

In the case of Japan, slow progress in economic restructuring, an aging population and the need for fiscal consolidation, mean economic growth is not expected to increase significantly over the next few years. Growth in Japan's economy is assumed to average around 1.8 per cent a year out to 2006. Public sector spending is expected to remain the main contributor to economic activity in Japan in the short term.

In the principal economies of east and south east Asia, including the Republic of Korea, Chinese Taipei, Singapore, Malaysia and Thailand, economic growth is likely to moderate from the high rates achieved in 2000. In contrast, economic growth in China is assumed to remain strong.

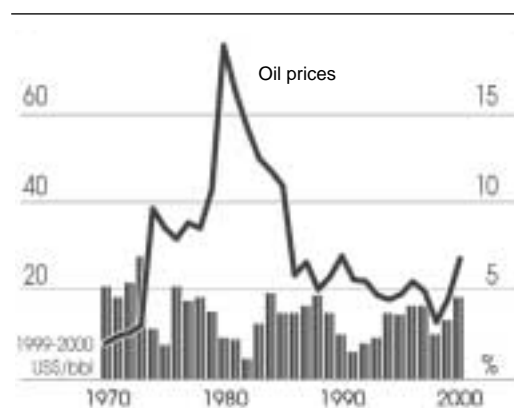
Table 1: Key world macroeconomic assumptions

	Unit	1999	2000 a	2001 a	2002 a	2003 a	2004 a	2005 a	2006 a
<b>Economic growth b</b>									
OECD	%	3.0	3.9	2.3	3.0	2.9	2.8	2.8	2.9
United States	%	4.2	5.0	1.8	3.2	3.0	3.0	3.0	3.0
Japan	%	0.8	1.5	1.2	1.5	1.7	1.8	1.8	2.0
Western Europe	%	2.2	3.2	2.8	3.0	2.9	2.8	2.8	2.8
Germany	%	1.6	3.1	2.7	3.0	3.0	2.8	2.8	2.8
France	%	3.0	3.2	3.0	3.0	3.0	2.8	2.8	2.8
United Kingdom	%	2.1	3.0	2.5	2.7	2.5	2.5	2.5	2.5
Italy	%	1.4	2.7	2.5	2.5	2.5	2.5	2.5	2.5
Korea, Rep. Of	%	10.7	9.2	5.0	5.5	5.5	5.0	5.0	5.0
New Zealand	%	3.9	4.2	3.0	3.0	3.0	3.0	3.0	3.0
Developing countries	%	3.8	5.6	5.1	5.3	5.2	5.2	5.1	5.1
Non-OECD Asia	%	5.8	6.8	6.2	6.4	6.2	6.2	6.0	6.0
South East Asia c	%	3.1	5.7	4.3	4.7	5.0	5.1	5.3	5.3
China d	%	7.1	8.0	7.8	7.8	7.5	7.5	7.0	7.0
Chinese Taipei	%	5.4	6.3	5.0	5.5	5.5	5.5	5.0	5.0
India	%	6.4	6.0	6.0	6.0	5.5	5.5	5.5	5.5
Latin America	%	0.1	3.5	3.5	3.7	3.7	3.7	3.7	3.7
Middle East	%	2.8	4.8	3.6	4.0	4.0	4.0	4.0	4.0
Russian Federation	%	3.2	7.0	5.0	5.0	4.0	4.0	4.0	4.0
Ukraine	%	-0.4	6.0	4.0	4.0	3.5	3.5	3.5	3.5
Eastern Europe	%	1.8	3.8	4.0	4.0	4.0	4.0	4.0	4.0
World e	%	3.3	4.6	3.4	3.9	3.8	3.8	3.7	3.7
<b>Industrial production f</b>									
OECD	%	3.0	4.9	2.5	3.3	3.1	3.0	2.9	2.9
<b>Inflation b</b>									
United States	%	2.2	3.4	2.7	2.5	2.5	2.5	2.5	2.5
<b>Interest rates</b>									
US prime rate g	% pa	8.0	9.2	8.3	8.3	8.5	9.0	9.0	9.0
<b>US exchange rates h</b>									
Yen/US\$	Yen	114	108	120	115	112	108	107	105
Euro/US\$	Euro	0.94	1.08	1.05	1.00	0.98	0.97	0.97	0.96

a ABARE assumption. b Change from previous period. c Indonesia, Malaysia, the Philippines, Singapore, and Thailand. d Excludes Hong Kong. e Weighted using 1999 purchasing power parity (PPP) valuation of country gross domestic product by the IMF. g Commercial bank lending rates to prime borrowers in the United States. h Average of daily rates. Sources: Australian Bureau of Statistics; International Monetary Fund; Organisation for Economic Cooperation and Development; Reserve Bank of Australia; ABARE.

A factor that can significantly influence the outlook for world economic growth is movements in international crude oil prices (figure 1). After reaching a high of US\$37 a barrel in late 2000, the price of the commonly quoted 'West Texas Intermediate' crude oil declined to around US\$28 a barrel in early March. The price of WTI crude oil is forecast to average around US\$29 a barrel in 2001 and US\$28 a barrel in 2002. If world crude oil prices were to average significantly higher in the next two years, the pace of world

Figure 1: World economic growth and oil prices



economic expansion could be substantially weaker than currently assumed.

## Australian economy

Activity in the Australian economy is assumed to remain reasonably firm in the short term. While growth in domestic demand is likely to moderate, export performance is expected to remain strong, supported by the relatively weak Australian dollar. The Australian economy is assumed to grow around 3.5 per cent a year over the medium term (figure 2).

## Inflation and interest rates to moderate

Australia's headline inflation rate is assumed to increase from 2.4 per cent in 1999-2000 to around 5.7 per cent in 2000-01, mainly as a result of the introduction of the goods and services tax. Net of the one-off effect of the GST, the underlying inflation rate is assumed to average 2.8 per cent for the year. In 2001-02, the inflation rate is assumed to moderate to 2.5 per cent. The outlook for inflation is the main factor affecting Australian interest rates. Given the favorable outlook for underlying inflation, Australia's interest rates are assumed to decline in the short term. Prime lending rates are assumed to average 9.2 per cent in 2000-01, before declining to 8.8 per cent in 2001-02 (figure 3).

## Australian dollar to remain volatile

In the first eight months of 2000-01, the Australian dollar is estimated to have averaged US55c and TWI 51, compared with the average of US63c and TWI 55 in 1999-2000. The recent sharp depreciation of the Australian dollar mainly reflects a significant appreciation of the US dollar and some adverse sentiment in financial markets toward the Australian currency.

Figure 2: Australian economic indicators

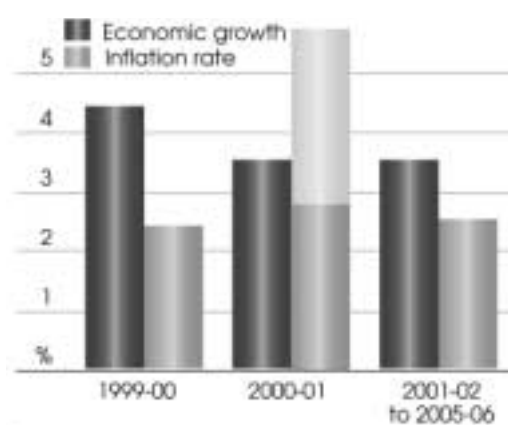


Figure 3: Real interest rates

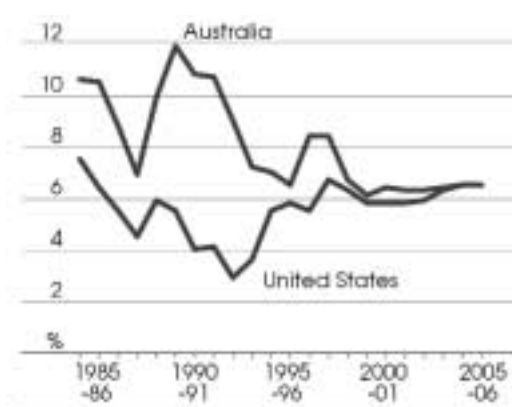
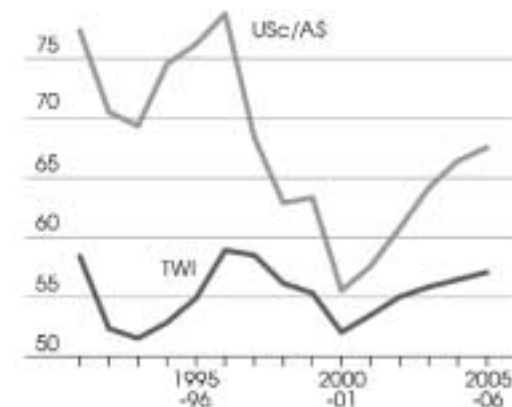


Figure 4: Australian exchange rates



Considerable uncertainty remains about the outlook for the exchange rate. This is because short term exchange rate movements can be significantly influenced by changes in financial market sentiment. Key factors that can markedly affect market sentiment, and hence the Australian dollar, are perceptions of economic performance in Australia and overseas, the outlook for world commodity prices, and movements in domestic and overseas interest rates. Progress on microeconomic reform and increased productivity should provide support for some strengthening of the Australian dollar over the next few years.

## **Prospects for agriculture**

A significant improvement is expected in the financial performance of the Australian farm sector in 2001-02, largely as a result of higher prices received for farm products, combined with an increase in farm production. The net value of farm production (the difference between the gross value of farm production and farm costs) is forecast to increase by 29 per cent to almost \$8.0 billion in 2001-02, following a 14 per cent increase in 2000-01 (table 2).

### **Farm prices for most commodities to increase**

The index of prices received by Australian farmers is forecast to rise by 3.6 per cent in 2001-02, following a 7.5 per cent increase in 2000-01. Higher prices for wheat, cotton, wool, lamb and milk used in manufacturing are forecast, while beef prices are expected to remain at around current highs after a 12 per cent rise in 2000-01.

The gross value of farm production is forecast to rise by 8 per cent to \$35.1 billion in 2001-02, reflecting a 3.6 per cent increase in prices received and a 4 per cent increase in the volume of farm production.

### **Farm costs**

A combination of steep rises in international prices for crude oil and a weak Australian dollar is putting upward pressure on farm input prices. As a result, total farm costs are forecast to rise by 3.0 per cent to \$27.1 billion in 2001-02, following a 3.5 per cent rise in 2000-01.

Reflecting recent falls in interest rates, total interest costs for the farm sector are forecast to fall by \$55 million (down 2.4 per cent) to \$2.2 billion dollars in 2001-02, following a 12 per cent rise in 2001-02.

Prices for most farm inputs are expected to increase in line with the general rate of inflation over the next few years. International prices for crude oil are projected to decline steadily from their 1999-2000 highs. Further, given that most internationally traded inputs are expected to remain in plentiful supply, only modest rises in the prices of imported inputs seem likely.

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On the revenue side, developments in the outlook for beef, sugar, dairy and forest products will be important to the Bundaberg region. A detailed discussion of prospects for these and other agricultural industries is contained in the March 2001 issue of *Australian Commodities*.

Table 2: Outlook for Australia's farm sector

	Unit	1998 -99	1999 -2000	2000 -01 f	2001 -02 f	2002 -03 z	2003 -04 z	2004 -05 z	2005 -06 z
<b>Gross value of farm production</b>									
Crops	A\$m	16 193	17 464	17 583	19 098	19 489	20 245	21 178	21 926
Livestock	A\$m	12 677	13 343	14 888	15 959	16 389	16 469	16 454	16 600
Total – nominal	A\$m	28 870	30 807	32 471	35 057	35 878	36 714	37 632	38 527
– real a	A\$m	30 391	31 669	32 471	34 202	34 149	34 093	34 092	34 052
<b>Value of farm exports</b>									
Crops	A\$m	12 091	12 688	13 680	14 925	14 970	15 554	16 648	17 464
Livestock	A\$m	10 455	11 521	13 865	14 708	14 992	14 800	14 645	14 578
Total – nominal	A\$m	22 546	24 209	27 545	29 632	29 962	30 354	31 293	32 042
– real a	A\$m	23 734	24 887	27 545	28 910	28 518	28 187	28 350	28 320
<b>Farm costs</b>									
Materials and services	A\$m	15 645	16 224	16 712	17 339	18 057	18 812	19 600	20 420
Total cash costs b	A\$m	21 063	21 860	22 678	23 364	24 314	25 316	26 386	27 499
Depreciation	A\$m	3 440	3 535	3 615	3 725	3 852	4 006	4 166	4 333
Total – nominal	A\$m	24 503	25 395	26 293	27 089	28 166	29 322	30 553	31 832
– real a	A\$m	25 793	26 106	26 293	26 428	26 809	27 229	27 679	28 135
<b>Farm incomes</b>									
Net cash income c	A\$m	6 970	8 497	9 253	11 193	11 064	10 898	10 745	10 527
Net value of production d	A\$m	4 367	5 412	6 178	7 968	7 712	7 392	7 079	6 694
– real a	A\$m	4 597	5 564	6 178	7 774	7 340	6 864	6 413	5 917
<b>Farm price indexes</b>									
Prices received by farmers	index	100.0	101.6	109.2	113.2	113.2	113.4	113.7	114.0
Prices paid by farmers	index	100.0	103.3	107.6	109.8	114.0	118.2	122.8	127.6
Farmers' terms of trade	index	100.0	98.4	101.5	103.1	99.3	95.9	92.6	89.3
<b>Volume of farm production</b>									
Crops	index	100.0	107.4	102.2	108.3	110.8	115.1	118.1	121.2
Livestock	index	100.0	102.1	103.9	105.9	108.3	108.3	109.7	111.1
Total farm	index	100.0	105.1	103.0	107.2	109.7	112.0	114.3	116.6
<b>Crop area and livestock numbers</b>									
Grains and oilseeds	'000 ha	20 463	20 616	20 011	20 415	20 450	20 660	20 788	20 883
Sheep	million	115.5	115.7	114.2	114.2	114.6	116.4	118.2	119.7
Cattle	million	26.6	26.7	27.0	27.3	27.1	27.0	26.9	26.8

a In 2000-01 Australian dollars. b Includes materials and services, wages, interest and rent payments. c Gross value of farm production less increase in assets held by marketing authorities and less total cash costs. d Gross value of farm production less total farm costs. f ABARE forecast. z ABARE projection.

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

Sources: Australian Bureau of Statistics; ABARE.

## Beef

Given that Australia exports over 60 per cent of its beef production (in carcass weight equivalent terms), saleyard prices for cattle and thus producer incomes are heavily influenced by economic and trade developments in Australia's major markets in Asia and the Pacific.

The recent outbreaks of foot and mouth disease in Europe, Latin America and the Middle East have potential to significantly affect Australia's beef industry. However, with considerable uncertainty about the possible further spread of the disease and the policy responses to managing the outbreak and trade in meat and livestock, it is still too early to estimate the effects on this country.

In Asia, expanding economic activity is expected to encourage higher demand from beef importers in Japan, the Republic of Korea and south east Asia. Herd rebuilding is also expected to commence in earnest in the United States in 2001-02, resulting in higher demand for imported beef as domestic production falls. In addition, herd rebuilding is expected to continue in Australia in the short term, with strong demand from restockers maintaining high prices for breeding stock and store cattle.

Australian saleyard prices of beef cattle are forecast to average 241 cents a kilogram (dressed weight) in 2001-02 — only a 1 per cent rise from the forecast for 2000-01.

Table 3: **Outlook for Australian beef and veal**

	Unit	1998 -99	1999 -2000	2000 -01 f	2001 -02 f	2002 -03 z	2003 -04 z	2004 -05 z	2005 -06 z
Saleyard price									
– nominal	Ac/kg	195	213	238	241	236	228	216	210
– real <sup>a</sup>	Ac/kg	205	219	238	236	225	212	196	185
Cattle numbers <sup>b</sup>	million	26.6	26.7	27.0	27.3	27.1	27.0	26.9	26.8
– beef	million	23.4	23.6	23.9	24.1	24.0	23.8	23.7	23.6
Slaughterings	'000	9 097	8 649	8 357	8 553	8 935	8 772	8 617	8 563
Production	kt	2 011	1 988	1 981	2 048	2 137	2 093	2 086	2 105
Consumption									
per person	kg	37.0	37.7	36.6	36.7	36.6	36.0	36.0	36.4
Retail price									
– nominal	Ac/kg	990	1 041	1 052	1 071	1 091	1 105	1 115	1 131
– real <sup>a</sup>	Ac/kg	1 042	1 071	1 052	1 045	1 039	1 026	1 010	1 000
<b>Exports</b>									
Value	A\$m	2 863	3 119	3 514	3 724	3 870	3 643	3 401	3 323
Volume <sup>c</sup>	kt	883	852	876	900	955	931	917	924
– to United States	kt	288	312	343	351	369	357	349	350
– to Japan	kt	314	326	319	320	336	326	318	319
– to Rep. of Korea	kt	73	69	74	75	89	88	92	97
Live cattle	'000	730	850	935	968	1 016	1 054	1 088	1 120

<sup>a</sup> In 2000-01 Australian dollars. <sup>b</sup> At 31 March on establishments with an estimated value of agricultural operations of \$5000 or more in 1998-99, and at 30 June thereafter. <sup>c</sup> Fresh, chilled and frozen, shipped weight. <sup>f</sup> ABARE forecast. <sup>z</sup> ABARE projection.

Sources: Department of Agriculture, Fisheries and Forestry; Australian Bureau of Statistics; ABARE.

Looking further ahead, cattle prices in the Pacific beef market are expected to come under downward pressure as beef traded in the region rises. In 2002-03, Australian saleyard prices of beef cattle are projected to decline, and to continue falling in real terms before stabilising in 2004-05 (table 3).

## Supplies to tighten in the Pacific beef market

Beef production in the Pacific Basin is forecast to be lower in 2001-02. Despite growing production and trade from Australia, production in the United States and Canada is expected to be lower as producers in these countries reduce turnoff in order to build herd numbers.

## Australian beef production rising

Cattle slaughter in Australia is forecast to rise in 2001-02 for the first time in three years. After two years of herd rebuilding, a higher turnoff of cattle is expected as producers take advantage of strong cattle prices. As a result of the increased turnoff, beef production is forecast to rise by 3 per cent to over 2 million tonnes (figure 5).

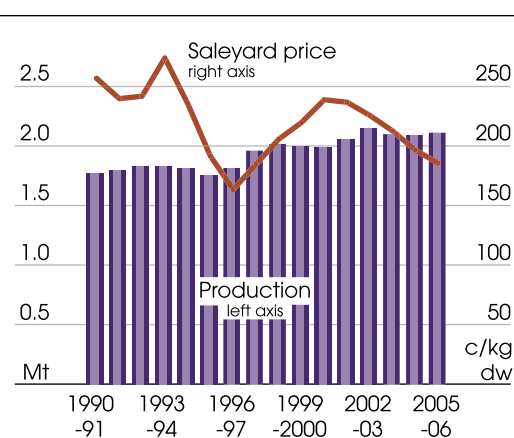
Also contributing to the increase in production, slaughter weights are expected to continue to rise as grain fed production makes up a larger share of total turnoff — particularly as demand in Japan and the Republic of Korea for Australian grain fed beef increases in the wake of reduced supplies of north American beef in the short term.

Australian beef cattle numbers are expected to decline over the medium term as saleyard prices ease from current highs. Australian beef production is projected to peak at 2.1 million tonnes in 2002-03, and then decline until 2005-06.

## Pacific market beef demand to remain strong

Traditionally, Australia's export markets have been dominated by the United States and Japan. The United States accounted for 39 per cent of Australian beef exports in 2000, while Japan accounted for 36 per cent. Other notable buyers of Australian beef included the Republic of Korea (8 per cent), Canada (5 per cent), Chinese Taipei (3 per cent) and south east Asia (4 per cent). Income growth, exchange rate relativities, and the competitiveness of suppliers will affect future demand for Australian beef in these markets.

Figure 5: Australian beef





Increased retention of cows and heifers on farms as producers move to build herd numbers, means US production of nonfed beef will be lower next year. As a result, US demand for imported manufacturing grade beef is expected to strengthen, with Australian beef exports to the United States forecast to rise by 2 per cent in 2001-02 to 351 000 tonnes. Exports are projected to reach a high of 369 000 tonnes in 2002-03 before declining slightly to 350 000 tonnes by the end of the projection period.

A 15 per cent decline in the value of the Australian dollar relative to the yen in 2000 resulted in Australian beef being particularly competitive in the Japanese market. Australian exports to Japan rose to a record 326 000 tonnes in calendar year 2000, 4 per cent higher than 1999 exports. An assumed muted rate of Japanese economic growth is likely to be a key factor contributing to relatively slow growth in demand for Australian beef over the next couple of years. The slow recovery of Japan's economy is likely to continue to influence consumer purchases of meat, with a growing preference for lower value cuts of meat over higher value cuts.

Total Australian exports of beef to Japan are projected to reach a high of 336 000 tonnes in 2002-03 before declining over the remainder of the projection period as competition from US beef grows in line with an expanding herd and turnoff.

Korean beef consumption is high by Asian standards and has been rising over a number of years. Economic growth, which recovered strongly after the Asian economic downturn, is assumed to be 5 per cent or more over the projection period to 2005-06. Such rates of growth should augur well for beef demand over the next five years.

Of particular importance to Australia, prospects for beef trade with Korea have improved with the liberalisation of the Korean beef market on 1 January 2001:

- From 1 January 2001, Korean imports will be subject to a tariff only — 41.2 per cent in 2001, declining to 40 per cent by 2004;
- Korea will no longer impose quotas on imports of beef;
- there will no longer be an administered price on imported beef (markups ceased on 1 January 2000);
- there will be no Korean government involvement in import purchasing and no restriction on private sector imports.

In 2001-02, as current high stocks are reduced and beef supplies from north America decline, Australian exports to Korea are forecast to grow by 1 per cent to around 75 000 tonnes. Over the medium term Australian exports to Korea are projected to continue growing to around 97 000 tonnes by 2005-06.

## EU demand falls due to BSE scare

Demand for beef dropped sharply throughout the European Union in the last quarter of 2000 in response to the discovery of BSE (bovine spongiform encephalopathy or ‘mad cow disease’) cases in many member states and a consumer scare when news that beef from an infected herd had found its way into a French supermarket chain. In response to the BSE discoveries, many countries within and outside the European Union have banned the import of EU beef, beef products and live cattle.

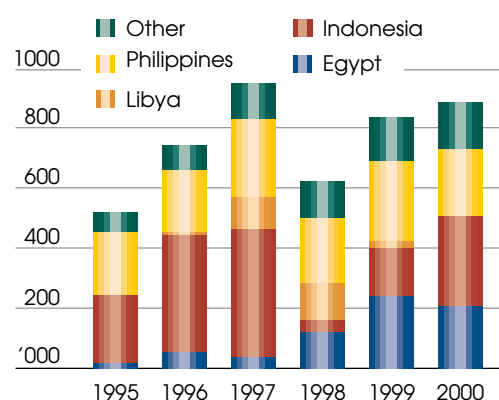
Lower demand for beef in Europe is unlikely to have a major impact on Australian beef exports. Australian shipments to the European Union are limited to a strict 7000 tonne quota, less than 1 per cent of Australia’s total exports. However, in the short term Australia, along with other BSE-free exporters, may increase trade with countries previously supplied by the European Union — for example, markets in eastern Europe, the Middle East and north Africa.

Global beef production and marketing is also being made highly uncertain by the current foot and mouth disease (FMD) outbreak. In addition to over 250 cases of FMD recorded over the past month in the United Kingdom, FMD cases have been confirmed in continental Europe, south America and the Middle East. Maintaining Australia’s FMD-free status is paramount to maintaining important export markets — particularly those in Japan, Korea and north America. As a result, Australia last week suspended all imports of animals susceptible to FMD and their products from the European Union and from any country in which FMD is endemic or in which there is an outbreak. Australia is reviewing this blanket ban on a daily basis. FMD in Australia would be disastrous for the livestock industries, as it would mean closure of valuable export trade in cattle, sheep and livestock products and widespread productivity and income impacts on primary producers.

## Demand for live cattle to strengthen

Cattle exports have recovered strongly since the Asian financial difficulties of three years ago. Exports of live cattle to Indonesia climbed in 2000 to over 297 000 head, almost double 1999 exports, returning that country to prominence as the largest market for Australian live cattle (figure 6). Shipments to Indonesia accounted for a third of Australia’s total live cattle trade in 2000, while the Philippines, the previous lead market, accounted for 25 per cent.

Figure 6: Live cattle exports, by destination



Strong cattle prices and a weaker Indonesian rupiah are expected to affect demand for cattle and constrain export growth to Indonesia over 2001-02. Currency weakness is also expected to adversely affect demand for live cattle in the Philippines in the short term, with strong cattle prices and a tariff rise further constraining demand.

Demand from Egypt (Australia's third largest cattle market) and markets in the Middle East is expected to remain strong in the short term, with the discovery of BSE in EU countries late last year resulting in these markets being temporarily closed to European cattle and beef. As a result, Australia is likely to increase exports to Egypt and the Middle East. Total Australian live cattle exports are forecast to rise by 10 per cent to 968 000 in 2001-02, and are projected to continue increasing to 1.12 million by 2005-06.

## Sugar

The world indicator sugar price, New York no. 11 (raw), is forecast to fall by 2.9 per cent to average US9.9c/lb in 2001-02. Assuming an improvement in seasonal conditions for next year's crop in Brazil, Thailand and Australia, world production is projected to increase by more than consumption, placing some downward pressure on prices. Although lower than last year's average price, the forecast sugar price represents a big improvement on the lows recorded in the late 1990s.

Over the medium term to 2005-06, world sugar prices (in 2000-01 dollars) are projected to fall to around US8.3c/lb in 2003-04, before rising to US10.0c/lb in 2005-06 (figure 7). The projected price movements reflect supply and demand shifts as producers and consumers respond to changing price expectations and economic conditions respectively.

The projections reported here reflect an assumption that there will be little change to stock-holding behavior in major markets. Traditionally, leading importers such as the European Union, the Russian Federation and China hold significant amounts of sugar stocks relative to domestic consumption. In addition, India (a major producer) is carrying stocks equivalent to over 60 per cent of its consumption needs.

## World sugar production to rebound

World sugar production is forecast to rise by 2 per cent to 132 million tonnes in 2001-02 (table 4), mainly reflecting a return to normal growing conditions following last year's poor season in Brazil, Thailand and Australia. Also, sugar beet production in the Russian

Figure 7: World sugar price

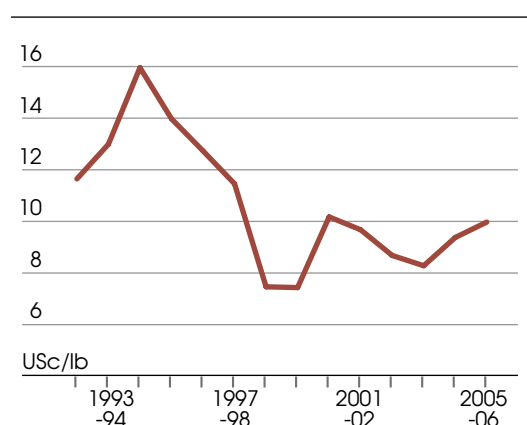


Table 4: Outlook for sugar

	Unit	1998 -99	1999 -2000	2000 -01 f	2001 -02 f	2002 -03 z	2003 -04 z	2004 -05 z	2005 -06 z
<b>World a</b>									
Production	Mt	135.0	134.8	129.3	131.9	135.6	139.1	141.7	143.9
Consumption	Mt	125.5	128.2	130.4	132.5	134.9	137.6	140.5	143.4
Stocks b	Mt	57.4	62.1	59.5	59.9	61.6	62.1	62.0	61.2
Stocks-to-consumption ratio	%	45.7	48.5	45.6	45.2	45.7	45.2	44.2	42.7
<b>Price</b>									
- nominal	USc/lb	7.2	7.2	10.2	9.9	9.1	8.9	10.4	11.3
- real c	USc/lb	7.6	7.5	10.2	9.7	8.7	8.3	9.4	10.0
<b>Australia d</b>									
Sugar production e	kt	4 998	5 448	4 181	4 734	5 052	5 464	5 895	6 033
Sugar exports	kt	3 751	4 142	3 129	3 590	3 891	4 285	4 699	4 819
<b>Value of exports</b>									
- nominal	A\$m	1 256	1 101	1 001	1 070	1 021	1 238	1 531	1 686
- real g	A\$m	1 322	1 132	1 001	1 044	971	1 150	1 387	1 490

a September–August years. b Historical estimates of closing stocks are based on individual country estimates of production, consumption, trade and stocks. Given possible under/overreporting of statistics in individual countries, changes in world closing stocks from year to year may not necessarily equal the difference in world production and world consumption. c In 2000-01 US cents. d July–June years. e Raw tonnes actual. g In 2000-01 Australian dollars. f ABARE forecast. z ABARE projection.

Sources: Australian Bureau of Statistics; F.O. Licht; Queensland Sugar Corporation; ABARE.

Federation and the United States is forecast to increase, reflecting favorable prices to growers in those countries.

Over the remainder of the outlook period to 2005-06, world production is projected to rise steadily to around 144 million tonnes. Most of the output growth is expected to occur in the key exporting countries, including Brazil, Thailand and Australia. Policies in the United States, European Union and Brazil that affect sugar production, consumption and trade will continue to have a substantial influence on market outcomes.

## Steady growth in world sugar consumption

World sugar consumption is projected to increase by an average of 2 per cent a year during the period 2001-02 to 2005-06, down marginally on growth rates in the past decade. Population growth and continued steady economic growth in key net importing regions (particularly in Asia, but excluding Japan) and the developing countries will continue to be the main factors boosting world sugar consumption over the projection period. However, competition from alternative sweeteners, such as high fructose corn syrup, will remain strong.

The key growth region for world sugar consumption is India, which is by far the world's leading sugar consumer. Indian sugar consumption has risen by nearly 3 million tonnes (or nearly 4 per cent) since 1996-97, driven by a strong increase in per person consumption. Growth in Indian sugar consumption is likely to remain strong over the medium term, boosted by assumed relatively strong economic growth.

## **Improved prospects for Australian producers**

Australian sugar cane growers have had several difficult years of low returns, which can be attributed to poor world prices and a series of unfavorable seasonal events that lowered cane yields, commercial cane sugar content and thus total production of sugar. Also likely to affect pool returns in 2000-01 was the forward sale of a significant proportion of the crop at relatively low prices in the first part of 2000.

Last season Australian producers were hampered by sharply lower yields from the main Queensland cane variety Q124, caused by orange rust. The higher yielding irrigated areas of the Burdekin and central Queensland, which had a large proportion of the crop sown to the Q124 variety, experienced the largest losses.

As a temporary measure, growers used fungicides to minimise the damage caused by the disease. The longer term response by growers is to plough out the Q124 variety, but the alternative varieties available will not yield as well as Q124 under normal seasonal conditions. Despite the increased plough-out of the Q124 variety, substantial areas remain planted to the variety in 2001.

As well as the orange rust problem, untimely heavy rains in October 2000, in the middle of harvest, washed out a large area of recently planted cane. The damage was particularly concentrated in the irrigation areas of the Burdekin around Plane Creek and around Mackay. In contrast to the central and north Queensland growing regions, dryland crops in south Queensland around Bundaberg incurred significant yield losses in 2000-01 due to dry seasonal conditions.

In recognition of the financial hardship faced by cane growers, and the limited production alternatives, the Commonwealth government provided an \$83 million assistance package in September 2000, focusing on short term relief through family relief payments and providing interest rate subsidies to encourage grower investment to improve productivity.

Australian export unit returns are forecast to fall in 2001-02 as a result of lower world prices. However, grower incomes and average returns per hectare planted are expected to improve as a result of a lift in crop yields and higher average pool prices. Producer returns are projected to increase steadily beyond 2003-04, as world prices recover.

Higher sugar returns than those seen in the late 1990s are projected to result in slow but steady growth in production in the next five years. Australian sugar production is forecast to increase to 4.7 million tonnes in 2001-02 — up 13 per cent from last season's production. The increase reflects expected higher yields from an assumed return to normal growing conditions in Queensland. However, cane yields are forecast to remain slightly below trend next season as a result of the increased amount of young cane following the large plough-out of older Q124 stands.

Over the medium term, growth in Australian cane production is likely to be sourced primarily from small increases in the area under cane in most parts of Queensland's growing areas, including the Atherton Tablelands. A small increase in area planted is also expected for the Ord and New South Wales sugar growing regions, but milling capacity may constrain industry growth in most Australian cane growing regions.

Australian exports of raw sugar are forecast to rise by 15 per cent in 2001-02 to nearly 3.6 million tonnes, reflecting increased production. Assuming the recent disease and pest problems do not recur, exports are projected to be just over 4.8 million tonnes in 2005-06. With exportable supplies projected to increase in Thailand and Brazil, Australia is likely to face continued and intense price competition in servicing its higher quality markets. The industry will need to work hard to build its presence in Asian markets where it has a freight advantage over Brazilian suppliers.

## **Dairy**

Following two decades of substantial restructuring and a decade of strong growth in milk production, the Australian dairy industry has entered a new phase. This has occurred as a result of changes to the nature and extent of government regulation of the industry, and changes in both domestic and export markets for dairy products.

Despite the recent changes, the medium term outlook for the dairy industry is positive. Strong demand for dairy products as a result of rising consumer incomes and favorable consumption patterns are expected to result in higher cheese prices (in real terms) over the medium term, while skim milk powder prices are projected to remain around current high levels in real terms (table 5).

Australian manufacturers have been particularly successful in gaining access to new and expanding export markets in growing Asian economies, and it seems likely that the Asian region will remain the focus for future export opportunities.

## **World market**

Major oil exporting nations play a crucial role in world dairy trade because they are large importers of dairy products. Fueled by higher oil prices, stronger economic growth in these countries and subsequent higher consumer incomes are expected to underpin stronger demand for dairy products.

Also, demand for dairy products in developing countries, particularly in south east Asia, is expected to continue rising over the medium term — a reflection of growing consumer interest in dairy products for health and taste reasons, improving infrastructure (such as expansion in supermarkets and cold storage facilities) and improved dairy product packaging and shelf life.

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Table 5: Outlook for dairy products

	Unit	1998 -99	1999 -2000	2000 -01 f	2001 -02 f	2002 -03 z	2003 -04 z	2004 -05 z	2005 -06 z
<b>World</b>									
<b>Indicative price</b>									
<b>Butter</b>									
– nominal	US\$/t	1 546	1 196	1 323	1 362	1 375	1 389	1 403	1 417
– real a	US\$/t	1 633	1 236	1 323	1 326	1 307	1 287	1 269	1 250
<b>Skim milk powder</b>									
– nominal	US\$/t	1 303	1 463	2 110	2 119	2 161	2 205	2 249	2 294
– real a	US\$/t	1 377	1 513	2 110	2 063	2 053	2 043	2 033	2 023
<b>Cheese</b>									
– nominal	US\$/t	1 804	1 746	2 004	2 123	2 193	2 233	2 275	2 300
– real a	US\$/t	1 906	1 805	2 004	2 067	2 083	2 069	2 057	2 029
<b>Australia</b>									
Cow numbers b	'000	2 155	2 170	2 176	2 195	2 214	2 229	2 241	2 252
Yield per cow	L	4 723	4 999	5 085	5 166	5 252	5 332	5 408	5 483
<b>Production</b>									
Total milk	ML	10 178	10 847	11 066	11 339	11 629	11 886	12 119	12 347
Milk sales	ML	1 931	1 929	1 982	2 023	2 068	2 112	2 155	2 202
Manufacturing usage	ML	8 247	8 918	9 084	9 316	9 561	9 774	9 964	10 145
Butter c	kt	176	179	145	151	161	160	159	161
Cheese	kt	320	358	444	446	445	456	466	469
Skim milk powder	kt	255	246	197	210	230	231	230	234
Wholemilk powder	kt	145	190	179	185	190	197	202	207
<b>Milk price dg</b>									
– nominal d	Ac/L	28.5	29.8	27.9	28.2	29.3	30.2	31.3	32.1
– real e	Ac/L	30.0	30.6	27.9	27.5	27.9	28.1	28.4	28.4
<b>Export volume</b>									
Butter c	kt	104	124	84	91	101	102	102	98
Cheese	kt	175	220	274	269	254	256	259	256
Skim milk powder	kt	220	218	164	177	197	199	198	200
Wholemilk powder	kt	126	153	155	162	167	175	181	181
<b>Export value</b>									
– nominal	A\$m	2 257	2 439	3 306	3 566	3 553	3 516	3 520	3 459
– real e	A\$m	2 376	2 508	3 306	3 479	3 382	3 265	3 189	3 057

a In 2000-01 US dollars. b At 31 March on establishments with an estimated value of agricultural operations of \$5000 or more in 1998-99, and at 30 June thereafter. c Includes the butter equivalent of butteroil, butter concentrate, ghee and dry butterfat. d Includes freight from farm gate to processor in some states. e In 2000-2001 Australian dollars. g Weighted average price of fluid milk and manufacturing milk. f ABARE forecast. z ABARE projection.

Sources: Australian Bureau of Statistics; Australian Dairy Corporation; ABARE.

Dairy product prices are expected to benefit over the medium term from continued strong demand in line with rising consumer incomes, particularly in the Asian region, south America and the Middle East. Growth in consumption will be strongest in countries with growing populations, increasing urbanisation and strong economic growth. World milk production is also expected to continue growing over the medium term, albeit at a slower rate than consumption, resulting in a more favorable supply–demand balance for dairy products.

## Outlook for Australia

Since the introduction of an open market in milk in July 2000, the average farm gate price of milk has fallen in all states. However, higher returns for manufactured dairy products on export and domestic markets are expected to partly offset the negative impacts of the cessation of the Commonwealth's Domestic Market Support Scheme for manufacturing milk and the removal of state market milk arrangements.

The immediate price impacts of deregulation have varied substantially among states because producers in each state previously had different exposure to the two sets of regulations. In New South Wales the average farm gate price paid for milk is forecast to be around 25.4 cents a litre in 2000-01, compared with an average price of 36.0 cents a litre in 1999-2000.

The decline in the average price reflects lower prices for milk used in the drinking milk sector, partly offset by higher prices for manufacturing milk. Large decreases in the average farm gate price of milk in 2000-01 are also forecast for Queensland and Western Australia. In Victoria the average farm gate milk price is forecast to be around 25.1 cents a litre in 2000-01 — a decrease of 3.5 per cent compared with the 1999-2000 price.

Average farm gate prices for milk are forecast to rise slightly in 2001-02, reflecting improved world prices for manufactured dairy products. Over the medium term, average farm gate prices for milk are expected to increase further in real terms, reflecting strengthening world prices for dairy products.

The process of adjustment is proving challenging for many dairy farmers, particularly those in areas where a large proportion of milk production was previously sold to the fluid milk sector. The Dairy Industry Adjustment Package that came into effect on

1 July 2000, is designed to assist producers in adjusting their business operations to the new pricing environment. While some farmers are planning to leave the dairy industry, many are expected to use payments from the package to expand their herds or retire debt.

### *Australian milk production to rise*

With changes to the regulatory environment, Australian cow numbers are forecast to rise by only 0.3 per cent in 2000-01, compared with the previous year's increase of nearly 0.7 per cent. Over the period to 2005-06, the cow herd is projected to continue its longer run upward trend, although at a slower rate of growth than during the 1990s (figure 8).

Australian milk production is forecast to increase by 2.5 per cent to 11.3 billion litres in 2001-02. A further 8.9 per cent rise to around 12.3 billion litres is projected over the remainder of the outlook period, with both cow numbers and milk yield per cow projected to increase. Higher milk yields are expected to reflect continuing advances in animal genet-



ics, improved farm management practices and better feeding regimes.

### *Milk use and product manufacture*

Given that prices for cheese are expected to be strong relative to other dairy product prices over the medium term, the composition of Australian dairy production is expected to continue shifting toward cheese.

Sales of fresh milk are forecast to increase only marginally over the short and medium terms. Milk consumption per person in

Australia has remained fairly stable — at around 102 litres — for a number of years. However, the composition of fresh milk sales is expected to continue the trend of recent years, whereby sales of modified fat milks and UHT products have been increasing at the expense of plain while milk. This trend toward increased consumption of reduced fat milk has the effect of making more milk fat available for cream or the manufacture of other dairy products.

Total exports of Australian dairy products are projected to increase over the outlook period, reflecting the continuing expansion of Australian milk production, continuing growth in world demand for dairy products, and only limited growth in the domestic market. Being a relatively low cost milk producer, Australia is well placed to take advantage of the expected expansion in Asian demand for cheese. Japan remains Australia's largest export market for cheese (taking close to 40 per cent of shipments in 2000), with Saudi Arabia, the United Kingdom and the United States also being significant markets.

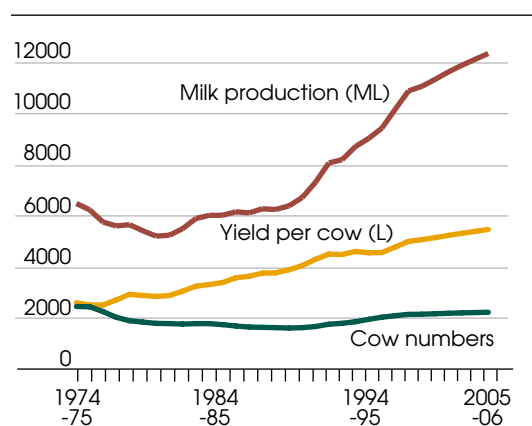
## Plantation forestry

### **Domestic consumption and production of forest products**

Sawnwood and wood based panels consumption in Australia rose in 1999-2000, reflecting a substantial rise in housing commencements. With the prospect of the GST, the domestic housing market experienced a boom in 1999-2000, with total dwelling commencements up by 15 per cent to 171 865 units — the highest since the peak of the previous building cycle in 1993-94 (figure 9).

However, this is not expected to continue. The recent slowing in residential building activity is forecast to result in a sharp fall in the consumption of sawntimber and wood based panels in 2000-01. The decline is projected to continue, with a recovery not expected until 2003-04 (table 6).

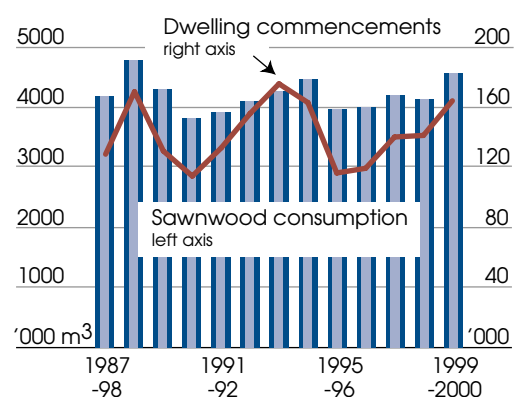
Figure 8: **Australian milk production**



Sawnwood production reached record levels in 1999-2000, rising 9 per cent to 3.9 million cubic metres, mainly as a result of the increased demand. In the short term, the falling demand for sawntimber will result in a decline in production and an increase in stocks. In contrast, increasing demand from Asia is expected to result in continued growth in the production of wood based panels, particularly medium density fibreboard.

Australian consumption of paper and paperboard rose in 1999-2000. Strong economic growth contributed to increases in consumption of all grades of paper. Population growth and moderate economic growth are expected to sustain an increase in the consumption of paper and paperboard products over the medium term.

Figure 9: Australian sawnwood consumption and dwelling commencements



## Global forest product markets

Over the next decade, world consumption and production of industrial forest products are expected to continue to grow strongly. Production and consumption are projected to reach 1.87 billion cubic metres by 2010 — an increase of 370 million cubic metres from 1996. The Asian and Oceania regions are expected to provide the greatest growth, with their production projected to increase by 120 million cubic metres and consumption by 140 million cubic metres over the same period.

Table 6: Outlook for consumption of forest products

		1998	1999	2000	2001	2002	2003	2004	2005
	Unit	-99	-2000	-01 f	-02 f	-03 z	-04 z	-05 z	-06 z
Sawntimber	'000 m³	4 336	4 788	4 469	4 306	4 288	4 435	4 620	4 580
Wood based panels									
Particleboard	'000 m³	846	941	878	846	843	872	908	890
Plywood	'000 m³	265	296	276	266	265	274	286	280
Medium density fibreboard	'000 m³	364	471	440	424	422	436	455	450
Total a	'000 m³	1 475	1 708	1 594	1 536	1 530	1 582	1 649	1 620
Paper and paperboard									
Newsprint	kt	667	672	700	719	737	757	776	795
Printing and writing paper	kt	1 155	1 203	1 254	1 287	1 320	1 354	1 389	1 423
Household and sanitary	kt	212	242	252	259	265	272	279	286
Packaging and industrial	kt	1 450	1 451	1 512	1 552	1 592	1 634	1 675	1 716
Total	kt	3 485	3 568	3 719	3 817	3 914	4 017	4 119	4 219

a Excludes hardboard and softboard, for which production data are not available. f ABARE forecast. z ABARE projection. na Not available.  
Source: ABARE.

Around 95 per cent of Australia's forest exports are to countries in the Asian and Oceania regions. Japan and New Zealand account for around 46 per cent and 20 per cent respectively of Australia's forest product exports by value. Indonesia, the Republic of Korea, China, Chinese Taipei, Hong Kong, Singapore and Malaysia account for around a further 20 per cent. Given Australia's proximity to the Asian and Oceania markets, the significant gap between the regions' projected production and consumption is likely to offer significant export opportunities for Australian producers.

### **Australia's trade in forest products**

Australia's trade in forest products rose to record levels in 1999-2000, underpinned by buoyant domestic activity and recovering Asian economies. During 1999-2000, imports of forest products increased by 16 per cent to \$3.8 billion, reflecting increased imports of structural wood to meet the growing demand of the housing sector.

The value of imports is forecast to rise slightly in 2000-01, followed by a slight fall in 2001-02. A significant fall in sawntimber imports — forecast to be down by around

10 per cent in 2000-01 — is likely to be more than offset by increased demand for paper and paperboard, with imports of these products forecast to be up about 3 per cent. Imports are expected to grow more strongly in the medium term with an anticipated recovery in demand for sawntimber.

Exports of forest products rose by 22 per cent to \$1.6 billion in 1999-2000, mainly reflecting increased exports of paper and paperboard (the value of which rose by 38 per cent to almost \$0.5 billion). Woodchip exports, which account for just under half of the total value of forest product exports, increased by \$60 million in value, contributing to around a fifth of the rise in exports. The removal of export licence limits and the development of new markets contributed to the rise in the volume of woodchip exports.

Exports of forest products are also forecast to grow over the next year, with shipments of woodchips being the major contributor to the increase. Woodchip exports to Asian markets outside Japan are expected to rise, while Australia's share of Japan's woodchip imports is likely to continue to increase at the expense of imports from the United States.

At around 9 per cent of total hardwood woodchip exports in 1999-2000, plantation hardwood pulp logs have become a significant source of woodchip exports. The availability of these logs is projected to more than triple over the coming five years, providing a significant increase in woodchip available for export.