Appendix 5 Global Commodity Price Prospects

The broad declines in commodity prices in 2001 were another reminder of the key role played by the global industrial cycle in shaping commodity prices. In dollar terms, crude oil prices were down 13.7 percent, metals and minerals prices were down 9.6 percent, and agricultural prices were down 9 percent (figure A5.1).¹ Price declines were already well entrenched in the markets for metals and minerals and agricultural commodities by midyear. But the main decline in crude oil prices in 2001 occurred after the terrorist attacks on September 11, as OPEC (Organization of Petroleum Exporting Countries) producers kept the market well supplied, and now find it difficult to push prices higher because of the weakening in the global economy.

The projected rebound in global activity is the key reason to expect a change in the trend of commodity prices in the quarters ahead. The relatively tame nature of this rebound and the fact that current prices are generally below their 2001 average, however, means that the year-on-year recovery in prices in 2002 will be quite modest. Metals and minerals prices are projected to be up only 0.5 percent, and agricultural prices up by only 1.7 percent. Moreover, oil prices are not likely to move much from their current level, averaging about \$20 per barrel in 2002 (which would be below the 2001 average of \$24.35 per barrel). More upward momentum in prices should be evident in 2003, however. Metals and minerals prices should rise by 6.7 percent, agricultural prices by 7.6 percent and crude oil prices by 5 percent.

The demand for crude oil and metals and minerals is more responsive to changes in global economic and industrial activity than is the demand for agricultural commodities. Global strength in 2000 thus contributed to higher prices in those commodities, while it had little effect on agricultural prices. In addition, crude oil and metals and minerals production is more concentrated among fewer producers than is agricultural production. This facilitates supply cutbacks, as witnessed when OPEC producers quickly cut production and exports of crude in response to falling oil prices in 1998. Metals and minerals producers made similar but less effective cuts, which also led to price increases.

By contrast, agricultural producers are mostly small and dispersed, and coordinated supply cuts are difficult. As a result, agricultural production has continued to exceed demand in recent years, even though prices have been falling. In view of these adverse supply-demand conditions facing agriculture and the large decline in prices since 1997, the projection of an upturn in agricultural prices over the next three years is all the more striking. Price declines in agricultural commodities have now been large enough, however, that even dispersed producers are cutting production, and prices are indeed showing early signs of recovery.

Supply conditions also drive another key projection—that for crude oil. Following a muted recovery over the next 18 months or so, prices are forecast to decline anew, to average \$19 a barrel in 2004, as OPEC and non-OPEC supplies increase faster than demand. Metals and minerals prices are projected to increase 0.5, 6.7, and 5.1 percent, respectively, during 2002–04 as economic activity recovers and producers slowly increase output. Agricultural prices are expected to rise by 1.7, 7.6, and 7.1 percent, respectively, during 2002–04 because



of reduced production in response to current low prices and the modest demand increases that accompany a global economic recovery.

Commodity prices are inherently volatile, and efforts to reduce price volatility have generally been unsuccessful. The last of the United Nations (U.N.)– backed international commodity agreements (rubber) was suspended in 1999. The effort by the Association of Coffee Producing Countries to curtail exports and prevent sharp price declines has not been effective. The attempt by OPEC to keep prices in the \$22–\$28-per-barrel band was suspended after the terrorist attacks on September 11. Consequently, it seems unlikely that commodity price volatility will decline. This is a concern for developing countries that rely on commodity exports for a large share of export earnings or are large importers of key commodities such as food or oil.

The remainder of this appendix focuses on the outlook for individual commodities during the period 2002–04. Longer term price forecasts to 2015 are given in the appendix tables, but are not extensively discussed. Appendix table A5.9 presents nominal price forecasts for individual commodities and indexes, while tables A5.10 and A5.11 present real price forecasts for individual commodities and indexes.

Agriculture

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The extreme weakness of agricultural prices is due to the combination of large increases in productivity and slow demand growth over the past decade. For example, global consumption of coffee, cotton, and grains each grew by less than 1 percent per year during the 1990s—less than population growth. In addition, yields of most crops increased, and this caused production to rise and prices to fall. It does not appear that this surplus of production capacity will dissipate soon or that demand will increase significantly, and because of that, future price increases are expected to be modest.

That said, agricultural prices are expected to recover beginning in 2002, because of reduced supplies, which follow from low prices, and slightly higher demand, which follows from the global economic recovery. Stocks of some commodities have been declining for several years (grains stocks are down 17 percent from the 1998 highs, and sugar stocks are expected to decline 14 percent by mid-2002), although stocks of other commodities (such as coffee, cotton, rubber, and soybeans) remain high. The outlook for individual commodities varies because of different demand, supply, and stock conditions.

Beverages

Beverage prices were mixed in 2001. Coffee prices fell 29 percent as Vietnam and Brazil increased production despite stagnant export growth (table A5.1). Tea prices fell 14 percent because of weak demand and a recovery of production in major exporters. Cocoa rose 18 percent on strong demand and an expected poor harvest in Côte d'Ivoire. Bev-

	1997-88	1998–99	1999–2000	2000-01	2001-02
Brazil	22.8	35.6	30.8	34.10	33.7
Vietnam	6.9	7.5	11.0	15.0	13.3
Colombia	12.2	10.9	9.5	10.5	11.0
Indonesia	7.8	7.0	6.5	6.5	6.3
Mexico	5.1	5.0	6.2	5.3	5.5
Côte d'Ivoire	3.7	2.2	5.7	4.3	4.2
World	96.4	108.4	113.6	117.4	115.8

Table A5.1 Coffee Production (million bags)

Source: U.S. Department of Agriculture.

erage prices are expected to recover slightly during 2002–04 (figure A5.2).

Since the price peak in 1997, cocoa prices went down 34 percent, coffee prices went down 67 percent, and tea prices went down 22 percent. We expect cocoa prices to increase 12 percent in 2002, and a further 8 percent in 2003 as cocoa grindings increase along with the expected recovery of the global economy, and production returns to about the 2.8 million tons level of the past several years (table A5.2). We also expect increased volatility in cocoa prices because of the uncertainty surrounding the new producer-led cocoa body in Côte d'Ivoire and continued political uncertainty.

The coffee market is expected to remain depressed for at least another season, with arabica prices expected to remain unchanged during 2002 and robusta prices making minor gains as Vietnam curtails production by 1 to 2 million bags. A recovery is expected in 2003, with arabica and robusta prices each up 11 percent. However, this recovery could be delayed (especially for arabica) if Brazil increases coffee production to 40 million bags, as many analysts now expect. Nevertheless, the price levels experienced during the early 1990s are unlikely to be repeated, in the absence of adverse weather conditions, because of the supply increases.

Tea prices are expected to decline an additional 4.3 percent in 2002 as production continues to increase. Then prices are projected to make a gradual recovery, up 2.6 percent in 2003 and 3.2 percent in 2004. There is a risk that tea prices could continue to fall rather than recover in the next several years because of increased exports from Sri Lanka, Kenya, and India—the three largest tea exporters.

Food

Food prices increased about 2 percent in 2001, after reaching a 17-year low in 2000. Prices are expected to increase by 12 percent during 2002–04 because of reduced supplies and modest increases in demand that will accompany the expected global economic recovery (figure A5.3).

Fats and oils prices fell 7.5 percent in 2001, following a decline of 8.4 percent in 2000. Since 1997, vegetable oil prices (in dollars) have declined 40 percent because of large supplies and currency devaluations of major exporters such as Malaysia (which accounted for nearly 70 percent of palm oil

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							Annual growth rates (percent)			
	1970	1980	1990	1999	2000	2001	1970-80	1980-90	1990-2000	
Coffee (thousand bags)										
Production	64,161	86,174	88,849	113,588	117,447	115,756	2.11	1.36	1.20	
Consumption	71,536	79,100	96,300	110,400	111,100	110,000	1.01	1.97	0.22	
Exports	54,186	60,996	76,163	92,338	89,642	92,956	0.78	2.41	1.06	
	1970	1980	1990	1998	1999	2000				
Cocoa (thousand tons)										
Production	1,554	1,695	2,506	2,808	3,073	2,812	0.46	4.62	1.82	
Grindings	1,418	1,556	2,335	2,762	2,967	3,014	0.16	4.48	2.38	
Stocks	497	675	1,791	1,266	1,341	1,111	2.38	13.89	-3.95	
Tea (thousand tons)										
Production	1,286	1,848	2,526	2,963	2,847	2,895	4.09	2.87	1.24	
Exports	752	859	1,099	1,296	1,272	1,309	2.35	2.39	1.62	

Table A5.2 Beverages global balance

Note: Time references for coffee and cocoa are based on the crop year shown under the year that production begins: October to September for cocoa and April to March for coffee. For tea, data are in calendar years.

Sources: International Coffee Organization, International Cocoa Organization, International Tea Committee, Food and Agriculture Organization, U.S. Department of Agriculture, and World Bank.

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exports) and Brazil (which accounted for 30 percent of soybean oil exports).²

Prices of most fats and oils are expected to begin a substantial recovery during 2002. The prices of palm and soybean oils, the two dominant oils accounting for 19 and 21 percent of total fats and oils, are expected to increase by 17 and 12 percent, respectively. Lesser increases are expected during 2003. The overall index is expected to increase by 1.3 percent in 2002 and 2.9 percent in 2003. Demand should strengthen, especially because of the relaxing of import restrictions by China following its joining the World Trade Organization, while palm oil supplies are expected to grow only 1 percent this season compared to the long-term average of 9 percent.

The index of grains prices fell 1.6 percent in 2001 and is expected to increase about 6 percent in 2002, as stocks fall to a projected 23 percent of total use—the lowest since 1995 (table A5.3).

Wheat production has declined for four consecutive years, and year-end stocks are expected to decline for the third consecutive year in 2001–02. This has caused wheat prices to increase 12 percent in



Table A5.3 Foods global balance

							Annua	al growth rates	(percent)
	1970	1980	1990	1999	2000	2001	1970-80	1980-90	1990–2000
Fats and oils			Mill	ion tons					
Production	39.78	58.09	80.84	113.50	117.09	119.10	3.68	3.54	3.70
Consumption	39.82	56.80	80.87	112.06	116.87	120.59	3.55	3.69	3.64
Exports	8.83	17.76	26.89	35.45	37.88	38.73	7.05	4.19	3.39
Stocks	5.18	9.25	12.15	14.22	14.46	12.94	7.09	2.44	0.69
Grains			Mill	ion tons					
Production	1,079	1,430	1,769	1,871	1,836	1,843	2.88	1.55	1.04
Consumption	1,114	1,450	1,717	1,872	1,872	1,894	2.58	1.78	1.02
Exports	119	229	232	282	268	266	6.35	0.13	0.94
Stocks	193	309	490	523	487	436	7.24	3.83	-0.56
Soybeans			Thou	sand tons					
Production	44,269	80,873	104,093	159,854	173,384	182,446	6.84	1.87	5.08
Consumption	47,988	84,017	103,643	159,758	173,000	180,744	6.53	2.04	4.99
Exports	12,572	24,514	24,488	47,254	54,880	56,694	5.24	0.80	2.88
Stocks	3,599	11,538	12,992	14,593	14,959	17,476	13.83	-0.66	0.20
Sugar			Thousand ton	s (raw equivale	ent)				
Production	70,272	88,488	114,178	143,220	136,111	128,184	2.80	1.59	3.26
Consumption	67,730	90,547	110,598	133,104	134,712	132,064	3.30	1.40	3.00
Exports	21,578	28,346	34,069	42,015	38,495	34,944	3.26	0.83	3.12
Stocks	17,639	17,253	21,260	35,939	35,474	30,451	3.96	-0.77	4.52

Note: Time references for grains, soybeans, and sugar are based on marketing years, shown under the year in which production begin, and vary by country; for fats and oils, crop years begin in September. *Source:* U.S. Department of Agriculture; Oil World.

2001 from the 1999 lows. Prices are still 15 percent below the 1994 levels, when stocks were at comparable lows. Prices are projected to increase 4 percent in 2002 and an additional 4.5 percent in 2003. The risk to the forecast is on the upside if prices return to their historical relationship relative to stocks. A drought also threatens the Canadian and U.S. wheat crops and could lead to higher prices.

Maize prices in 2001 were only slightly above their lows in 1999 and 2000 despite the decline in maize stocks in 2000–01 and a projected further decline in stocks in 2001–02. If stocks fall as expected, they would about equal the levels in 1995, which preceded sharp maize price increases in 1995 and 1996. One of the factors that have kept maize prices low is the large supply of soybean meal, which substitutes for maize as livestock and poultry feed. However, the low maize stocks and the fall in production in major exporting countries in 2001–02 should cause maize prices to rise about 6 percent in 2002 and an additional 9 percent in 2003.

Rice prices fell 14.6 percent in 2001, to the lowest nominal price since 1972 and the lowest price relative to wheat since at least 1960. The extreme weakness in rice prices is due, at least in part, to the currency devaluation in Thailand, the largest exporter of rice. Global rice production and stocks declined in 2000–01 and are projected to decline in 2001–02. Rice prices began to rise in late 2001 and are expected to increase by 10 percent in 2002 and an additional 10 percent in 2003.

Soybean prices fell 7.6 percent in 2001, down 36 percent from their 1996 highs. The stock situation for soybeans is very different from that of most other crops. Soybean production has increased at an unprecedented 5 percent per year rate since 1990, sending soybean carryover stocks to near-record levels and prices to the lowest nominal levels since 1972. Ninety-five percent of the increase in global production was in the three main exporting countries (Argentina, Brazil, and the United States), which account for nearly 90 percent of world exports and about 80 percent of world production. The production increases in Argentina and Brazil were driven by improved yields and new varieties that can be grown in previously unfavorable climatic conditions. This allowed soybean production to expand farther north in Brazil and contributed to the more than doubling of Brazilian production from 1990 to 2001. The increase in U.S. production

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was due to policy changes that allowed producers to shift away from maize and also to improved varieties that allowed soybeans to displace wheat in some areas. Soybean prices are projected to increase modestly—by 5 percent in 2002 and by 7 percent in 2003. This would leave nominal prices nearly 30 percent below the price peak of 1996.

Sugar prices were up 6.6 percent in 2001 following the 31 percent increase in 2000 from the lows in 1999. Sugar prices are expected to rise about 4 percent in 2002 and an additional 2 percent in 2003, as global production is expected to fall about 6 percent and year-end stocks are expected to fall about 14 percent in 2002. Brazil, the largest exporter, is expected to have slightly higher production in 2002 than in 2001, but production is expected to remain below the peak level of 2000. Other major exporters, such as Australia and Thailand, are also expected to have slightly larger production in 2001, but production will likely remain well below recent peaks. Russia, the largest importer in recent years, with as much as 15 percent of world imports, is expected to reduce imports.

Raw materials

The index of agricultural raw materials prices (comprising cotton, natural rubber, and tropical hardwoods) declined 15 percent in 2001, and 43 percent since the peak in 1995 (figure A5.4). The declines have been due to weak currencies of major exporters, such as Malaysia, large production increases (cotton), and weak demand (timber).

Cotton prices (according to the Cotlook A Index) fell 23 percent in 2001 compared with 2000 mainly in response to an 8 percent surge in global production (table A5.4). More than 80 percent of the increase came from China and the United States, which account for a combined 45 percent of global production. Cotton demand has been weak, and is expected to decline slightly in 2001-02. Ending stocks are expected to increase nearly 15 percent, pushing the stocks-to-use ratio to a record high of 53 percent. The International Cotton Advisory Committee expects production to fall by about 4 percent in 2002–03, but the stocks-to-use ratio is still expected to remain high. Prices are projected to fall 5.6 percent in 2002 and then increase in 2003 but remain well below the 2000 level.

Natural rubber prices fell 13 percent in 2001, mostly because of weak demand for tires—the largest use of natural rubber. Car tire demand declined 10 percent in the United States, 4 percent in France, and 1 percent in Japan during the first half of 2001 compared to 2000. Major exporters (Indonesia, Malaysia, and Thailand) announced plans to cut production in 2002. However, past such efforts have been largely unsuccessful. Natural rubber prices are expected to decline 5 percent in 2002 and increase 14 percent in 2003 as the global economy recovers.

GLOBAL COMMODITY PRICE PROSPECTS

							Annua	al growth rates	(percent)
	1970	1980	1990	1999	2000	2001	1970-80	1980–90	1990–2000
Cotton			Thous	and tons					
Production	11,740	13,832	18,970	19,067	19,261	20,856	1.22	3.09	0.84
Consumption	12,173	14,215	18,576	19,803	19,651	19,590	1.11	3.10	0.21
Exports	3,875	4,414	5,081	6,150	5,739	6,167	0.93	2.79	0.49
Stocks	4,605	4,895	6,645	9,038	8,630	9,896	1.71	2.83	1.38
	1970	1980	1990	1998	1999	2000			
Natural rubber			Thous	and tons					
Production	3,140	3,820	5,080	6,820	6,810	6,830	1.78	3.17	3.08
Consumption	3,090	3,770	5,190	6,540	6,670	7,320	1.58	3.16	3.25
Net exports	2,820	3,280	3,950	4,690	4,660	5,000	1.26	2.07	1.84
Stocks	1,440	1,480	1,500	2,300	2,530	2,150	0.60	0.23	3.71
	1970	1980	1990	1997	1998	1999	1970-80	1980-90	1990–99
Tropical timber			Thousand	cubic meters					
Logs, produced	210	262	300	311	289	299	1.47	1.71	0.45
Logs, imported	36.1	42.2	25.1	17.9	14.6	18.9	0.18	-5.10	-5.36
Sawnwood, produced	98.5	115.8	131.8	115.0	108.3	108.2	1.17	1.74	-1.99
Sawnwood, imported	7.1	13.2	16.1	21.2	19.5	21.6	4.95	2.57	3.33
Plywood, produced	33.4	39.4	48.2	56.1	47.6	52.0	1.17	2.02	0.46
Plywood, imported	4.9	6.0	14.9	19.5	18.3	18.3	0.69	9.10	3.60

Note: Year references for cotton are based on the crop year shown under the production year beginning in August; for rubber and tropical timber, the year refers to the calendar year.

Sources: International Cotton Advisory Committee, International Rubber Study Group, Food and Agriculture Organization, and World Bank.

Tropical timber prices fell 18.8 percent in 2001, and are down 35 percent from their 1995 highs, because of weak import demand—especially in the European Union and Japan. The strength of the dollar versus the yen and European currencies contributed to lower dollar prices. Malaysian sawnwood export volumes fell by about 12 percent in the first half of 2001. China has continued to increase log imports for processing and re-export. African timber export prices have remained stronger than Asian prices because of the shift of

Table A5.4 Raw materials global balance

imports from Asia to Africa by European importers. Tropical timber prices are expected to remain about unchanged in 2002 before increasing by a total of 24 percent in 2003 and 2004.

Fertilizers

Fertilizer prices were broadly lower in 2001, as slow demand growth continued the trends of the 1990s (table A5.5), and surplus production capacity remained large for all major products. The recovery in

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							Annua	al growth rates (percent)
	1970	1980	1990	1997	1998	1999	1970-80	1980–90	1990–99
Nitrogen			Millio	on tons					
Production	33.30	62.78	82.26	87.60	88.48	90.85	6.53	3.12	1.11
Consumption	31.76	60.78	77.14	80.12	82.62	85.53	6.86	2.60	1.15
Exports	6.77	13.15	19.48	23.24	23.95	24.58	7.23	5.10	2.62
Phosphate			Millio	on tons					
Production	22.04	34.51	39.35	32.81	32.99	32.65	3.72	1.70	-2.05
Consumption	21.12	31.70	35.90	33.34	33.17	33.15	3.85	1.39	-0.88
Exports	2.92	7.51	10.50	12.24	12.54	12.90	8.37	5.01	2.31
Potash			Millio	on tons					
Production	17.59	27.46	26.82	26.16	24.98	25.42	3.97	-0.03	-0.59
Consumption	16.43	24.24	24.68	22.63	22.36	22.68	3.93	0.05	-0.94
Exports	9.45	16.72	19.82	22.52	22.13	22.63	4.89	0.73	1.48

Table A5.5 Fertilizer global balance

Note: All data are in marketing years.

Source: Food and Agriculture Organization.

grain prices is expected to support higher fertilizer prices in 2002, since an estimated 55 percent of total fertilizer use is for grains.

Nitrogen (urea) prices were down 6 percent in 2001 after increasing 44 percent in 2000 from extremely depressed levels. The Food and Agriculture Organization (FAO)/Industry Working Group estimates that global nitrogen fertilizer capacity exceeded current consumption by 11 percent in 2001–02 and that demand will increase fast enough to reduce surplus capacity to 8 percent within four years. We expect urea prices to rise 23 percent by 2004 because of increased grain prices and the reduction in surplus production capacity.

Phosphate prices were marginally lower in 2001 after falling sharply in 2000. Diammonium phosphate (DAP) prices fell 4.2 percent and triplesuper phosphate (TSP) prices fell 3.6 percent in 2001 compared to 2000. Prices are expected to increase 18 and 14 percent, respectively, for DAP and TSP by 2004 as surplus capacity declines and agricultural commodity prices rise.

Potash prices declined 3.6 percent in 2001 compared with 2000 after increasing slowly in each of the three previous years. Although surplus capacity remains large (it is estimated at 28 percent), prices have been kept relatively stable by industry cuts in production. Prices are expected to increase slowly because of tight supply management and steady increases in demand. By 2004, nominal prices are projected to rise 4 percent from 2001 levels.

Metals and minerals

The index of metals and minerals prices fell 9.6 percent in 2001 because of rising inventories and weak demand as a result of slowing economic activity (table A5.6). Low prices led to a number of production cutbacks, notably in copper and aluminum, which helped stem the price declines. Prices began to recover late in the year on expectations that an economic recovery would lead to higher demand for metals. Inventories remain high for many metals—the exceptions being lead and nickel—but the global balance for most metals is expected to move into deficit during the year.

Metals prices are expected to continue to rebound moderately in 2002 and record stronger increases in 2003–04. Real prices are expected to decline in the longer term, as production costs continue to fall because of technological innovation and improved managerial practices.

Aluminum prices fell 6.8 percent in 2001 as a result of weak demand and a sharp run-up in inventories (figures A5.5 and A5.6). Prices have been partly supported by reductions of more than 2 million tons of annual production capacity, mainly in the United States and Brazil because of power shortages. About 1.6 million tons of smelting capacity in the U.S. Pacific Northwest was idled following the electricity crisis on the West Coast, while at least 0.3 million tons were taken off-line in Brazil under mandatory rationing because of hydroelectric shortages in the region.

							Annual growth rates (percent)		
	1970	1980	1990	1999	2000	2001	1970-80	1980–90	1990-2000
Aluminum			Thous	and tons					
Production	10,257	16,027	19,362	23,705	24,642	24,360	3.2	1.9	2.2
Consumption	9,996	14,771	19,244	23,456	24,994	24,200	3.2	1.8	2.2
LME ending stocks		68	311	775	322	821	n.a.	-0.3	0.4
Copper			Thous	and tons					
Production	7,583	9,242	10,809	14,455	14,834	15,400	1.9	1.1	3.5
Consumption	7,294	9,400	10,780	14,095	15,160	14,720	2.5	1.0	3.3
LME ending stocks	72	123	179	790	357	799	7.4	-5.6	15.7
Nickel			Thous	and tons					
Production	0	717	842	1,028	1,105	1,138	n.a.	1.6	3.1
Consumption	0	742	858	1,076	1,152	1,125	n.a.	1.5	2.6
LME ending stocks	2	5	4	47	10	20	n.a.	-0.5	8.3

Table A5.6 Metals and minerals global balance

n.a. Not available.

Sources: World Bureau of Metal Statistics, the London Metal Exchange (LME), and World Bank.



It is uncertain when the idled capacity may be reactivated, but with such large amounts of capacity overhanging the market, the potential restarts could serve to cap prices in 2002. While prices could begin to recover in the second half of 2002, annual prices are expected to remain fairly flat.

In 2003, inventories are expected to decline because of rising demand, and prices are expected to move higher and continue to rise in the medium term, as demand increases keep the market in deficit. However, over the longer term, new lowcost capacity is expected to come on-stream and real prices are expected to continue their declines. Copper prices declined 13 percent in 2001, as world consumption fell 3 percent while production increased about 4 percent. London Metal Exchange (LME) stocks rose to 800,000 tons (figure A5.6). Low prices prompted a number of announced production cutbacks late in the year, which totaled about 500,000 tons per year (tpy) at year's end.

The production cuts are expected to contribute to a net decline in global output of about 1 percent in 2002. A recovery in demand of 3 percent is expected to lead to a 3 percent rise in prices. This gain is moderate because of the high level of inventories and uncertainty about the extent of recovery in de-



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	Tons									
	1991	1994	1995	1996	1997	1998	1999	2000	1991–00	
Jewelry	2,359	2,619	2,792	2,851	3,349	3,156	3,149	3,175	3.4	
Other fabrication	517	456	502	484	560	569	595	563	1.0	
Bar hoarding	252	231	306	182	325	173	240	198	-2.6	
Other						208	170	10	n.a.	
Total demand	3,129	3,305	3,600	3,518	4,234	4,106	4,154	3,946	4.0	
Mine production	2,162	2,282	2,276	2,361	2,479	2,538	2,568	2,573	2.0	
Net official sales	100	130	167	279	326	374	464	471	18.8	
Old gold scrap	482	617	624	640	628	1,097	616	611	2.7	
Net hedging	66	105	475	142	504	97	506		n.a.	
Other	319	171	57	95	297			291	-1.0	
Total supply	3,129	3,305	3,600	3,518	4,234	4,106	4,154	3,946	2.6	

Table A5.7 Gold global balance

n.a. Not available.

Sources: Gold Field Minerals Service and World Bank.

mand. Price increases are expected to accelerate to 8 percent and 6 percent, respectively, during 2003 and 2004 as demand continues to outstrip increases in production. Over the longer term, increases in new low-cost capacity are expected, and real prices are expected to decline.

Nickel prices fell 32 percent last year, but the decline was from unusually high levels in 2000 when exceptionally strong demand and low inventories resulted in a very tight market. In 2001, consumption fell more than 2 percent from weak demand for stainless steel, while production is estimated to have increased more than 3 percent. This led to a doubling of LME inventories, although stocks are low compared with levels during the 1990s.

The market balance is expected to remain in surplus in 2002, as production again outstrips projected demand growth of some 4 to 5 percent. With relatively low inventories, expectations of increasingly tighter markets are expected to result in higher prices this year. A shortage of nickel production is likely beyond 2002, as there appears to be a lack of new development projects during 2003–05, partly because of disappointments with new pressurized acid leach technology. Consequently, prices could spike sharply higher during this period if demand growth rose quickly.

Gold prices declined 3 percent in 2001 to \$271 per troy ounce (toz), because of weak demand and ample supplies (table A5.7). Demand in major markets fell nearly 2 percent during the first nine months of 2001, in part because of the strong U.S. dollar. The price decline was kept modest mainly because of a rally following September 11, which took prices towards \$300 toz, as some investors turned to gold as a refuge after the terrorist attacks in the United States. Prices returned to the \$275 toz level in November and December, as underlying market fundamentals remained weak. Central bank sales continue, with the U.K. government completing a series of auctions totaling 395 tons in early 2002.

Gold prices are projected to average \$275 toz over the 2002-04 period, and remain at or below \$300 toz over the longer term. Prices above this level will likely stimulate new supplies, encourage producer sales, and lessen demand, while prices dropping toward \$250 toz will reduce investment and encourage consumption. Mine production is expected to continue to increase moderately, as new low-cost operations come onstream. An important determinant of prices will be the decision by central banks whether to further stem official gold sales when the Washington Agreement expires in 2004.

Petroleum

Crude oil prices averaged \$24.4 per barrel in 2001—down 13.7 percent from 2000—and ended the year below \$19 per barrel. The price decline was due to falling demand, rising non-OPEC production, higher inventories, and speculative selling (table A5.8). Oil demand had been weakening prior to the terrorist attacks in the United States on September 11 because of slowing economic growth, but slumped further following the attacks, partly because of significantly reduced air travel and mild weather, and also expectations of lower economic

							Annua	al growth rates	(percent)
	1970	1980	1990	2000	2001	2002	1970-80	1980-90	1990-2000
OECD	34.0	41.5	41.5	47.8	47.7	47.5	2.0	0.0	1.4
former Soviet Union	5.0	8.9	8.4	3.6	3.7	3.7	5.9	-0.6	-8.1
Other non-OECD	6.8	12.3	16.1	24.4	24.6	24.8	6.1	2.7	4.3
Total consumption	45.7	62.6	66.0	75.9	76.0	76.0	3.2	0.5	1.4
OPEC	23.5	27.2	24.5	30.8	30.2	28.7	1.5	-1.0	2.3
former Soviet Union	7.1	12.1	11.5	7.9	8.6	9.0	5.4	-0.5	-3.6
Other non-OPEC	17.4	24.6	30.9	38.0	38.1	38.6	3.5	2.3	2.1
Total production	48.0	63.9	66.9	76.7	76.8	76.3	2.9	0.5	1.4
Stock change,									
miscellaneous	2.3	1.3	0.9	0.8	0.8	0.3			

Table A5.8 Petroleum global balance

Sources: BP, the International Energy Agency, and World Bank.

growth. OPEC also committed to keep the market well supplied, and inventories rose to more comfortable levels, compared to the very low levels of early 2000 (figure A5.7).

The 10 OPEC countries (excluding Iraq, which remains outside the quota system because of U.N. sanctions) reduced production four times in the past year by a combined total of 5 million barrels per day (mb/d) (figure A5.8), in an attempt to maintain prices within its targeted price range of \$22 to \$28 a barrel. OPEC's latest cut of 1.5 mb/d, effective January 2002, was made only after five non-OPEC producers agreed to contribute nearly 0.5 mb/d of

cuts to help stabilize prices. OPEC also decided to suspend its price band for six months.

All of the cuts are for six months, except for Russia, which only committed to reduce crude oil exports for three months. Russia did not agree to reduce crude production or limit product exports. As a result, actual reductions in non-OPEC production from these five countries may be limited to only 0.1 mb/d. Compliance within OPEC countries is expected to be less than in 2001, as some countries face difficulties reducing output.

In 2002, the requirements for OPEC oil are projected to be lower than in 2001, because of min-



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imal growth in global oil demand and a continued rise in non-OPEC supplies. Consequently OPEC will need to produce an estimated 1.5 mb/d less oil than in 2001 to stabilize prices. Oil demand is expected to show little growth this year, even with a moderate economic recovery in the second half of this year. Non-OPEC supplies are expected to increase by 1 mb/d, notably in Russia, despite the recent commitments.

Supporting prices may prove difficult in the first half of this year, especially if demand deteriorates, and deteriorating demand may pressure OPEC to cut production further. However, as demand recovers, compliance should become easier and inventories should converge on last year's levels, providing further support to prices.

A major upside threat to prices is a potential supply disruption from further actions to combat global terrorism. Should there be a significant supply disruption, oil prices could rise sharply. However, surplus production capacity in OPEC has widened to well over 6 mb/d, and this could compensate for some loss in exports because of disruptions caused by the war on terrorism.

In the medium term, OPEC is expected to continue its policy of adjusting output to keep inventories lean and maintain prices around \$25 per barrel. This requires OPEC to micromanage the market and take preemptive actions, which can prove difficult given the uncertainties of future levels of demand and competing supplies. Although demand is expected to grow moderately, significant production is expected to come onstream by mid-decade, especially from West Africa and the former Soviet Union. Rising capacity is also expected within OPEC. While OPEC will be required to raise production in 2003, non-OPEC producers are expected to capture much of the growth in demand in the 2004–05 period.

Oil prices are expected to average \$20 per barrel 2002, rising to \$21 in 2003, but falling below \$20 a barrel by mid-decade, because of rising supply competition. A threat to the near-term forecast is that OPEC could take strong, concerted action on production levels over the next few years to keep prices at or above \$25 per barrel. If successful, such action would reduce world demand and increase competing supplies, and prices would still be expected to fall below \$20 a barrel by middecade.

Notes

1. Oil prices are measured by the World Bank's index of spot prices, which includes equally weighted Brent, Dubai, and West Texas Intermediate crude oils. Percentage changes in this appendix refer to year-to-year changes unless noted otherwise.

2. Currency devaluations of major exporters can lead to declines in individual commodity prices in dollar terms (see box 1.1 on p. 20 of *Global Development Finance 2001*.

		Actual					Projections				
Commodity	Unit	1970	1980	1990	2000	2001	2002	2003	2005	2010	2015
Energy											
Coal, U.S.	\$/mt	n.a.	43.10	41.67	33.06	44.86	38.00	36.00	34.00	35.00	36.00
Crude oil, average	\$/bbl	1.21	36.87	22.88	28.23	24.35	20.00	21.00	18.00	19.00	21.00
Natural gas. Europe	\$/mmbtu	n.a.	3.40	2.55	3.86	4.06	3.30	3.10	2.75	2.75	3.00
Natural gas, U.S.	\$/mmbtu	0.17	1.55	1.70	4.31	3.96	2.50	2.60	2.75	3.00	3.25
Non-energy commodities											
Agriculture											
Beverages											
Cocoa	c/kg	67.5	260.4	126.7	90.6	106.9	120.0	130.0	140.0	157.0	168.0
Coffee other milds	c/kg	114.7	346.6	197.2	192.0	137.3	138.9	154.3	209.4	265.0	280.0
Coffee robusta	c/kg	91.4	324 3	118.2	91.3	60.7	63.9	70.6	88.2	132.0	142.6
Tea, auctions (3) average	c/kg	83.5	165.9	205.8	187.6	159.8	153.0	157.0	170.0	182.0	184.0
Food											
Fats and oils											
Coconut oil	\$/mt	397.2	673.8	336.5	450.3	318.1	375.0	450.0	600.0	645.0	670.0
Copra	\$/mt	224.8	452.7	230.7	304.8	202.1	350.0	400.0	450.0	480.0	500.0
Groundnut oil	\$/mt	378.6	858.8	963.7	713.7	680.3	725.0	775.0	820.0	850.0	875.0
Palm oil	\$/mt	260.1	583.7	289.8	310.3	285.7	330.0	360.0	400.0	450.0	475.0
Faill Oli Souboan mool	\$/IIIt \$/mt	102.6	262.4	200.2	129.2	191.0	182.0	192.0	215.0	225.0	225.0
Soybean nil	\$/111L \$/mat	102.0	202.4	200.2	220 1	254.0	105.0	192.0	425.0	460.0	255.0
Soybean on	\$/111L	200.5	397.0	246.9	211.0	105.0	390.0	403.0	423.0	460.0	303.0
Soybeans	\$/mt	116.9	296.2	246.8	211.8	195.8	205.0	220.0	240.0	250.0	260.0
Grains											
Maize	\$/mt	58.4	125.3	109.3	88.5	89.6	96.0	105.0	122.0	125.0	130.0
Rice, Thai, 5%	\$/mt	126.3	410.7	270.9	202.4	172.8	190.0	210.0	235.0	260.0	265.0
Sorghum	\$/mt	51.8	128.9	103.9	88.0	95.2	91.8	100.4	116.6	119.5	123.5
Wheat, US, HRW	\$/mt	54.9	172.7	135.5	114.1	126.8	131.0	138.0	155.0	160.0	165.0
Other food											
Bananas, US, new series	\$/mt	166.1	377.3	540.9	424.0	583.3	540.1	523.6	529.1	568.0	590.0
Beef, US	c/kg	130.4	276.0	256.3	193.2	212.9	211.6	213.8	213.8	220.5	230.0
Oranges	\$/mt	168.0	400.2	531.1	363.2	609.2	575.0	550.0	500.0	52.5.0	550.0
Shrimp Mexican	c/kg	n a	1 1 5 2	1 069	1 513	1 517	1 350	1 500	1 650	1 700	1 720
Sugar, world	c/kg	8.2	63.16	27.67	18.04	19.04	18.50	19.20	22.00	23.00	24.00
Agricultural raw materials											
Logo Comoroon	¢/aum	42.0	251 7	242 5	275 4	2((1))	265.0	275.0	200.0	228.0	285.0
Logs, Cameroon	\$/cum	43.0	231.7	343.3	2/3.4	200.1	263.0	273.0	215.0	260.0	205.0
Logs, Malaysia	\$/cum	43.1	195.5	522.0	190.0	139.1	135.0	170.0	215.0	260.0	293.0
Sawiiwood, Malaysia	\$/Culli	1/3.0	396.0	333.0	394./	401.4	403.0	330.0	623.0	/20.0	820.0
Other raw materials	allea	(7.(206.2	101 0	120.2	105.9	101.4	114.6	122.2	140.0	1(0.0
Pubbor PSS1 Malavoia	c/kg	40.7	142.5	86.5	29.1	60.0	57.2	62.9	77.2	147.7 87.7	95.1
Tobacco	\$/mt	1,076	2,276	3,392	2,976	3,012	3,080	3,150	3,250	3,275	3,300
Fortilizers											
DAD	¢ /mat	54.0	222.2	171 4	154.2	1477	155.0	1(0.0	170.0	175.0	190.0
DAP Dhoonhato no di	\$/111L \$/mat	11.00	46.71	1/1.4	134.2	14/./	133.0	160.0	170.0	1/3.0	180.0
Phosphate rock	\$/111L © /t	22.0	40./1	40.30	45.75	41.//	41.50	42.00	43.00	43.00	46.00
TCD	\$/mt	32.0	115.7	98.1	122.5	118.1	120.0	121.3	125.0	127.0	150.0
	\$/mt	43.0	180.3	131.8	13/./	126.9	130.0	135.0	145.0	150.0	155.0
Urea, E. Europe, bagged	\$/mt	n.a.	n.a.	119.3	101.1	95.3	99.6	108.6	126./	131.3	135.8
Metals and minerals	¢ /	554	1 450	1 (30	1 5 40	1 4 4 4	1 450	1.550	1 700	1 000	1.050
Aluminum	\$/mt	336	1,436	1,639	1,549	1,444	1,450	1,550	1,/00	1,800	1,850
Copper	\$/mt	1,416	2,182	2,661	1,813	1,5/8	1,625	1,800	2,000	2,050	2,100
Gold	\$/toz	35.9	607.9	383.5	2/9.0	2/1.0	2/5.0	2/5.0	2/5.0	300.0	300.0
Iron ore, Carajas	c/dmtu	9.84	28.09	32.50	28.79	30.03	29.50	30.00	32.00	33.00	33.00
Lead	c/kg	30.3	90.6	81.1	45.4	47.6	52.5	55.0	60.0	64.0	64.5
Nickel	\$/mt	2,846	6,519	8,864	8,638	5,945	6,000	6,300	6,500	6,700	6,800
Silver	c/toz	177.0	2,064	482.0	499.9	438.6	475.0	500.0	520.0	550.0	550.0
Tin	c/kg	367.3	1,677	608.5	543.6	448.4	440.0	475.0	525.0	540.0	550.0
Zinc	c/kg	29.6	76.1	151.4	112.8	88.6	85.0	92.5	100.0	110.0	120.0

Table A5.9 Commodity prices and price projections in current dollars

\$/mt, dollars per metric ton; \$/bbl, dollars per barrel; \$/mmbtu, dollars per million British thermal units; c/kg, cents per kilogram, \$/cum, dollars per cubic meter; \$/toz, dollars per troy ounce; c/dmtu, cents per dry metric ton unit.

n.a. Not available.

Note: Projections as of February 27, 2002.

Source: World Bank Economic Policy and Prospects Group.

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Table A5.10 Commodity prices and price projections in constant 1990 dollars

				Actual				Projections			
Commodity	Unit	1970	1980	1990	2000	2001	2002	2003	2005	2010	2015
Energy											
Coal, U.S.	\$/mt	n.a.	54.71	41.67	33.97	46.77	39.82	36.42	32.04	30.46	29.26
Crude oil, average	\$/bbl	4.31	46.80	22.88	29.01	25.39	20.96	21.24	16.96	16.54	17.07
Natural gas, Europe	\$/mmbtu	n.a.	4.32	2.55	3.96	4.23	3.04	3.03	2.59	2.39	2.44
Natural gas, US	\$/mmbtu	0.61	1.97	1.70	4.43	4.12	2.62	2.78	2.69	2.61	2.64
Non-Energy Commodities Agriculture											
Beverages		2 4 2 4		10/-							
Cocoa	c/kg	240.6	330.5	126./	93.1	111.4	125./	131.5	131.9	136.6	136.5
Coffee, other milds	c/kg	408.8	440.0	197.2	197.3	143.2	145.5	156.1	197.3	230.6	227.6
Tea, auctions (3) average	c/kg c/kg	323.7 297.7	411.7 210.6	205.8	93.8 192.8	63.3 166.6	67.0 160.3	158.8	83.1 160.2	114.9	115.9 149.5
Food											
Fats and oils											
Coconut oil	\$/mt	1416.0	855.3	336.5	462.7	331.6	392.9	455.2	565.3	561.4	544.5
Copra	\$/mt	801.6	574.7	230.7	313.1	210.7	366.7	404.6	424.0	417.8	406.3
Groundnut oil	\$/mt	1349.5	1090.1	963.7	733.3	709.2	759.6	783.9	772.6	739.8	711.1
Palm oil	\$/mt	927.1	740.9	289.8	318.8	297.8	345.8	364.2	376.9	391.6	386.0
Soybean meal	\$/mt	365.7	333.1	200.2	194.4	188.7	191.7	194.2	202.6	195.8	191.0
Soybean oil	\$/mt	1020.8	758.6	447.3	347.4	369.1	408.6	409.7	400.5	400.4	410.4
Soybeans	\$/mt	416.8	376.0	246.8	217.7	204.2	214.8	222.5	226.1	217.6	211.3
Grains											
Maize	\$/mt	208.2	159.0	109.3	91.0	93.5	100.6	106.2	115.0	108.8	105.7
Rice, Thai, 5%	\$/mt	450.3	521.4	270.9	208.0	180.2	199.1	212.4	221.4	226.3	215.4
Sorghum	\$/mt	184.7	163.6	103.9	90.4	99.3	96.2	101.6	109.9	104.0	100.4
Wheat, US, HRW	\$/mt	195.7	219.3	135.5	117.2	132.2	137.3	139.6	146.1	139.3	134.1
Other food											
Bananas	\$/mt	592.1	478.9	540.9	435.7	608.1	565.9	529.6	498.6	494.3	479.5
Beef. US	c/kg	465.0	350.3	256.3	198.5	222.0	221.7	216.3	201.5	191.9	186.9
Oranges	\$/mt	599.1	508.0	531.1	373.2	635.1	602.5	556.3	471.1	456.9	447.0
Shrimp Mexican	c/kg	n a	1 462	1 069	1 5 5 4	1 582	1 415	1 517	1 555	1 480	1 398
Sugar, world	c/kg	29.32	80.17	27.67	18.5	19.9	19.4	19.4	20.7	20.0	1,590
Agricultural raw materials											
Logo Comoroon	¢/aum	152.2	210.5	242 5	202.0	277.4	277.7	279.2	202.7	204.2	212.0
Logs, Cameroon	¢/cum	153.5	249.2	177.0	203.0	1(5.0	1(2.4	172.0	202.7	224.2	220.7
Logs, Malaysia	\$/cum	133.8	248.2	522.0	193.2	165.8	162.4	172.0	202.6	226.5	239.7
Sawnwood, Malaysia	\$/cum	623.9	302.7	555.0	611.1	501.8	508.2	336.3	388.9	626.6	666.4
Other raw materials	c/lra	241.1	261.7	191.0	122.9	110.2	106.2	116.0	124.6	120.5	120.0
Rubber RSS1 Malaysia	c/kg	145.2	180.8	86.5	71.0	62.6	60.1	64.7	72.7	76.4	77.3
Tobacco	\$/mt	3,836	2,889	3,392	3,058	3,140	3,227	3,186	3,062	2,850	2,682
Fertilizers											
DAP	\$/mt	192.5	2.82.1	171.4	158.5	154.0	162.4	161.9	160.2	152.3	146.3
Phosphate rock	\$/mt	39.2	59.3	40.5	45.0	43.5	43.5	42.5	40.5	39.2	37.4
Potassium chloride	\$/mt	114.1	146.9	98.1	125.9	123.1	125.7	122.9	117.8	110.5	105.7
TSP \$/mt153 3	228.8	131.8	141 5	132.3	123.7	136.2	136.6	136.6	130.6	126.0	103.7
Urea, E. Europe, bulk	\$/mt	n.a.	n.a.	119.3	103.9	99.4	104.3	109.9	119.4	114.2	110.4
Metals and minerals											
Aluminum	\$/mt	1,982	1.848	1.639	1.592	1.505	1,519	1.568	1,602	1.567	1,503
Copper	\$/mt	5.047	2,770	2.661	1.863	1.645	1,703	1.821	1.884	1.784	1,707
Gold	\$/toz	128.1	771.6	383 5	286 7	282 5	288 1	278.2	259 1	261.1	243.8
Iron ore	c/dmtu	35.1	35 7	32.5	200.7	31.3	30.9	30.4	30.2	201.1	215.0
Lead	c/kg	102.0	115.0	94.9 Q1 1	44.6	10 L	550.9	55.4	56.2	20.7 55 7	20.0 52 A
Nielvol	C/Kg	10 1 4 7	0 275	01.1	+0.0	+7.0 (100	33.0	23.0	(125	5 9 2 1	5 5 2 4
INICKEI Cilwar	3/1110 a/tor	621.0	0,2/3	0,004	0,0/0	0,198	0,28/	505 0	0,123	3,831	3,326
Silver Tin	c/toz	631.0	2617.4	482.0	515./	437.3	47/./	303.8	490.0	4/8./	447.0
1111 7:	c/kg	105.6	2127.3	008.3	338.3	40/.3	401.0	400.3	474./	4/0.0	447.0
ZINC	c/kg	105.5	96.6	131.4	115.9	92.5	89.1	93.6	94.2	95./	97.5

\$/mt, dollars per metric ton; \$/bbl, dollars per barrel; \$/mmbtu, dollars per million British thermal units; c/kg, cents per kilogram, \$/cum, dollars per cubic meter; \$/toz, dollars per troy ounce; c/dmtu, cents per dry metric ton unit.

n.a. Not available.

Note: Projections as of February 27, 2002.

Source: World Bank Economic Policy and Prospects Group.

Table A5.11 Weighted indexes of commodity prices and inflation

			Actual				Projections ^a				
Index	1970	1980	1990	2000	2001	2002	2003	2005	2010	2015	
Current dollars											
Petroleum	5.3	161.2	100.0	123.4	106.4	87.4	91.8	78.7	83.0	91.8	
Nonenergy commodities ^b	43.8	125.5	100.0	86.9	79.0	80.0	85.9	96.6	106.1	111.6	
Agriculture	45.8	138.1	100.0	87.7	79.8	81.1	87.4	99.7	111.9	118.9	
Beverages	56.9	181.4	100.0	88.4	72.1	74.8	81.6	100.7	123.6	130.8	
Food	46.7	139.3	100.0	84.5	86.1	88.4	92.5	100.9	106.4	110.4	
Fats and oils	64.4	148.7	100.0	96.2	89.0	95.5	102.7	115.5	123.8	129.9	
Grains	46.7	134.3	100.0	79.5	78.2	83.0	90.0	102.0	107.7	110.9	
Other food	32.2	134.3	100.0	77.7	88.1	85.6	85.6	88.3	91.4	94.1	
Raw materials	36.4	104.6	100.0	91.4	77.4	76.5	85.0	97.4	110.2	121.2	
Timber	31.8	79.0	100.0	111.0	90.2	90.5	102.2	117.8	136.6	155.5	
Other raw materials	39.6	122.0	100.0	78.0	68.6	66.9	73.2	83.5	92.2	97.8	
Fertilizers	30.4	128.9	100.0	105.8	98.8	100.0	102.9	108.6	112.8	116.1	
Metals and minerals	40.4	94.2	100.0	83.0	75.1	75.4	80.5	87.7	91.3	93.3	
Constant 1990 dollars ^c											
Petroleum	18.9	204.6	100.0	126.8	111.0	91.6	92.8	74.1	72.3	74.6	
Nonenergy commodities	156.3	159.3	100.0	89.3	82.3	83.9	86.8	91.0	92.3	90.7	
Agriculture	163.3	175.3	100.0	90.1	83.2	85.0	88.4	93.9	97.4	96.7	
Beverages	202.8	230.3	100.0	90.8	75.1	78.4	82.6	94.9	107.6	106.3	
Food	166.5	176.8	100.0	86.8	89.7	92.6	93.6	95.1	92.6	89.7	
Fats and oils	229.5	188.7	100.0	98.9	92.8	100.0	103.9	108.8	107.7	105.6	
Grains	166.6	170.5	100.0	81.7	81.5	86.9	91.0	96.1	93.8	90.1	
Other food	114.9	170.5	100.0	79.9	91.8	89.7	86.6	83.2	79.6	76.5	
Raw materials	129.8	132.7	100.0	93.9	80.7	80.1	86.0	91.8	95.9	98.5	
Timber	113.3	100.3	100.0	114.0	94.1	94.9	103.4	111.0	118.9	126.3	
Other raw materials	141.1	154.9	100.0	80.1	71.5	70.1	74.0	78.7	80.2	79.5	
Fertilizers	108.3	163.6	100.0	108.7	103.0	104.8	104.1	102.3	98.2	94.4	
Metals and minerals	143.9	119.6	100.0	85.3	78.3	79.0	81.4	82.6	79.5	75.8	
Inflation indixes, $1990 = 100^{d}$											
MUV index ^e	28.05	78.78	100.00	97.32	95.92	95.44	98.86	106.13	114.90	123.05	
% change per year		10.88	2.41	-0.27	-1.44	-0.50	3.59	3.61	1.60	1.38	
US GDP deflator	33.59	65.93	100.00	123.73	126.45	128.10	130.15	135.80	151.41	168.82	
% change per year		6.98	4.25	2.15	2.20	1.30	1.60	2.15	2.20	2.20	

a. Commodity price projections as of January 18, 2002.

b. The World Bank primary commodity price indexes are computed based on 1987–89 export values in U.S. dollars for low- and middle-income economies, rebased to 1990. Weights for the subgroup indexes expressed as ratios to the non-energy index are as follows in percent: agriculture 69.1; fertilizers 2.7; metals and minerals 28.2; beverages 16.9; food 29.4; raw materials 22.8; fats and oils 10.1; grains 6.9; other food 12.4; timber 9.3; and other raw materials 13.6.

c. Computed from unrounded data and deflated by the manufacturing unit value (MUV) index.

d. Inflation indexes for 2001–10 are projections as of November 12, 2001. MUV for 2000 is an estimate. Growth rates for years 1980, 1990, 2000, 2005, 2010, and 2015, refer to compound annual rate of change between adjacent endpoint years; all others are annual growth rates from the previous year.

e. Unit value index in U.S. dollar terms of manufactures exported from the G-5 countries (France, Germany, Japan, United Kingdom, and the United States) weighted proportionally to the countries' exports to the developing countries.

Source: World Bank Development Prospects Group. Historical U.S. GDP deflator: U.S. Department of Commerce. January 18, 2002.