AUSTRALIA

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World economic growth, influenced by developments in the large US economy, is of critical importance to global demand for food and agricultural commodities. With US economic activity having slowed in the first half of 2001, there is likely to be a flow-on effect to other economies—including to Australia and its principal trading partners. Developments in the Asian region will be particularly important to Australian producers and traders of traditional commodities, fresh horticultural products, and processed food products.

Macroeconomic Situation and Outlook

Economic activity in Australia slowed in the second half of 2000 and is expected to slow further in 2001. While domestic demand may be relatively weak in the short term, export performance is expected to remain strong, supported by a significantly weaker Australian dollar. Economic growth in Australia is projected to slow to less than 2 percent in 2001 (down from 3.7 percent in 2000), but to recover in 2002.

The introduction of a 10 percent goods and services tax (GST) and sharp rises in domestic gasoline prices have had significant effects on consumer prices since mid-2000. Net of the one-off effect on consumer prices of the imposition of the GST, the underlying inflation rate was 2.6 percent in 2000. In 2001, inflationary pressures are expected to remain low, mainly as a result of anticipated weaker domestic demand. Underlying inflation is assumed to be around 2.6 percent in 2001 and 2.5 percent in 2002. After a gradual increase of 1.5 percentage points between November 1999 and August 2000, Australian official interest rates were lowered from 6.25 percent in January to 5 percent in April 2001.

Over the past year, the Australian exchange rate has fluctuated significantly, both on a trade-weighted basis and against the US dollar. The Australian dollar depreciated markedly from US$.66 and a trade-weighted index (TWI) of 57 in January 2000 to a historical low of US$.48 and TWI 47 in March 2001, before a partial reversal to US$.52 and TWI 50 in early May. The Australian dollar is assumed to average around US$.53 and TWI 51 in 2001 and US$.56 and TWI 52 in 2002. It averaged US$.58 and TWI 52 in 2000. The actual outcome will depend very much on the strength of world economic growth, the associated outlook for world commodity prices, and on financial market perceptions of the 'worth' of what is widely viewed as a commodities-linked currency.

Food Prices and Consumption

Australian retail food prices increased by 2.4 percent in 2000. The major increases were recorded in takeaway and fast foods (partly because of the introduction of the GST on these items) and in fruits and vegetables (due to adverse weather in a number of important growing regions). Food prices are forecast to rise between 2 and 3 percent in both 2001 and 2002.

The introduction of the broad-based GST that replaces a range of indirect taxes has affected both prices and domestic consumption of food products. Under the new tax system, fresh foods are GST-free, but processed foods and foods eaten away from home are taxed. Product prices have changed to varying degrees because of the different tax rates under the previous and new systems (services are now taxed), and because of differences in the amount of value-added between the farm gate and the end consumer. The effect of the GST on food consumption will be a function of the size of the price change for each type of food and on overall consumer responsiveness to price and income shifts.

The export-oriented nature of much of Australia's agriculture means domestic food prices and prices received by farmers will also be affected by what happens in global agricultural markets. In value terms, around 60-70 percent of farm-level agricultural output is exported each year (ABARE 2001, pp. 20-21). Given the weaker world economic outlook, global prices of most agricultural products are not forecast to increase significantly over the next one to two years.

Prices received by Australian growers of wheat planted in 2001 are forecast to be 3 percent higher than last year because of expanding world consumption and likely lower global stocks. Prices of the principal oilseed in Australia, canola, are forecast to be around 15 percent higher for the 2001 crop — reflecting lower world production and expanding demand. The average return per tonne of sugar cane harvested is forecast to be around 23 percent higher in 2001-02 (July-June), as growers benefit from export sales of sugar at substantially improved prices and the effect on revenues of the lower Australian dollar.

Australian saleyard prices for beef cattle are forecast to increase by 6 percent in fiscal 2001-02, and to ease slightly in the following year as the volume of beef marketed increases after a period of herd rebuilding. The extent to which bovine spongiform encephalopathy (BSE or 'mad cow disease') and foot and mouth disease outbreaks in Europe affect Australia's meat industries will depend on the opportunities that may occur in third markets that previously imported significant amounts of European product. Decreased production of prime lamb, because of improving wool prices, is forecast to contribute to a 6 percent rise in saleyard lamb prices in 2001-02. The farm-gate price of milk is forecast to rise marginally to US$.17 (A$.31) per liter in fiscal 2001-02, and to improve again in 2002-03 as export demand grows.

Food Processing and Marketing

The Australian market for food has been growing relatively strongly. Although some slowdown is expected with an anticipated fall in economic growth, the outlook for the domestic market remains positive. The total value of food sales in 1999-2000 was estimated at US$42 ($A67) billion, an increase of 4.9 percent over the previous year.

Supermarkets accounted for over 60 percent of all food sales and increased their total value of sales by around 5 percent. Of the other main forms of food retailing, the café and restaurant sector recorded strong sales growth of 12 percent, while sales from other outlets (mainly delicatessens, butchers shops, and greengrocers) remained static. Sales by takeaway food outlets declined by 2 percent, continuing a trend evident since 1996-97.

Exports of food and beverages grew in value by 8 percent in 1999-2000, with most of the growth being in exports of substantially transformed foods, including meats, dairy products, seafoods, and wine. Exports of more elaborately transformed foods remained low, at around 1.4 percent of total exports. Most of the trade in food continues to be focused on the Asian market. Australian exports of processed food and beverages to Asia were valued at US$5.1 (A$8.1) billion in fiscal 1999-2000 (July–June year). Processed food exports to the European Union in 1999-2000 were worth US$.9 (A$1.5) billion and those to North America were valued at US$1.6 (A$2.6) billion.

A key factor influencing the Australian food industry is globalization of food trade and manufacturing. Globalization has generated benefits through enhanced efficiency and productivity, and benefited consumers through stronger price discipline. Internationalization of production and some reduction in trade barriers have supported the growth in world trade. More open markets mean Australian firms have to compete for domestic market share with foreign entrants and are increasingly taking the opportunity to access larger foreign markets.

Partly to facilitate firms' ability to access overseas markets, merger and acquisition activity continues to be significant in the Australian food industry—including (in recent times) major mergers in pasta, fruit juice, and dairy manufacturing. As a result, the Australian food processing industry is becoming highly concentrated. In 1997-98, the 20 largest food processing companies located in Australia accounted for almost 50 percent of total industry turnover. For individual product categories, it is common for the one or two largest suppliers to have more than 50 percent of the market. Around half of these companies are foreign-owned or controlled. Of the top 20 companies, seven are wholly Australian-owned, nine are wholly foreign-owned or controlled, and four are a mixture of Australian and foreign ownership. The two largest supermarket chains, Woolworths and Coles, currently account for about half of total retail food and grocery sales.

Ongoing regulatory reform will be important to the creation of an environment more conducive to industrial competitiveness, more encouraging to new market entrants, and more helpful to firms in pursuing opportunities for expansion. A new body (Food Standards Australia New Zealand) will be responsible for food regulatory standards beginning in late 2001. These standards will be based on scientific and technical criteria. The changes will include consumer information requirements covering composition and ingredient labeling and, in relation to genetically modified (GM) foods, mandatory labeling in circumstances where the nature of the food has been significantly changed with respect to its nutritional quality, composition, allergenicity, or end use.

New product development and branding are increasingly dominating global consumer markets. Information and communications technology, particularly e-commerce, is reshaping the supply chain and changing the structure of the global market. Although Internet-based food commerce in Australia remains in its infancy, the technologies associated with e-commerce have considerable potential to improve the efficiency of Australian food marketing. So far, relatively little progress has been made in addressing key problems restricting the application of e-commerce such as the standardization of both product descriptions and operating platforms—particularly at the producer level. Rural access to the Internet remains low, but is increasing rapidly with 19.6 percent of farms having Internet access in March 1999.

Meeting the various production and marketing challenges facing the food industry will require significant increases in spending on research and development. Australia's processed food industry has relatively low investment in research and development compared with other industry sectors. Expenditure on research and development by the processed food and beverage industry grew strongly from around US$61 (A$75) million in 1988-89 to US$220 (A$291) million in 1995-96, before falling back to US$122 (A$179) million in 1997-98—partly as a result of reduction in tax incentives for research and development.

Agricultural Production and Trade

The gross value of Australian farm production (food and fiber) is forecast to rise by 5 percent in 2001-02 (July–June) and by a further 2 percent in 2002-03. The rise is expected to result largely from higher prices for farm products—boosted in part by a low Australian dollar—and from increased production of key commodities such as wheat and sugar. The net value of farm production (the residual between gross value and costs) is forecast to be US$4.2 billion (A$7.8 billion) in 2001-02 and about the same in 2002-03. Total value of farm exports from Australia is forecast to rise by 4 percent to US$16.1 billion (A$29.8 billion) in 2001-02.

Despite improved returns from sheep (especially wool), the large shift in resources to cropping that occurred in the 1990s is unlikely to be reversed in the near term. Having made a substantial capital investment in cropping, and with expectations of continuing productivity gains that will enable them to profitably expand grain output at lower prices, many farmers will be reluctant to move resources back into sheep. Productivity on Australian grain farms (essentially the ability to produce more output per unit value of input) is estimated to have increased by an average of 3.2 percent a year over the 22 years to 1998-99. Annual productivity growth in the beef industry was 2.1 over the same period, and in the sheep industry (principally wool) it was 0.6 percent.

Australian farmers are forecast to plant around 20 million hectares (49.4 million acres) to grains in each of the next two years. Close to

60 percent of this area is likely to go into wheat. Sheep numbers are estimated to have fallen 1.4 percent to 114 million in the year to June 2001, and are forecast to be down further to 113 million in 2002. The national cattle herd (beef and dairy) is forecast to rise from 26.7 million head in June 2000 to around 27.0 million head in June 2002. Milk production is projected to rise 1 percent to 11.0 billion liters in 2001-02 and to 11.3 billion liters in 2002-03—reflecting a small increase in dairy cow numbers and higher milk yields.

Food and Agricultural Policy

International trade reform remains a key policy objective for the Australian government. The economic benefits to most countries (including Australia) are likely to be significant. In the Pacific region, global reductions in agricultural protection, in conjunction with less government intervention in other sectors such as manufacturing, would result in substantial economic gains to both developed and developing countries.

In the case of one Pacific Basin group of countries—Australia, Canada, China, Indonesia, Japan, Malaysia, New Zealand, Philippines, Thailand and the United States—it has been estimated that a 50 percent reduction in government support for agriculture and manufacturing would result in a US$36 billion a year increase in aggregate real gross domestic product by 2010 (Freeman et al. 2000). Of this amount around US$20 billion would go to the non-OECD countries in the study. If reform is confined to agriculture, the benefits are estimated to be much less—a total increase in GDP of US$15 billion, with only US$3.8 billion of this going to the region's non-OECD countries.

Domestically, there has been considerable easing of regulations affecting the Australian grain marketing and distribution system in the past decade. Corporatization and privatization of domestic grain marketing and handling arrangements have contributed to greater entrepreneurship, innovation, and lower costs in the marketing chain, and to more opportunities for growers to respond to consumer needs. The single-desk export marketing arrangement for Australian wheat, operated by AWB (International) Ltd., was reviewed under National Competition Policy guidelines during 2000. The Australian government subsequently announced that the single-desk arrangement would be retained until at least 2004, when its performance would be reviewed in terms of the benefits to the grains industry and to the wider community.

The potential for GM crops continues to be closely monitored. Only GM cotton is grown commercially in Australia, with around 165,000 hectares—37 percent of the total area under cotton—planted in 2000. Most was insect-resistant (Bt) cotton, while the rest was herbicide-resistant varieties. Trials of GM canola continue to occur, but without commercial release.

Deregulation of the domestic dairy market has resulted in substantially lower prices to farmers previously supplying quota-controlled milk for fresh consumption, and has resulted in some higher-cost farmers leaving the industry. Prices paid to farmers supplying milk for the fresh market fell by an average of US$.10 (A$.19) a liter in the six months following deregulation (ACCC 2001). Prices paid by consumers for plain milk in supermarkets have fallen by an average of US$.12 (A$.22) a liter. Processor and supermarket margins both fell by about 19 percent.

Water Resources and Management

There has been considerable investment in water storage in Australia over the years — both for irrigation and power generation, and for municipal use. Excluding on-farm storage, in 1990, there were 447 major dams in Australia with a total capacity of 79 billion cubic meters (National Land and Water Resources Audit 2001). Close to a third of this storage is located in the state of New South Wales.

In 1996-97 (the latest year for which data are available), total consumption of water in Australia was around 23.3 billion cubic meters (National Land and Water Resources Audit 2001). This amount was 60 percent greater than the consumption in 1983-84.

There have been substantial changes to water policy in Australia as both the national and state governments have moved to introduce a more market-oriented system of water allocation and usage. The catalyst for water policy reform was a 1994 agreement by the Council of Australian Governments that included commitments to: consumption-based pricing and full cost recovery for water delivery services; clearly specified water property rights separated from the land; formal determination of water allocations to the environment; and the introduction of water trade to maximize economic returns from water use. The responsibility for implementing the reforms rests with the state governments through their respective water resource management agencies.

A key factor for the food industry is that in many parts of Australia, there is public pressure for irrigation water usage to be reduced in order to provide greater flows for the environment. About 75 percent of consumption in 1996-97 was for irrigation, with 20 percent going to urban and industrial use, and the remaining 5 percent to rural livestock and households (National Land and Water Resources Audit 2001). In the vast majority of surface water management areas where further water resource development is a viable option, consumption is either close to or exceeds the volumes estimated to be consistent with the maintenance of long term sustainable water flows (National Land and Water Resources Audit 2001) A similar situation exists for groundwater.

Actual or potential restrictions on water availability mean that water use efficiency is becoming an increasingly important issue. More efficient water use is likely to have environmental and economic benefits as irrigators and other users favor activities yielding higher returns. A key factor in achieving more efficient water use is the adoption of market-oriented water policies incorporating trade in water entitle-

ments increases, there will be greater incentives for more widespread adoption of efficient storage, delivery, and application systems.

Although water trade has been introduced in many irrigation areas, most activity so far has involved the trading of water within seasons, with little trading of water entitlements occurring on a permanent basis. This latter characteristic may reflect a degree of uncertainty with respect to long-term property rights for water (Gordon, Kemp, and Mues 2000)—especially in an environment where rainfall patterns and the availability of water from publicly owned storages can be highly variable.

In early 2001, permanent water entitlements in the southern Murray Darling River Basin (where such trade is most developed) were trading in a range of around US$ 266 ($A500) to US$532 ($A1000) a thousand cubic meters (Mues, personal communication, April 2001). The price differences reflect relative reliability of supply and some regional restrictions on trade. The lower prices were in areas dominated by broadacre agriculture (grains and grazing livestock) and dairy farming. The upper prices were for higher security water entitlements for use in intensive horticultural activities.

The institutional constraints to full and open trade in water includes restrictions on the volume of water entitlements that can be traded out of particular regions and on trade between regions in different states. Many of these restrictions were imposed in response to concerns that trading water out of a region would lead to underutilized irrigation assets or to structural adjustment problems for farmers in regions that are net sellers of water. These problems suggest some future priorities for policy reform—such as a consistent definition of property rights in different jurisdictions, and tariff structures better suited to large fixed capital investments.

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	Units	1997	1998	1999	2000	2001E	2002F
FOOD CONSUMPTION PATTERNS *a*							
Per capita caloric intake	Cal/day	3,063	3,059	3,056	3,053	3,050	3,047
From animal products	Cal/day	1,034	1,028	1,023	1,018	1,013	1,008
From vegetable products	Cal/day	2,029	2,031	2,033	2,035	2,037	2,039
Protein (% of calories)	%	13.9	13.9	13.9	14.0	14.0	14.1
Fat (% of calories)	%	31.4	31.3	31.2	31.2	31.1	31.0
Carbohydrates (% of calories) *b,c*	%	50.0	50.1	50.2	50.3	50.4	50.5
INCOME AND FOOD PRICES							
Per capita income *d,e,f,g*	US$/capita	15,412	13,334	14,150	13,110	12,840	13,618
% of disposable income spent on food *d,h*	%	14.3	14.5	14.4	13.8	14.2	14.0
% spent eating out *d,h*	%	1.7	1.7	1.9	2.0	1.9	2.0
Food price index *i*	1990=100	119.0	122.2	127.1	130.2	133.4	136.7
General price index (CPI) *i*	1990=100	116.4	117.4	119.2	125.3	128.6	131.8
POPULATION *e*							
Total population	Million	18.5	18.8	19.0	19.2	19.4	19.6
Urban *j*	Million	15.1	15.3	15.5	15.7	15.8	16.0
Nonurban	Million	3.4	3.5	3.5	3.5	3.6	3.6
Share of population in the following age groups *k*							
0–4 years	%	7.0	6.8	6.7	6.6	6.5	6.3
5–14 years	%	14.2	14.1	14.0	13.9	13.7	13.6
15–19 years	%	7.1	7.1	7.0	7.0	7.0	6.9
20–44 years	%	38.3	38.1	37.9	37.7	37.4	37.2
45–64 years	%	21.4	21.8	22.2	22.6	23.0	23.4
65–79 years	%	9.5	9.5	9.5	9.4	9.4	9.4
80–over	%	2.6	2.7	2.8	2.9	3.0	3.1
Median age of population	Years	34.3	34.6	34.9	35.2	na	na
Female labor force participation *l*	%	53.7	53.9	53.6	55.0	na	na
LIFE EXPECTANCY *m*							
Males	Years	75.4	75.7	75.9	76.2	na	na
Females	Years	81.2	81.4	81.6	81.8	na	na
FOOD INFRASTRUCTURE							
Trade capacity							
Grain exports *n*	1,000 Tons	24,546	21,620	21,762	21,094	22,084	21,457
Grain imports *b,n*	1,000 Tons	43	51	45	44	40	40
Total food and agricultural trade *o*	Million US$	13,968	13,504	14,336	15,365	13,837	13,837
Total food and agricultural exports *o,p*	Million US$	11,613	10,960	11,786	12,765	11,237	11,237
Perishable products *o,p*	Million US$	3,006	3,292	3,553	3,838	3,516	3,516
Fishery exports *p*	Million US$	1,112	898	895	982	1,148	1,267
Total food and agricultural imports *q*	Million US$	2,355	2,544	2,550	2,600	2,600	2,600
Perishable products *q*	Million US$	541	596	600	650	650	650
Fishery imports *p*	Million US$	390	378	499	467	na	na
Port capacity *r,s*	1,000 TEUs	2,060	2,287	2,563	2,785	na	na
Road access *t*	1,000 Kms	803	803	804	806	na	na
Rail access t	1,000 Kms	37	40	40	na	na	na
Power generation *b,u*	Gigawatts	182,988	194,380	199,435	203,769	208,961	211,219
Percent of population with refrigerators	%	100.0	100.0	100.0	100.0	100.0	100.0
ROLE OF AGRICULTURE AND TRADE IN THE ECONOMY *b*							
Agriculture as a share of GDP *d*	%	2.7	2.8	2.8	2.8	2.8	2.8
Self sufficiency in grains *v*	%	255.0	320.0	348.0	301.0	312.0	295.0
Self sufficiency in horticultural products *p,q*	%	195.0	182.0	160.0	177.0	na	na
POLICY TRANSFERS *w*							
Consumer subsidy equivalents	%	–4.0	–3.0	–2.0	–3.0	na	na
Total transfers (subsidy/tax)	Million US$	–338	–212	–123	–168	na	na
Total transfers per capita	US$/capita	–18	–11	–6	–9	na	na
MACROECONOMICS INDICATORS							
GDP growth	%	3.8	5.3	4.7	3.7	1.9	4.0
Interest rate *x*	%	8.9	8.2	8.0	9.2	8.5	8.5
Exchange rate	AU$/US$	0.74	0.63	0.65	0.58	0.53	0.56

na = not available E = estimate F = forecast

Sources:

a. FAO database.
b. Data on a financial year (July-June) basis (2000=2000-01).
c. ABS, Apparent Consumption of Foodstuffs and Nutrients Australia, cat. no. 4306.0. Data beyond 1992 have been extrapolated from historical trend. Caloric shares do not sum to 100 percent because of absence of fiber.
d. ABS, National Income, Expenditure and Product, cat. no. 5206.0.
e. ABS, Australian Demographic Statistics, cat. no. 3101.0.
f. Data expressed in average real terms.
g. Series has changed from that reported in previous years, for example now includes investment income from retirement funds.
h. ABS, Retail Trade, cat. no. 8501.0.
i. ABS, Consumer Price Index, cat. no. 6401.0.
j. Defined as sum of persons in population centres greater than 30,000 residents.
k. ABS, Estimated Resident Population of Australia, cat. no. 3201.0.
l. ABS, Labour Force, cat. no. 6202.0.
m. United Nations, World Population Prospects 1994 revision.
n. ABS, Foreign Trade: Magnetic Tape Service, cat. no. 5464.0.
o. Data expressed in chain volume measures. Reference year is 1999-2000. Balance of payments basis.
p. ABS, International Merchandise Exports - Australia, cat. no. 5422.0.
q. ABS, International Merchandise Imports - Australia, cat. no. 5439.0.
r. Total of major Australian ports of Brisbane, Sydney, Melbourne, Adelaide and Freemantle.
s. Bureau of Transport and Communication Economics, Waterline, issue no. 14.
t. ABS, Yearbook of Australia, cat. No. 1301.0.
u. ABARE, Energy Market Developments and Projections to 2014-15, 1999.
v. ABARE, Australian Commodity Statistics, 2000; ABARE, Australian Commodities, March, 2001.
w. OECD, Agricultural Policies in OECD Countries, 2000.
x. Prime lending rate to large businesses.