

APPENDIX

Table A2: Commodity Prices and Price Projections in Current Dollars

Commodity	Unit	Actual					Projections				
		1970	1980	1990	1998	1999	2000	2001	2002	2005	2010
Non-Energy Commodities											
Agriculture											
Beverages											
Coal, US	\$/mt	n.a.	43.10	41.67	34.38	33.17	33.00	33.50	34.00	35.50	38.00
Crude oil, avg. spot	\$/bbl	1.21	36.87	22.88	13.07	18.07	24.00	21.00	19.00	18.00	19.00
Natural gas, Europe	\$/mmbtu	n.a.	3.40	2.55	2.42	2.13	3.40	3.25	2.90	2.70	2.75
Natural gas, US	\$/mmbtu	0.17	1.55	1.70	2.09	2.27	2.80	2.90	2.80	2.75	3.00
Agriculture											
Beverages											
Cocoa	c/kg	67.5	260.4	126.7	167.6	113.5	95.0	105.0	120.0	150.0	170.0
Coffee, other milds	c/kg	114.7	346.6	197.2	298.1	229.1	220.5	220.5	234.8	254.0	265.0
Coffee, robusta	c/kg	91.4	324.3	118.2	182.3	148.9	110.2	114.6	125.7	163.1	187.4
Tea, 3-auction average	c/kg	83.5	165.9	205.8	204.6	183.9	186.0	187.0	188.5	195.0	210.0
Food											
Fats and Oils											
Coconut oil	\$/mt	397.2	673.8	336.5	657.9	737.1	650.0	625.0	620.0	620.0	650.0
Copra	\$/mt	224.8	452.7	230.7	411.1	461.5	410.0	425.0	435.0	460.0	483.0
Groundnut oil	\$/mt	378.6	858.8	963.7	909	787.7	750.0	800.0	800.0	820.0	850.0
Palm oil	\$/mt	260.1	583.7	289.8	671.1	436.0	350.0	350.0	365.0	425.0	460.0
Soybean meal	\$/mt	102.6	262.4	200.2	170.3	152.2	185.0	195.0	205.0	215.0	226.0
Soybean oil	\$/mt	286.3	597.6	447.3	625.9	427.3	405.0	410.0	430.0	460.0	525.0
Soybeans	\$/mt	116.9	296.2	246.8	243.3	201.67	220.0	230.0	240.0	250.0	275.0
Grains											
Maize	\$/mt	58.4	125.3	109.3	102.0	90.2	100.0	110.0	115.0	125.0	130.0
Rice, Thai, 5%	\$/mt	126.3	410.7	270.9	304.2	248.4	250.0	260.0	270.0	315.0	345.0
Sorghum	\$/mt	51.8	128.9	103.9	98.0	84.4	95.0	105.0	110.0	120.0	125.0
Wheat, US, HRW	\$/mt	54.9	172.7	135.5	126.1	112.0	120.0	130.0	140.0	160.0	170.0
Other Food											
Bananas, US	\$/mt	166.1	377.3	540.9	489.5	373.2	468.5	496.0	518.1	556.7	567.7
Beef	c/kg	130.4	276.0	256.3	172.6	184.3	198.4	202.8	202.8	209.4	220.0
Oranges	\$/mt	168.0	400.2	531.1	442.4	430.8	250.0	400.0	500.0	565.0	600.0
Shrimp, Mexican	c/kg	n.a.	1,152	1,069	1,579	1,461	1,500	1,510	1,530	1,550	1,590
Sugar, world	c/kg	8.2	63.16	27.67	19.67	13.81	13.45	14.20	14.50	20.00	24.00
Raw Materials											
Timber											
Logs, Cameroon	\$/cum	43.0	251.7	343.5	286.4	269.3	295.0	310.0	320.0	340.0	420.0
Logs, Malaysia	\$/cum	43.1	195.5	177.2	162.4	187.1	210.0	225.0	235.0	255.0	290.0
Sawnwood, Malaysia	\$/cum	175.0	396.0	533.0	484.2	600.8	640.0	660.0	680.0	755.0	900.0
Other Raw Materials											
Cotton	c/kg	67.6	206.2	181.9	144.5	117.1	123.5	130.1	136.7	158.7	180.8
Rubber, RSS1, Malaysia	c/kg	40.7	142.5	86.5	72.2	62.9	70.6	75.0	79.4	88.2	99.2
Tobacco	\$/mt	1,076	2,276	3,392	3,342	3,026	3,100	3,100	3,100	3,250	3,300
Fertilizers											
DAP	\$/mt	54.0	222.2	171.4	203.4	177.8	165.0	175.0	180.0	195.0	205.0
Phosphate rock	\$/mt	11.00	46.71	40.50	43.00	44.00	44.00	44.00	44.00	44.00	46.00
Potassium chloride	\$/mt	32.0	115.7	98.1	116.9	121.6	122.5	124.0	124.0	125.0	127.0
TSP	\$/mt	43.0	180.3	131.8	173.1	154.5	142.0	150.0	155.0	160.0	170.0
Urea, E. Europe, bagged	\$/mt	48.0	222.1	130.7	103.1	77.8	90.0	100.0	110.0	120.0	140.0
Metals and Minerals											
Aluminum	\$/mt	556	1,456	1,639	1,357	1,361	1,600	1,600	1,650	1,800	1,900
Copper	\$/mt	1,416	2,182	2,661	1,654	1,573	1,800	1,900	2,000	2,200	2,400
Gold	\$/toz	36.0	608.0	383.5	294.2	278.8	285.0	280.0	275.0	275.0	300.0
Iron ore, Carajas	c/dmtu	9.84	28.09	32.50	31.00	27.59	29.00	29.50	30.25	32.00	33.00
Lead	c/kg	30.3	90.6	81.1	52.9	50.3	47.0	52.5	55.0	60.0	64.0
Nickel	\$/mt	2,846	6,519	8,864	4,630	6,011	9,000	8,000	7,000	6,000	6,800
Silver	c/toz	177.0	2,064	482.0	553.4	525.0	520.0	515.0	510.0	525.0	550.0
Tin	c/kg	367.3	1,677	608.5	554.0	540.4	560.0	560.0	570.0	590.0	610.0
Zinc	c/kg	29.6	76.1	151.4	102.5	107.6	115.0	116.0	117.0	120.0	125.0

n.a. = not available

Note: Projections as of May 4, 2000.

Source: World Bank, Development Economics, Development Prospects Group

Table A3: Confidence Intervals for Price Projections in Current Dollars (70% probability)									
Commodity	Unit	2000		2001		2002		2005	
Coal, US	\$/mt	28.25	- 37.75	25.50	- 41.50	24.00	- 44.00	22.00	- 49.00
Crude oil, avg. spot	\$/bbl	20.00	- 28.00	15.00	- 27.00	12.50	- 25.50	10.75	- 25.25
Natural gas, Europe	\$/mmbtu	2.85	- 3.95	2.45	- 4.05	1.95	- 3.85	1.60	- 3.80
Natural gas, US	\$/mmbtu	2.35	- 3.25	2.20	- 3.60	2.00	- 3.60	1.65	- 3.85
Agriculture									
Beverages									
Cocoa	¢/kg	83	- 107	83	- 127	82	- 159	82	- 219
Coffee, other milds	¢/kg	189	- 253	169	- 272	153	- 317	134	- 373
Coffee, robusta	¢/kg	95	- 127	89	- 142	85	- 168	99	- 229
Tea, 3-auction average	¢/kg	157	- 209	149	- 225	143	- 238	137	- 265
Food									
Fats and Oils									
Coconut oil	\$/mt	572	- 794	519	- 793	475	- 892	452	- 1,050
Copra	\$/mt	359	- 462	349	- 502	325	- 547	296	- 613
Groundnut oil	\$/mt	655	- 829	628	- 937	621	- 1,009	583	- 1,138
Palm oil	\$/mt	306	- 396	281	- 438	287	- 500	308	- 678
Soybean meal	\$/mt	159	- 218	152	- 238	148	- 275	151	- 312
Soybean oil	\$/mt	355	- 455	344	- 511	345	- 588	347	- 721
Soybeans	\$/mt	189	- 260	179	- 281	173	- 322	163	- 363
Grains									
Maize	\$/mt	86	- 116	86	- 136	85	- 145	81	- 179
Rice, Thai, 5%	\$/mt	215	- 290	198	- 333	194	- 356	205	- 457
Sorghum	\$/mt	81	- 110	80	- 130	74	- 139	78	- 172
Wheat, US, HRW	\$/mt	103	- 139	101	- 161	104	- 176	104	- 229
Other Food									
Bananas, US	\$/mt	422	- 517	416	- 577	427	- 610	439	- 675
Beef	¢/kg	169	- 228	158	- 247	146	- 272	147	- 304
Oranges	\$/mt	213	- 313	288	- 512	350	- 650	379	- 752
Shrimp, Mexican	¢/kg	1,275	- 1,725	1,178	- 1,842	1,102	- 2,020	1,008	- 2,201
Sugar, world	¢/kg	11.8	- 15.1	11.1	- 17.3	10.2	- 19.6	13.4	- 30.0
Raw Materials									
Timber									
Logs, Cameroon	\$/cum	251	- 342	233	- 391	208	- 432	187	- 493
Logs, Malaysia	\$/cum	179	- 244	173	- 281	165	- 306	153	- 357
Sawnwood, Malaysia	\$/cum	544	- 755	508	- 825	490	- 857	468	- 1,027
Other Raw Materials									
Cotton	¢/kg	107	- 138	110	- 151	102	- 171	102	- 214
Rubber, RSS1, Malaysia	¢/kg	63	- 79	61	- 89	62	- 96	61	- 116
Tobacco	\$/mt	2,728	- 3,472	2,480	- 3,720	2,325	- 3,875	2,178	- 4,323
Fertilizers									
DAP	\$/mt	142	- 188	137	- 214	130	- 234	137	- 273
Phosphate rock	\$/mt	40	- 48	36	- 52	35	- 53	33	- 55
Potassium chloride	\$/mt	110	- 135	99	- 149	94	- 156	88	- 169
TSP	\$/mt	122	- 162	117	- 183	112	- 202	112	- 224
Urea, E. Europe, bagged	\$/mt	77	- 107	75	- 125	79	- 147	84	- 174
Metals and Minerals									
Aluminum	\$/mt	1,350	- 1,850	1,200	- 2,000	1,100	- 2,200	1,075	- 2,525
Copper	\$/mt	1,525	- 2,075	1,425	- 2,375	1,330	- 2,670	1,300	- 3,100
Gold	\$/toz	240	- 330	210	- 350	185	- 365	170	- 385
Iron ore, Carajas	¢/dmu	25	- 33	23	- 36	23	- 38	22	- 43
Lead	¢/kg	40	- 54	40	- 66	37	- 74	36	- 84
Nickel	\$/mt	7,500	- 10,500	6,000	- 10,000	4,600	- 9,400	3,600	- 8,400
Silver	¢/toz	440	- 600	385	- 645	340	- 680	315	- 735
Tin	¢/kg	475	- 645	420	- 700	380	- 760	355	- 825
Zinc	¢/kg	98	- 132	87	- 145	78	- 156	72	- 168

Note: Projections as of May 4, 2000.

Source: World Bank, Development Economics, Development Prospects Group

APPENDIX

Table A4: Commodity Prices and Price Projections in Constant 1990 Dollars

Commodity	Unit	Actual					Projections				
		1970	1980	1990	1998	1999	2000	2001	2002	2005	2010
Coal, US	\$/mt	n.a.	59.88	41.67	33.00	32.03	31.09	30.79	30.46	29.70	28.13
Crude oil, avg. spot	\$/bbl	4.82	51.22	22.88	12.54	17.45	22.61	19.30	17.02	15.06	14.06
Natural gas, Europe	\$/mmbtu	n.a.	4.72	2.55	2.32	2.06	3.20	2.99	2.60	2.26	2.04
Natural gas, US	\$/mmbtu	0.68	2.15	1.70	2.00	2.19	2.64	2.67	2.51	2.30	2.22
Agriculture											
Beverages											
Cocoa	c/kg	269.1	361.7	126.7	160.9	109.6	89.5	96.5	107.5	125.5	125.8
Coffee, other milds	c/kg	457.2	481.6	197.2	286.1	221.2	207.7	202.6	210.3	212.5	196.2
Coffee, robusta	c/kg	364.3	450.6	118.2	174.9	143.8	103.8	105.4	112.6	136.5	138.7
Tea, 3-auction average	c/kg	332.9	230.5	205.8	196.4	177.6	175.2	171.9	168.9	163.2	155.5
Food											
Fats and Oils											
Coconut oil	\$/mt	1583.7	936.1	336.5	631.5	711.8	612.3	574.5	555.4	518.8	481.2
Copra	\$/mt	896.5	629.0	230.7	394.6	445.6	386.3	390.6	389.7	384.9	357.5
Groundnut oil	\$/mt	1509.4	1193.0	963.7	872.8	760.6	706.6	735.3	716.7	686.1	629.2
Palm oil	\$/mt	1036.9	810.9	289.8	644.1	421.0	329.7	321.7	327.0	355.6	340.5
Soybean meal	\$/mt	409.0	364.6	200.2	163.5	146.9	174.3	179.2	183.6	179.9	167.3
Soybean oil	\$/mt	1141.7	830.2	447.3	600.8	412.6	381.5	376.8	385.2	384.9	388.6
Soybeans	\$/mt	466.2	411.5	246.8	233.5	194.7	207.3	211.4	215.0	209.2	203.6
Grains											
Maize	\$/mt	232.9	174.0	109.3	97.9	87.1	94.2	101.1	103.0	104.6	96.2
Rice, Thai, 5%	\$/mt	503.6	570.6	270.9	291.9	239.9	235.5	239.0	241.9	263.6	255.4
Sorghum	\$/mt	206.5	179.0	103.9	94.1	81.5	89.5	96.5	98.5	100.4	92.5
Wheat, US, HRW	\$/mt	218.9	240.0	135.5	121.1	108.2	113.1	119.5	125.4	133.9	125.8
Other Food											
Bananas, US	\$/mt	662.2	524.1	540.9	469.8	360.4	441.3	455.9	464.1	465.8	420.2
Beef	c/kg	520.1	383.4	256.3	165.6	178.0	186.9	186.4	181.7	175.2	162.9
Oranges	\$/mt	670.0	556.0	531.1	424.6	416.0	235.5	367.7	447.9	472.8	444.2
Shrimp, Mexican	c/kg	n.a.	1,600	1,069	1,515	1,410	1,413	1,388	1,371	1,297	1,177
Sugar, world	c/kg	32.8	87.8	27.7	18.9	13.3	12.7	13.1	13.0	16.7	17.8
Raw Materials											
Timber											
Logs, Cameroon	\$/cum	171.5	349.7	343.5	274.9	260.0	277.9	284.9	286.7	284.5	310.9
Logs, Malaysia	\$/cum	172.0	271.6	177.2	155.9	180.7	197.8	206.8	210.5	213.4	214.7
Sawnwood, Malaysia	\$/cum	697.8	550.2	533.0	464.7	580.2	602.9	606.6	609.2	631.8	666.2
Other Raw Materials											
Cotton	c/kg	269.7	286.5	181.9	138.7	113.1	116.3	119.6	122.5	132.8	133.8
Rubber, RSS1, Malaysia	c/kg	162.4	197.9	86.5	69.3	60.7	66.5	68.9	71.1	73.8	73.4
Tobacco	\$/mt	4,290	3,162	3,392	3,207	2,922	2,920	2,849	2,777	2,719	2,443
Fertilizers											
DAP	\$/mt	215.3	308.7	171.4	195.2	171.7	155.4	160.9	161.3	163.2	151.8
Phosphate rock	\$/mt	43.9	64.9	40.5	41.3	42.5	41.5	40.4	39.4	36.8	34.1
Potassium chloride	\$/mt	127.6	160.8	98.1	112.2	117.5	115.4	114.0	111.1	104.6	94.0
TSP	\$/mt	171.5	250.4	131.8	166.1	149.2	133.8	137.9	138.9	133.9	125.8
Urea, E. Europe, bagged	\$/mt	191.4	308.6	130.7	98.9	75.1	84.8	91.9	98.5	100.4	103.6
Metals and Minerals											
Aluminum	\$/mt	2,217	2,023	1,639	1,303	1,314	1,507	1,471	1,478	1,506	1,406
Copper	\$/mt	5,645	3,032	2,661	1,588	1,519	1,696	1,746	1,792	1,841	1,777
Gold	\$/toz	143.5	844.7	383.5	282.3	269.2	268.5	257.4	246.4	230.1	222.1
Iron ore, Carajas	c/dmtu	39.2	39.0	32.5	29.8	26.6	27.3	27.1	27.1	26.8	24.4
Lead	c/kg	120.8	125.8	81.1	50.7	48.5	44.3	48.3	49.3	50.2	47.4
Nickel	\$/mt	11,348	9,056	8,864	4,443	5,805	8,479	7,353	6,271	5,021	5,034
Silver	c/toz	705.7	2866.9	482.0	531.2	506.9	489.9	473.4	456.9	439.3	407.1
Tin	c/kg	1464.7	2330.5	608.5	531.8	521.8	527.6	514.7	510.6	493.7	451.6
Zinc	c/kg	118.0	105.8	151.4	98.3	103.9	108.3	106.6	104.8	100.4	92.5

n.a. = not available

Note: Projections as of May 4, 2000.

Source: World Bank, Development Economics, Development Prospects Group