

# 18407 vol.5 no.4

August



Deepening slowdown in East Asia

Oil prices continue to fall

Grain harvests reach record high

Asian timber prices fall hard



Commodity prices continue the year-long decline that began with the East Asia financial crisis. Energy prices fall 5.0% during the quarter, while nonenergy prices fall 4.7%.

# CHANGE IN QUARTERLY PRICES, 1Q98 To 2Q98 Percent

Energy	-5.0
Nonenergy	<b>-4</b> .7
Total agriculture	-5.8
Beverages	-12.6
Total food	-2.0
Fats and oils	-5.4
Grains	-1.1
Other foods	+1.7
Raw materials	-2.5
Timber	-3.4
Fertilizers	+1.3
Metals and minerals	-1.7

## **SUMMARY**

## Page 4

## SPECIAL FEATURE

## ■ DEEPENING ECONOMIC SLOWDOWN

## IN EAST ASIA

Page 6

The initial impact on commodity markets of the financial crises in East Asia was relatively small. East Asian exporters have diverted shipments to the US and Europe, where economic activity has been robust, but demand in these countries has not been able to absorb their own rising production and higher imports without a significant decline in prices for many commodities.

## **ENERGY**

## ■ COAL

PAGE 9

International coal prices continue to slide, feeling the effects of weakening demand in Asia, higher supplies, and rising stocks. With the global exportable surplus expected to continue at similar levels next year, international prices are expected to fall.

#### NATURAL GAS

PAGE 9

US gas prices remain low thanks to weak demand and surplus storage. Storage levels are expected to be well above last year's levels heading into winter, and no significant increase in prices is anticipated. European gas prices continue to follow oil prices downward.

## PETROLEUM

PAGE 10

Prices continue to decline in the face of surplus production, soaring inventories, and extremely weak demand in Asia. OPEC (excluding Iraq) and non-OPEC producers pledge a second round of cuts totaling 3.1 mb/d. Adherence to quotas will help reduce the overhang in the market and gradually boost prices. However, a deepening of the demand slump in Asia could impede OPEC's ability to rebalance the market.

## BEVERAGES

## Cocoa

Page 14

Depressed stocks are likely to lead to higher prices. Cocoa consumption in Central and Eastern Europe returns to pre-1990 levels. Spain and the Netherlands drop opposition to the use of cocoa butter equivalent.

## COFFEE

PAGE 15

El Niño's toll is estimated at 6 million bags. Brazil's expected bumper crop depresses arabica prices. India introduces coffee futures contracts for both arabica and robusta.

## **屬 TEA**

PAGE 16

Despite strong demand, good production prospects may put some pressure on prices. June 29 marked the end of the 319-year-old London tea auction. Nepal is privatizing seven government tea estates.

## **FOOD**

**FATS AND OILS** 

#### FATS AND OILS

PAGE 16

Stocks reach a 20-year low corresponding to only 39 days of consumption. Supplies are also just beginning to feel the effects of the El Niñorelated drought, which will put further upward pressure on the prices of most fats and oils.

## COCONUT OIL

PAGE 17

Exports from the Philippines are expected to decline sharply. Prices pick up and may increase even more.

## PALM OIL

Page 17

World production is likely to decline by 500,000 tons. Lagging El Niño effects are expected to lower yields even further, which combined with depleted stocks may lead to even higher prices. Indonesia increases its export tax from 40% to 60%.

## SOYBEAN OIL

PAGE 18

US soybean plantings in 1998 exceed the 1979 record planting of 28.5 million hectares. High soybean oil demand, a consequence mainly of lower production of palm oil, the main competing oil, depresses stocks.

#### **GRAINS**

## GRAINS

PAGE 18

World grain production is expected to rise about 2.5% over last year, to a record level. Stocks are rebuilding in both major exporting countries and the rest of the world, and supplies are expected to be adequate this year. Trade will remain weak because of the East Asian economic slowdown and generally adequate supplies in major importing countries.

#### MAIZE

PAGE 19

Weak demand in East Asia combined with large supplies will keep prices low. Stock-building in the major exporting countries could lead to aggressive exporting and lower prices.

## RICE

PAGE 19

Prices recover from their earlier lows, lifted by large imports from Indonesia and the Philippines. New crop prospects are good, however, and import levels are expected to fall, capping further price increases.

## ■ WHEAT

Page 20 Weal

Prices fall to five-year lows. Stock-rebuilding should keep prices low, at least until the next crop is planted in the spring of 1999.

## OTHER FOOD

## BANANAS

Page 20

Following the WTO's ruling, EU ministers agree to increase import quotas for bananas grown in Latin America by 353,000 tons a year. Banana workers end strike in Panama.

#### M SHRIMP

PAGE 21

Weak demand in Japan along with increased world supplies keeps prices weak despite strong demand in the US and Europe. Concerns about the potential for disease spur producers to harvest early and lead to an abundance of smaller and medium-size shrimp on the market.

## SUGAR

PAGE 21

Prices fall to a 10-year low after world production increases of 3.2%. Policy changes in several countries, including Russia's increase in the import tariff, also add to market weakness.

## AGRICULTURAL RAW MATERIALS

## Cotton

PAGE 22

Following a record three-year low, prices pick up. Adverse weather conditions in the US set the stage for even higher prices. Australia follows the US by introducing its own assistance program to cotton-importing countries.

## RUBBER

PAGE 23

After hitting a 20-year low last quarter, prices stabilize at 75¢/kg. Low prices induce increased imports in car manufacturing countries. Thailand threatens to leave the International

Natural Rubber Organization, the last nonoil cartel. Osaka and Thailand Commodity Exchanges plan to introduce rubber futures contracts.

## TIMBER

Page 23

The Japanese recession and devaluation of the yen further weaken demand for Southeast Asian timber.

## **FERTILIZERS**

## FERTILIZERS

PAGE 24

Weak grain prices spell trouble for fertilizer demand since grain accounts for the largest share of fertilizer use. Grain prices have fallen sharply for more than two years.

## POTASSIUM CHLORIDE

PAGE 24

The market remains tight, with strong import demand from China, India, and Pakistan. Negotiations of contract prices for the second half of 1998 are under way and are expected to result in some increases.

#### PHOSPHATES

PAGE 2

TSP and DAP prices remain firm, reflecting tight world supplies and strong import demand. Strong demand in developing countries keeps TSP prices growing—at 3.8% a year since 1990.

## ■ UREA

Page 25

Prices continue to weaken as demand remains slack and exporters show a willingness to cut prices in order to hold market share. The East Asia financial crisis has reduced demand in the region.

## METALS AND MINERALS

## ALUMINUM

Page 26

Prices continue to fall on extremely weak demand in Asia and rising global production. Demand in the US and Europe remains strong, but US consumption is expected to slow in the second half of the year and into 1999. Prices are expected to remain weak.

#### ■ Copper

PAGE 27

Prices fall in May and June, ending the quarter 40% below their highs of 1997. Strong demand in Europe and the US is offset by rising supplies and extremely weak demand in Asia.

#### ■ Gold

Page 28

Prices are slightly higher in the second quarter, but the slump in Asian demand is keeping prices weak. The new European Central Bank will hold 15% of foreign exchange reserves in gold, leaving some 12,000 mt no longer needed to back currencies.

## IRON ORE AND STEEL

PAGE 29

Steel prices fall in the second quarter on rising supplies and weak demand in Asia. With the depreciation of Asian currencies, producers are aggressively marketing their products in the US and Europe, where demand has been strong.

## **COMMODITY PRICES**

**COMMODITY PRICE INDICES** 

Page 5

**™** Commodity price outlook

Page 30

## SUMMARY

Commodity prices continued the year-long decline that began with the East Asian financial crisis. Energy prices fell 5.0% during the quarter, and nonenergy prices were down 4.7%. Prices this quarter reflect the situation that now faces nearly all commodities: weak demand, large supplies, and rising stocks. Beverage prices were hit especially hard, with arabica coffee and tea prices sharply lower on large production increases. Beverage prices managed to withstand the pressure better than most other commodities because of previous supply constraints that are just now being overcome.

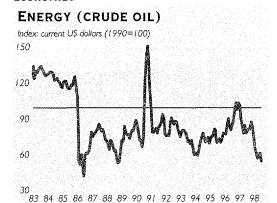
What commodity producers, traders, and consumers want to know is how much lower prices are likely to fall. Our forecast is for continuing weakness in prices, but without further substantial declines. Prospects for a significant price recovery are not very good. The large stock buildup for many commodities will not be drawn down quickly because of weak demand in Asia, and that sets the stage for a slow recovery of prices. Supply will contract with the current low prices, leading eventually to lower stocks. Nominal prices are expected to rise on a year-on-year basis in 2000, but the recovery will be modest. The boomto-bust character of commodity markets can

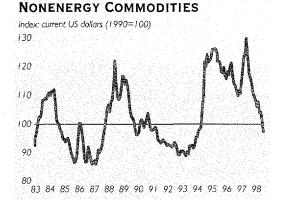
be expected to produce another boom as supplies are eventually drawn down. But for now, the bust is here and the boom is a long way off—at least if past price cycles are a guide. The deepening economic slowdown in East Asia also casts a pall over prospects for a recovery in commodity prices (see Special Feature).

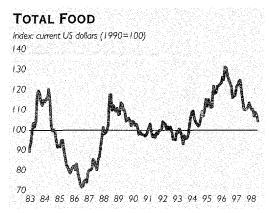
While the East Asian financial crisis has been a major contributor to the decline in commodity prices, so have the large increases in supply of many commodities. A number of agricultural commodities achieved record production levels, and production increased sharply in both of the past two years for many commodities. Grain production rose 9.5% in the past two years to a record high, while consumption rose just 5.5%. Production of major oilseeds rose 8.9% during the same period to reach a record high in 1997/98. Sugar production, too, was at a record high in 1997, with growth of 7.2% over the past two years, while consumption was up just 4.5%.

The lower commodity prices will have a significant impact on many developing countries—not just those in the Asia region. According to the most recent complete data from UNCTAD, developing countries receive roughly one-third of their export earnings from primary commodities, including fuels. Africa is the most dependent on commodity exports, with nearly 80% of export earnings coming from commodities. South America is next, at nearly 50%, followed by Asia at slightly more than a quarter. The broad-based declines in commodity prices mean that all regions are affected, but the sharpest declines were in crude oil, which affects primarily the Middle East. Sub-Saharan Africa was spared the worst impact of the commodity price declines because some of its exports are in commodities that managed to avoid the sharp price declines. Sub-Saharan Africa's largest commodity exports are crude oil, cocoa, robusta coffee, cotton, and copper. Of these, crude oil, copper, and cotton prices fell significantly, while cocoa and coffee prices rose during 1997 and 1998.

FIGURE 1. WEIGHTED INDEX OF PRIMARY COMMODITY PRICES FOR LOW- AND MIDDLE-INCOME **ECONOMIES** 







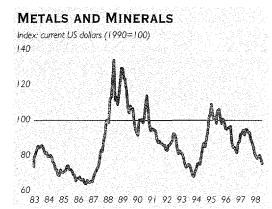


TABLE 1. WEIGHTED INDEX OF PRIMARY COMMODITY PRICES FOR LOW- AND MIDDLE-INCOME **ECONOMIES IN CURRENT DOLLARS** (1990=100)

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	,	Nonenergy	/									Metals
		commod-	Total agn	i_	Total	Fats		Other	Total raw			and
	Energy	ities	culture	0	food	and oils	Grains	food	materials	Timber	Fertilizers	mineral
	(100)*	(100)	(69.1)	(16.9)	(29.4)	(10.1)	(6.9)	(12.4)	(22.8)	(9.3)	(2.7)	(28.2)
Annual												
1995	75.06	122.20	131.31	151.19	116.90	136.56	120.38	98.84	135.22	139.54	103.59	101.61
1996	89.25	115.09	125.48	126.47	123.63	147.02	140.58	94.97	127.12	139.49	18.611	89.11
1997	83.80	117.64	128.72	171.04	116.08	147.74	112.11	92.38	113.73	125.83	119.73	90.24
Quarterly												
1997Q2	80.38	125.97	139.58	197.80	119.51	151.77	116.50	94.80	122.41	140.49	120.04	93.13
1997Q3	81.14	115.93	125.94	173.56	110.24	138.44	105.65	89.72	110.99	123.97	116.44	91.30
1997Q4	81.91	109.39	119.34	162.12	112.04	146.29	103.62	88.73	97.13	98.69	118.20	84.08
1998Q1	61.48	105.96	116.53	164.92	109.12	140.01	105.66	85.76	90.32	91.90	120.02	78.66
1998Q2	58.38	100.98	109.76	144.11	106.91	132.53	104.54	87.26	88.04	88.82	121.62	77.44
Monthly												
1997 Jun	78.32	124.16	136.65	193.83	114.55	144.40	111.43	91.85	122.88	140.97	118.81	94.00
1997 Jul	80.12	117.44	127.52	173.43	110.23	137.69	106.63	89.76	115.89	133.84	117.94	92.62
1997 Aug	81.73	116.13	125.79	173.02	110.03	136.46	106.16	90.57	111.19	123.84	115.68	92.46
1997 Sep	81.56	114.22	124.51	174.23	110.46	141.16	104.16	88.84	105.88	114.24	115.68	88.81
1997 Oct	87.59	110.53	119.95	160.94	111.09	143.66	105,50	87.56	101.08	103.72	116.07	86.88
1997 Nov	83.44	109.36	119.12	156.44	113.36	149.42	102.37	90.00	98.95	100.77	118.51	84.54
1997 Dec	74.70	108.26	118.96	168.99	111.68	145.80	102.98	88.63	91.37	91.58	120.02	80.84
1998 <b>J</b> an	65.65	106.06	116.55	169.56	110.22	142.00	104.58	87.37	85.51	81.93	120.02	78.96
1998 Feb	61.50	107.69	119.27	169.31	110.23	141.64	106.35	86.68	93.93	97.14	120.02	78.07
1998 Mar	57.30	104.14	113.77	155.89	106.89	136.37	106.04	83.22	91.52	96.61	120.02	78.96
1998 Apr	59.05	104.15	113.47	152.41	108.77	134.27	104.69	90.17	90.76	94.79	120.59	79.67
1998 May	61.32	101.34	110.21	145.10	107.60	135.76	105.09	85.96	87.79	87.90	121.86	77.56
1998 Jun	54.77	97.46	105.59	134.81	104.36	127.55	103.84	85.66	85.58	83.75	122.41	75.10

Note: Weighted by average 1987-89 export values for low- and middle-income economies.

a. Crude oil index.

Source: World Bank, Development Prospects Group.

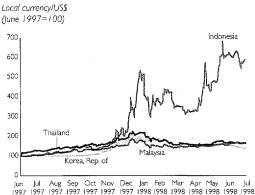
# DEEPENING ECONOMIC SLOWDOWN IN EAST ASIA

The economic situation in East Asia has worsened. Most of the major economies in the region are in full-fledged recession, with the notable exceptions of China and Taiwan (China), although economic activity has slowed in China. The initial impact on commodity markets of the financial crises in the five East Asian economies—Republic of Korea, Indonesia, Malaysia, Philippines, and Thailand (EA5)—was relatively small. For many commodities the downturn in prices had begun well before the crisis deepened last December, with supply problems and the recession in Japan responsible for much of the deterioration in prices. The EA5 account for only 3-4% of world GDP, and well under 10% of world consumption for most commodities (table 2).

Consensus forecasts suggest that EA5 GDP will fall by 7% in 1998, with large declines in Thailand and Indonesia, where the crisis has been most severe. Large currency devaluations of 30–40% (and as high as 80% for Indonesia) increased the price of imports and, together with falling incomes, led to drastically lower imports for all goods, including commodities.

In Thailand total imports for the first four months of the year were down 37% from a year earlier, and commodity imports were down 41% (figures 3 and 4). Imports of metals and minerals fell 50%, and crude oil 40%

FIGURE 2. EAST ASIAN EXCHANGE RATES



| 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 | 1998 |

TABLE 2. CONSENSUS FORECASTS OF ECONOMIC GROWTH

Year-on-year	hercentage	arouth	of GDP
rear-orregar	percentage	SIOMAI	U GDI

Economy	1990–96	1997	1Q98	1998	1999
Indonesia	7.8	4.6	-6.2	-15.1	-2.0
Korea, Rep. of	7.5	5.5	-3.8	<del>-4</del> .3	1.1
Malaysia	8.7	7.8	-1.8	-2.6	-0.1
Philippines	2.8	5.1	1.7	2.1	3.1
Thailand	8.1	-0.3	-6.4	-7.2	-0.2
EA5	7.5	4.7	-4.2	6.8	0.1
Taiwan, China	6.4	6.8	5.9	5.4	5.5
Hong Kong, Ch	ina 5.4	5.3	-2.0	-2.2	0.9
Singapore	8.3	7.8	5.6	0.4	1.5
Japan	1.7	8.0	-3.7	-1.4	0.6
China	12.3	8.8	7.2	7.4	7.7
EA 10	4.3	2.9	-1.7	-0.6	1.7
US	2.3	3.8	3.8	3.3	2.2
EU	1.5	2.6	3.0	2.8	2.6
World	2.2	3.1	2.2	1.9	2.3

Source: Consensus Forecasts, July 8, 1998; World Bank.

in dollar terms (figure 5). Lower commodity prices accounted for part of the reduction: oil and copper prices fell some 30% between May 1997 and April 1998. Actual oil consumption in Thailand fell 11% during the first four months-about what would be expected for a price-inelastic commodity with a 6%-7% reduction in GDP. (Income elasticities for petroleum consumption in developing countries are typically about 1.0; see Dermot Gately and Shane S. Streifel, The Demand for Oil Products in Developing Countries, Discussion Paper 359, World Bank 1997.) Thailand's agricultural imports fell nearly 30% in the first four months, with food imports down 20% and other agricultural products down about 40%. Price and income effects are apparent. Agriculture prices fell 20%, as the World Bank food price index fell nearly 10% and the agriculture raw materials index 25% from May 1997 to April 1998.

Although the EA5 account for less than 4% of world GDP, the downturn in Japan (15% of world GDP), the slowdown elsewhere in the region, and spillovers into other regions (Brazil, Russia, South Africa) mean that more than one-quarter of world GDP is either falling or its growth is decelerating. A deeper and broader recession will have a significant impact on commodity markets, as generally favorable

growth in world commodity supplies meets diminishing increases in demand.

Combining Japan and the EA5 brings the shares of world consumption for most commodities to roughly 15%-25% of world demand (table 3). Japan is a major importer of primary commodities for domestic consumption and for inputs into manufactures exports. Japan's expected decline in GDP for 1998 is about 1.5%; output contracted nearly 4% in the first quarter. Japan has greatly reduced imports of many commodities, particularly metals and minerals, because of the slump in construction and automobiles. Together Japan plus the EA5 account for 18% of world GDP, and their economies are expected to contract by about 2.5% in 1998.

Including China with the six economies raises the share of world consumption significantly. For the EA10 economies (which include Hong Kong, China; Singapore; and Taiwan, China), the share of global consumption rises from one-quarter to one-third or more of world consumption. Consumption of rubber and tin are well over 40% of world consumption, and oilcrops are 38% (with China, Indonesia, and Malaysia each having more than 10% of world demand).

Economic activity has slowed in China and is expected to slow further this year, although growth remains strongly positive—unlike the case in much of the rest of the region. Consensus forecasts show that even with strong growth in China and Taiwan (China), EA10

economic activity—which accounted for nearly one-quarter of world GDP in 1997—will decline in 1998. A greater than expected slow-down in China or the region as a whole would cause a further drop in consumption and add to pressure on commodity prices.

The region is also an important producer of major commodities, yet for many products the share of world output is small (table 4). Indonesia stands out as a significant producer of minerals and agriculture crops, accounting for a quarter of the world's rubber and tin output. It is also an important producer of oilcrops, wood, nickel, copper, oil, and coal. Malaysia is a major producer of rubber, oilcrops, wood, tin, and oil, while Thailand is a major producer of rice, rubber, and fish.

Large currency devaluations have reordered the competitive and cost positions of commodity producers. Currency depreciations have made exports more competitive. And in domestic currency terms, exports have become more profitable for producers in countries where the currency value has fallen more than international prices and domestic costs have increased less than domestic prices. While international prices for metals, oil, and other commodities have fallen sharply, prices have risen substantially for Indonesian producers, making them far more competitive with producers in countries whose currencies have not depreciated.

For Thailand total exports have held up, while commodity exports have slipped

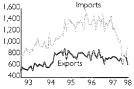
FIGURE 3. THAILAND'S MERCHANDISE IMPORTS AND EXPORTS, JANUARY 1993—APRIL 1998



Source: Bank of Thailand.

FIGURE 4. THAILAND'S COMMODITY IMPORTS AND EXPORTS, JANUARY 1993— APRIL 1998

Millions of US dollars



Source: Bank of Thailand

TABLE 3. EAST ASIAN CONSUMPTION OF MAJOR COMMODITIES AS SHARE OF WORLD CONSUMPTION Percent

Economy	Aluminum	Copper	Lead	Nickel	Tin	Zinc	Oil	Coal	Rubber	Cereals	Sugar	Oil- crops	Wood
Indonesia	0.8	0.7	1.5	0.0	1.1	1.1	1.4	0.3	2.9	2.6	2.1	10.1	4.7
Korea, Rep. of	3.1	4.9	4.1	6.9	5.2	4.	3.1	1.5	4.7	1.0	0.0	0.4 .	0.0
Malaysia	0.5	1.3	1.3	0.0	2.9	0.7	0.6	0.1	5.9	0.3	0.1	11.0	2.8
Philippines	0.2	0.6	0.4	0.0	0.0	0.6	0.5	0.1	2.6	0.7	1.8	2.5	0.7
Thailand	1.1	1.2	1.4	0.0	2.0	1.1	1.1	0.4	3.1	8.0	3.9	1.1	1.5
EA5	5.6	8.7	8.7	6.9	11.2	7.7	6.7	2.3	19.2	5.3	8.0	25.1	9.8
Japan	11.2	11.4	5.6	18.3	12.3	9.7	7.8	3.9	11.4	2.0	0.3	1.8	7.7
China	9.6	8.1	7.3	3.8	13.9	10.4	5.5	29.7	15.5	22.2	5.9	10.8	12.7
EA10	29.4	33.7	24.3	36.7ª	42.2	31.1	22.3	37.1	46.2	29.5	14.2	37.7	31.3

a. Excludes Republic of Korea.

Note: EA10 includes Hong Kong, Singapore, and Taiwan, China; for agricultural products Taiwan is included in China. Source: World Metal Statistics, BP Statistical Review of World Energy, Food and Agriculture Organization.

TABLE 4. EAST ASIAN PRODUCTION OF MAJOR COMMODITIES AS SHARE OF WORLD PRODUCTION

												Oil-	
Economy	Aluminum	Copper	Lead	Nickel	Tin	Zinc	Oil	Coal	Rubber	Cereals	Sugar	crops	Wood
Indonesia	1.0	4.8	0.0	7.4	26.4	0.0	2.1	1.4	24.3	2.3	2.1	10.1	9.5
Korea, Rep. of	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.3	0.0	0.1	0.0
Malaysia	0.0	0.2	0.0	0.0	2.4	0.0	1.0	0.0	16.3	0.1	0.1	11.1	7.0
Philippines	0.0	0.4	0.0	1.7	0.0	0.0	0.0	0.0	3.0	0.6	1.8	2.9	0.5
Thailand	0.0	0.0	0.2	0.0	0.3	0.3	0.0	0.0	32.0	1.0	3.9	1.1	0.3
EA5	1.0	5.4	0.3	9.1	29.2	0.4	3.1	1.5	75.5	4.3	7.9	25.2	17.3
Japan	0.1	0.0	0.2	0.0	0.0	1.0	0.0	0.1	0.0	0.5	0.3	0.1	4.1
China	9.4	3.7	17.5	4.7	26.5	12.1	4.6	30.1	6.1	17.9	5.9	10.1	10.7
EA10	10.5	9.1	18.0	13.8	55.7	3.5	7.7	31.8	81.6	22.7	14.1	35.3	32.4

Note: EA10 includes Hong Kong, Singapore, and Taiwan, China; for agricultural products, Taiwan is included in China. Source: World Metal Statistics, BP Statistical Review of World Energy, Food and Agriculture Organization.

FIGURE 5. THAILAND'S COMMODITY IMPORTS, JANUARY 1993—APRIL 1998

Millions of US dollars

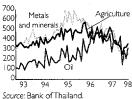
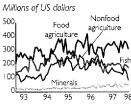


FIGURE 6. THAILAND'S COMMODITY EXPORTS, JANUARY 1993—APRIL 1998



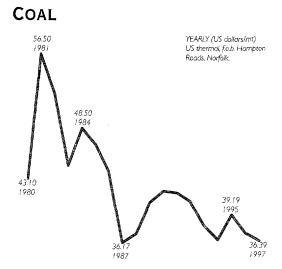
Source: Bank of Thailand.

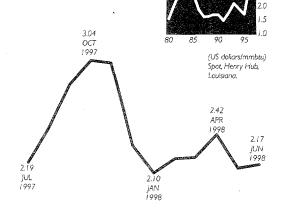
slightly (figures 3, 4, and 6). Commodity export volumes have increased, but the decline in international prices has offset the gain to producers. Thailand's rice exports increased significantly to Indonesia, whose rice crop suffered from El Niño-related setbacks. This caused a rebound in rice prices and helped sustain export revenues in this sector. Among Thailand's commodity exports, only nonfood agriculture exports have fallen, pulled down mainly by the sharp decline in rubber prices. The International Natural Rubber Organization (INRO) did not intervene when the international dollar price of rubber fell because the depreciation of the Singapore and Malaysian currencies and the strength of the dollar had kept INRO's benchmark price-which is denominated by the Singapore dollar and Malaysian ringgit—above the intervention level.

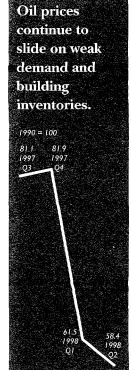
China is a large producer for most commodities, but its exports are relatively small except for tin. The country produces 30% of

the world's coal, but it exports little because coal accounts for three-quarters of its energy consumption. A significant slowdown in China would still affect commodity markets, however, by reducing imports and perhaps forcing marginal supplies onto oversupplied world markets.

East Asian economies trade heavily among themselves, and the recession in Japan has affected trade in both directions. Japan purchases 16% of EA5 exports and sells the EA5 20% of its exports. This has forced all East Asian exporters to divert shipments to the US and Europe, where economic activity has been robust. However, demand in these countries has not been able to absorb their own rising production and higher imports without a significant decline in prices for many commodities. An expected slowdown in US GDP would put further pressure on commodity prices. An eventual recovery in Asia would direct exports back to Asia and support a recovery in commodity prices. But that appears some time off.







## INTERNATIONAL COAL PRICES FALL ON WEAK DEMAND

International coal prices continued to slide in the second quarter due to weak demand in Asia, rising production, and higher stock levels. Falling exchange rates in Australia, Indonesia, and South Africa have increased the competitiveness of coal from these countries, and exports are increasing. Buyers in Asia and Europe are taking advantage of low spot prices and increasing their share of purchases from the spot market. Spot sales have been completed at as much as \$10/mt below the Japanese Chubu benchmark price of \$34.50/mt.

Current low spot prices will undoubtedly affect contract negotiations for next year—for both steam and coking coal. The global exportable surplus is expected to continue into 1999 and will not only keep a lid on prices, but will likely exert further downward pressures.

US prices also remained weak in the second quarter in response to ample supplies and moderate demand growth. While temperatures have been hot in the south and southeast, brief waves of extreme heat elsewhere have put little upward pressures on prices, as utilities along the eastern seaboard have satisfied peak demand by operating generating equipment with jet fuel, heating oil, and heavy fuel oil—taking advantage of low oil prices. Coal demand is expected to pick up in 1999, assuming normal weather, and production is projected to rise 3%, with much of the growth continuing to occur in the western region.

## PRICES DECLINE ON SURPLUS STORAGE

NATURAL GAS

US natural gas prices remained low in the second quarter, held down by weak demand and surplus inventories. The mild winter weather left gas in underground storage levels well above last year's level. In the second quarter the weather was seasonally mild in most of the nation, although Texas and parts of the southeast experienced high temperatures in June that rose even higher in July. Despite a brief heat wave in July throughout much of the country that raised electric utilities' gas demand for air conditioning, the storage surplus kept spot prices from surging.

While demand in the power and residential markets was moderate, the industrial sector recorded a surprising 5.1% decline in gas demand in the first quarter despite a strong increase in industrial output by gas-consuming manufacturing industries and much lower gas prices than a year earlier. The only bright spot in gas demand this year is likely to be in the power sector.

Storage levels at the end of June are estimated at 400 billion cubic feet (Bcf) higher than a year earlier, with the east and west consuming regions and the southwest producing region holding more gas than a year ago. Storage in the southwest producing region is well above last year's level, a good indication that gas supplies are more than adequate to meet any surge in summer power demand.

August 1998 9

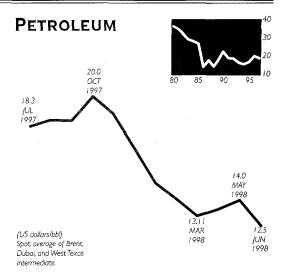
The large surplus in storage makes any significant price increases unlikely this year. Storage levels are expected to exceed 3,100 Bcf by the end of October, giving a surplus of some 220 Bcf heading into winter.

US gas production is expected to rise more than 1% this year, and imports are expected to increase 4%. Beginning in November more than 1.1 Bcf of new pipeline capacity from Canada will bring more gas into the US. Further capacity expansion is also planned for 1998. These capacity expansions will bring higher prices to Canadian producers, who have realized steep discounts in the past because of transportation constraints.

In Europe, where gas contracts are partly indexed to petroleum prices, gas prices fell 4% in the second quarter in the wake of sharply lower oil prices. Gas prices are expected to remain tied to oil, but the increasing liberalization of European gas markets will weaken that link and exert downward pressure on gas prices.

The first wave of competition will flow over the continent this October, when the Interconnector pipeline between the UK and Belgium begins bringing UK spot gas into the regulated continental markets, which are slowly being liberalized. Gas flows through the line can be reversed when necessary, though commercial rules are still being developed.

On May 23 the UK became the first country to virtually free its entire gas market. All 20 million British residential gas users are now free to choose their gas suppliers. So far some 20% of residential users have signed up to switch gas providers to secure lower prices. The UK has now leapt ahead of the US, which has wanted to open up residential markets to competition but has faced more hurdles because of the different timetables and agendas set by local governments. The experience in the UK will be watched by other countries and will likely spur greater liberalization of gas markets around the world.



## PRICES CONTINUE TO FALL ON WEAK DEMAND AND RISING INVENTORIES

Oil prices fell again in the second quarter, dragged down by surplus oil production, rising inventories, and weak demand in Asia. Prices for the first half of 1998 were 30% below a year earlier, and recent prices are more than 40% below the highs of last October. OPEC agreed to reduce production by 1.4 million barrels per day (mb/d) beginning in the third quarter, following a pledge to cut production by 1.2 mb/d in the second quarter. Non-OPEC producers pledged cuts of about 0.5 mb/d. Even if producers adhere to these new commitments, it will still take time to reduce the large surplus. Demand in Asia is much weaker than expected, and a deepening of the economic slump will thwart OPEC's efforts to rebalance the market. Prices are expected to remain relatively low but could gradually improve if sufficient crude is taken off the market.

In late June OPEC agreed to reduce output by 1.355 mb/d or 5.3% (excluding Iraq), for one year beginning July 1, 1998 (table 5). Saudi Arabia agreed to the largest volume reduction of 0.425 mb/d, or 5%. Venezuela had the second largest volume reduction at 0.325 mb/d, but the highest percentage reduction, at more than 10%. Declines for all of the other members were less than 5%.

The agreement follows a similar pledge in March when OPEC (again excluding Iraq)

agreed to reduce output for the second quarter by  $1.245 \, \mathrm{mb/d}$ , or 4.6%. In this agreement Saudi Arabia had the largest reduction, at  $0.3 \, \mathrm{mb/d}$ , or  $3.9 \, \%$ , followed by Venezuela at  $0.2 \, \mathrm{mb/d}$ , or 5.9%.

Both rounds of production cut agreements were spearheaded by secret negotiations among Saudi Arabia, Venezuela, and non-OPEC Mexico. Mexico pledged to reduce production by 0.2 mb/d—0.1 mb/d in the second quarter and a further 0.1 mb/d beginning in the third quarter. Other producers also pledged reductions, notably Norway (0.1 mb/d), Russia (0.1 mb/d), and Oman (0.05 mb/d), for a total non-OPEC pledge of around 0.5 mb/d.

OPEC's combined cuts (2.6 mb/d) totaled 10%—about the same as the 10% rise in quotas announced last November that initiated the price collapse. The new target for the 11 OPEC members is 24.39 mb/d, slightly above the old quota of 23.83 mb/d (January 1, 1998). The new target is higher because the cuts were made from a February "baseline" level, which at the time was 0.8 mb/d over quota.

The agreement altered the distribution of OPEC quota shares. Saudi Arabia is now back to 8.0 mb/d, the quota it had had from the time of the Gulf crisis until the beginning of this year. Venezuela, on the other hand, has a new target that is nearly 0.5 mb/d above its old quota, even after agreeing to reductions of more than 0.5 mb/d. Because Venezuela had long exceeded its quota, its February "baseline" production level was well above its old quota level. Qatar and Nigeria also have higher quotas, of 0.26 mb/d and 0.17 mb/d. Iran, however, has a new target that is 0.28 mb/d below its old quota.

If implemented, the total cuts by OPEC and non-OPEC producers of 3.1 mb/d should keep more oil from going into inventories and help reduce the surplus overhang in the market—but it will take time. A lot of oil has found its way into inventories this year. OPEC production in the second quarter was only 0.3 mb/d less than in the first quarter. Excluding Iraq's

increase of 0.5 mb/d, the rest of OPEC reduced production by 0.8 mb/d (table 5). In June OPEC producers (excluding Iraq) had reduced output by about 1 mb/d from the February level, but that was still nearly 0.3 mb/d short of the target. The main overproducers were Nigeria and Iran.

Non-OPEC supplies have come in well below expectations, mainly because of delayed start-up of new fields in the North Sea, but also because of lower output following agreed production cuts and lower prices. Non-OPEC production was seasonally lower in the second quarter by 0.7 mb/d (table 6), but was 0.6 mb/d higher than a year earlier. Most of the gains were in the North Sea and Latin America. International Energy Agency (IEA) forecasts last fall had projected production increases of nearly 2 mb/d, with gains expected in all regions. Output was less—and below forecast—in almost all regions.

World oil demand is estimated by the IEA to have risen 1.2~mb/d, or 1.7%, in the first quarter, and by only 0.5~mb/d, or 0.7%, in the second quarter (table 7). By comparison, growth was nearly 3%, or 2~mb/d, for all of 1997. The relatively strong gain in global oil demand in the first quarter may be overestimated. The overall gain masks the extreme

TABLE 5. OPEC CRUDE OIL PRODUCTION AND QUOTAS

Millions of barrels per day

	Quota 1 Q98	Actual I Q98	Actual 2Q98	Target 2Q98	Target 3Q98–2Q99
Algeria	0.908	0.87	0.83	0.818	0.788
Indonesia	1.456	1.31	1.29	1.310	1.280
Iran	3.942	3.58	3.68	3.483	3.318
Iraq	1.314	1.58	2.06	1.650	2.100
Kuwait	2.190	1.94	1.81	2.080	1.980ª
Libya	1.522	1.46	1.41	1.373	1.323
Neutral Zone		0.52	0.58		
Nigeria	2.042	2.26	2.19	2.133	2.033
Qatar	0.4   4	0.71	0.68	0.670	0.640
Saudi Arabia	8.761	8.43	8.17	8.448	8.023ª
UAE	2.366	2.45	2.28	2.257	2.157
Venezuela	2.583	3.36	3.18	3.170	2.845
Total crude	27.500	28.47	28.15	27.392	26.487
Excluding Irac	26.19	26.89	26.09	25.74	24.39
$NGLs^b$		2.82	2.86		
Total OPEC	2	31.29	31.00		

a. Quota includes half share of Neutral Zone.

b. Natural gas liquids.

Source: International Energy Agency and OPECNA.

TABLE 6. NON-OPEC OIL SUPPLY

Millions of barrels per day

	1996	1997	1Q98	2Q98	Change I Q98 to 2Q98
Unites States	8.59	8.64	8.65	8.54	-0.11
Canada	2.46	2.57	2.72	2.61	-0.11
United Kingdom	2.81	2.76	2.95	2.85	-0.10
Norway	3.23	3.28	3.36	3.17	-0.19
Other OECD	1.34	1.41	1.36	1.42	0.06
Latin America	6.54	6.84	7.12	7.15	0.03
Africa .	2.65	2.74	2.76	2.76	0.00
Middle East	1.89	88.1	1.90	1.88	-0.02
China	3.12	3.19	3.19	3.16	-0.03
Other Asia	2.11	2.11	2.12	2.12	0.00
FSU	7.07	7.20	7.30	7.12	-0.18
Eastern Europe	0.22	0.22	0.22	0.22	0.00
Processing gain	1.52	1.57	1.64	1.64	0.00
Total non-OPEC	43.54	44.40	45.29	44.62	-0.67

Note: Includes natural gas liquids, nonconventional, and other supply sources Source: International Energy Agency.

weakness in Asian demand (including Japan), which fell 0.4 mb/d in the first quarter, in strong contrast to growth of 0.8–0.9 mb/d in recent years. From OPEC's perspective, 1.3 mb/d of expected oil demand growth was lost in the first quarter—which is similar to the rise in OPEC output (including Iraq) during the first quarter.

Crude oil demand fell especially hard in the East Asian crisis countries in the first part of the year. Following sharp currency devaluations, countries drew down stocks and tended to shut out oil imports, thus reducing the demand for crude oil by more than the underlying reduction in domestic consumption. In the first five months of the year domestic oil consumption fell 11% in Thailand, 13% in

the Republic of Korea, and 4% in Japan. Demand in Indonesia has likely fallen dramatically given the 80% currency depreciation and the severe decline in economic activity. There was also a marked slowdown in oil demand in China and India, although demand seemed to rebound in April in both countries.

Oil inventories ballooned in the second quarter because of surplus supplies and the contango in futures prices, which encouraged stock building. While stocks did not rise in the first quarter, despite mild winter weather and rising production, inventories soared in the second quarter, mainly in the US and Europe, for both crude and refined products. Inventory levels were reported at near saturation levels in the US. In June and early July US crude stocks started to decline, but high refinery runs resulted in higher stocks of petroleum products.

The IEA is projecting a recovery in world oil demand of 1.4% in the third quarter and 2.3% in the fourth quarter (table 8). OECD demand growth is projected at a moderate 1.1% and 1.7% in the last two quarters, and non-OECD growth at 2% and 3%. Demand in Asia is projected to rise by 0.15 mb/d in the third quarter, with growth in China of 0.3 mb/d offset by declines in other Asian countries including Japan, and by 0.35 mb/d in the fourth quarter, with China accounting for most of the increase.

TABLE 7. OIL CONSUMPTION

		Millions of bar	rels per day		Percentage change						
	OECD	FSU and Eastern Europe	Developing countries	Total	OECD	FSU and Eastern Europe	Developing countries	Total			
1990	38.3	9.9	18.2	66.3	0.4	-4,4	3.7	0.5			
1991	38.3	9.4	19.0	66.7	0.2	<del>-4</del> .7	4.6	0.7			
1992	39.0	8.2	20.1	67.3	1.7	-13.0	5.8	0.8			
1993	39.2	7.0	21.5	67.7	0.5	-14.6	7.1	0.6			
1994	40.2	6.0	22.5	68.6	2.4	-14.3	4.5	1.3			
1995	40.6	5.9	23.6	70.1	1.1	-1.3	4.9	2.1			
1996	41.4	5.5	24.8	71.7	1.9	-6.6	5.3	2.3			
1997	41.9	5.7	26.2	73.8	1.3	3.6	5. <del>4</del>	2.9			
1Q97	42.0	5.7	26.0	73.8	-0.8	-4.2	5.2	1.0			
2Q97	40.9	5.7	25.7	72.3	2.8	4.8	4.0	3.4			
3Q97	41.8	5.7	26.0	73.5	2.3	7.3	5.8	3.9			
4Q97	42.8	5.9	2.6.9	75.7	0.9	9.3	5.8	3.2			
1Q98	<del>4</del> 2.5	6.0	26.5	75.0	, 1.1	5.6	1.9	1.7			
2Q98	40.9	5.5	26.4	72.8	-0.1	-2.7	2.8	0.7			

Source: International Energy Agency and World Bank

The IEA sees non-OPEC supplies rising only 0.2 mb/d in the third quarter and 0.6 mb/d in the fourth quarter. Assuming that OPEC produces at 30.0 mb/d, which is slightly over its target, these projections imply zero stock build in the third quarter (when stocks typically build significantly) and a draw of 1.7 mb/d in the fourth quarter (larger than normal). If that happens, inventories would fall by more than 150 million barrels in the fourth quarter, which would provide a good start toward rebalancing the market and lifting prices. With production restraint continuing into 1999, inventories could fall further and prices would continue to risethough not back to 1997 levels. Cold winter weather-expected by some forecasters-and continued shortfalls in non-OPEC supplies would benefit oil producers.

Much depends on OPEC compliance with its quotas and, perhaps more important, on the level of demand. A protracted recession in Asia and a slowdown in the industrial countries could result in lower demand and little improvement to inventory levels. Moreover, should Iraq's exports continue indefinitely—or rise—prices could remain depressed well into next year.

If prices remain low, the question becomes whether OPEC and non-OPEC producers would make further cuts and move toward a new production and pricing strategy. Additional cuts would push Saudi Arabia below 8 mb/d and further reduce its market share. Saudi Arabia reportedly has suggested establishing an informal body of OPEC and non-OPEC producers to monitor markets and step in whenever there was instability in the oil market. OPEC won support from outside producers this year to help reduce supply, indicating that broader cooperation among producers is possible. Whether such cooperation materializes will depend partly on how long oil prices remain low and how much financial pain is inflicted on producers.

Should OPEC decide not to restore prices to the \$18 a barrel level, a much lower price environment would significantly alter the upstream petroleum business. For now, producers are intent on curbing surplus supplies and boosting prices. With strict adherence to quotas and no dramatic downturn in demand, prices should gradually improve, though remaining well below their 1996–97 levels.

TABLE 8. WORLD PETROLEUM DEMAND AND SUPPLY

Millions of barrels per day

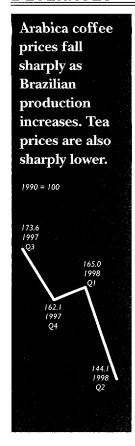
	1995	1996	1Q97	2Q97	3Q97	4Q97	1997	1Q98	2Q98	3Q98	4Q98	1998
Demand												
OECD	40.6	41.4	42.0	40.9	41.8	42.8	41.9	42.5	40.9	42.2	43.6	42.3
FSU	4.8	4.3	4.3	4.4	4.5	4.6	4.4	4.6	4.2	4.4	4.7	4.5
Other	24.7	26.0	27.4	27.0	27.2	28.2	27.5	27.9	27.7	27.9	29.1	28.1
Total	70.1	71.7	73.7	72.3	73.5	75.6	73.8	75.0	72.8	74.5	77.4	74.9
Supply												
OECD .	18.0	18.4	18.7	18.3	18.5	19.1	18.7	19.1	18.6	18.5	19.5	18.9
FSU	7.1	7.1	7.0	7.2	7.3	7.3	7.2	7.3	7.1	7.2	7.2	7.2
Other <sup>a</sup>	17.3	0,81	18.5	18.5	18.5	18.7	18.5	18.9	18.9	8.8	19.0	18.9
OPEC®	27.7	28.5	29.6	29.6	30.1	30.7	30.0	31.3	31.0	30.0	30.0	30.0
Total	70.1	72.0	73.8	73.6	74.4	75.8	74.4	76.6	75.6	74.5	75.7	75.0
Stock change and miscellaneous												
OECD	-0.3	-0.1	0.4	0.3	0.4	0.1	0.3	-0. I				
Floating/transit	0.1	-0. I	0.1	0.2	0.3	0.0	0.1	0.2				
Other/miscellaneous	0.3	0.4	0.5	0.9	0.3	0.1	0.2	1.4				
Total	0.1	0.3	0.0	1.3	1.0	0.1	0.6	1.5	2.8	0.0	-1.7	0.1

Note: Includes natural gas liquids (NGLs), nonconventional, and other supply sources.

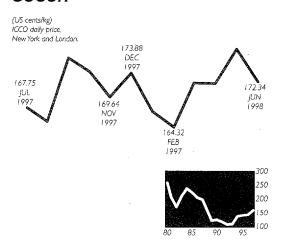
a Includes processing gains (1.6 mb/d in 1997).

b. Includes NGLs (2.8 mb/d in 1997).

Source: International Energy Agency and World Bank



## COCOA



## STOCKS CONTINUE TO DECLINE

Cocoa prices averaged 174¢/kg this quarter, up 4% from last quarter's average of 168¢/kg and up 8% from the same quarter in 1997. Lower expectations about the size of West African mid-crops and civil unrest in Indonesia pushed up cocoa futures in both London and New York, but futures returned to earlier levels following good weather reports and Suharto's resignation.

The most recent estimates by the International Cocoa Organization (ICCO) are that world production for the 1997/98 season will reach 2.68 million tons, 1.7% lower than last season's 2.73 million tons. Côte d'Ivoire, the world's dominant producer, is expected to produce 1.11 million tons, or 42% of world output, almost 15% lower than in the 1996/97 season. Ghana, the second largest producer and accounting for 12% of world's output, is expected to register a 78% increase, reaching almost 400,000 tons. Indonesia, the third largest producer, is expected to produce 315,000 tons, down 5% from last season's 330,000 tons.

Exports of cocoa beans dropped a steep 12% in the last quarter of 1997 (the latest available figure from ICCO) over exports in 1996. Exports of cocoa butter and chocolate products experienced marked declines of 8% and 5%, while cocoa powder and liquor were up an estimated 10% and 5%.

End-of-season stocks reached a record low of 1.17 million tons, down 13% from last sea-

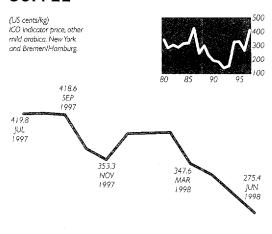
son's 1.35 million tons, bringing the stock to grindings ratio to 41.4%. With an expected consumption growth of at least 3%, production in the 1998/89 season would have to increase by an unlikely 10% to meet demand at current prices. Hence, price increases accompanied by a further drawdown in stocks are highly likely.

The Ghana Cocoa Board announced a 25% nominal increase in producer prices, from 1,800 cedis/kg (\$774/mt) to 2,250 cedis/kg (\$968/mt). This increase follows earlier increases of 50% in 1997 and 43% in 1996. While much of the increase has been eroded by inflation, 1998 real prices are still 12% above 1997 prices. Currently, the ratio of f.o.b. prices to farmgate prices is 50%. The cocoa board plans to raise the ratio to 60% within the next two growing seasons. Producer prices are lower in Ghana than in any other major producing country except Côte d'Ivoire, despite the fact that Ghana produces the highest quality beans.

LMC's Commodity Bulletin reports that cocoa consumption in Central and Eastern Europe has returned to pre-1990 levels. Cocoa imports reached 365,000 tons in 1996/97, exceeding even the 355,000 ton record of 1988/89. In view of higher consumption prospects, many countries in the region are keeping tariffs on beans low while escalating tariffs on processed products to protect domestic manufacturers and boost revenue (for example, Bulgaria has an 75% import tariff on chocolate). Inevitably, the high level of tariffs has prompted changes in the structure of imports. Beans, which had accounted for 80% of cocoa imports in Central and Eastern Europe before 1990, fell to 52% in 1996/97, reflecting the substitution of multinational chocolate manufacturers for subsidized inefficient domestic chocolate producers. Consumers in the region are expected to pay higher prices for chocolate products, while smuggling and black market activities will be inevitable.

Spain and the Netherlands dropped their opposition to the draft EU legislation on the use of cocoa butter equivalent. With approval of the legislation now expected, growth of cocoa consumption is likely to slow.

## COFFEE



## PRICES DECLINE SHARPLY

The April–June arabica price indicator averaged 304%/kg, down from 378%/kg in the first quarter and more than 40% below last year's second quarter price. Robusta prices averaged 192%/kg this quarter, up 5% the previous quarter and almost the same as in the second quarter of last year.

The recent decline in arabica prices, which are expected to remain under continuous pressure throughout the season, reflects mostly Brazilian production prospects. According to estimates by Abecafe's, the Association of Brazilian Coffee Exporters, Brazil is expected to produce 35.2 million bags in 1998/99, up from 22 million bags in 1997/98. These estimates are somewhat higher than the government's official estimates of 31.2 million bags (26.9 for arabica and 4.3 for robusta)—the government's official estimates differed for the 1996/97 crop by the same margin. Expectations for the Brazilian bumper crop have already put downward pressure on New York futures prices.

Thus far, El Niño has taken a heavy toll on coffee production. World production for 1997/98 (July/June) is expected at 69.6 million bags for arabica, down 5.8% from 1996/97, and 26 million bags for robusta, down 6.2%. Brazil, the world's largest arabica producer, showed an almost 10% drop, down to 25.6 million bags. The hardest hit countries are Guatemala and Kenya, with estimated reductions in arabica production of

14% and 26%. Production in Colombia, the world's second largest arabica producer, remained unchanged at 10.8 million bags. Among the major arabica producers, only Costa Rice exhibited a marked increase (2.3 million bags, or more than 5%).

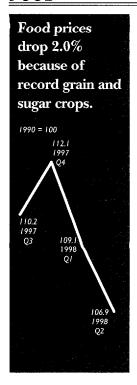
Robusta producers also suffered declines, with Uganda and Indonesia taking the biggest hits at 22% and 16% reductions over the previous season. Dry weather in Vietnam, the second largest Asian robusta producer after Indonesia, reduced its bean output this season by 10%.

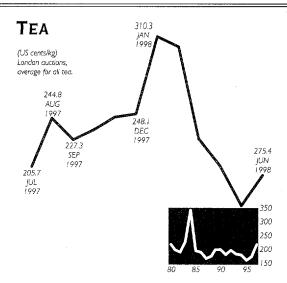
Consumption in the major consuming countries fell in 1997 and appears to have remained sluggish in 1998. High prices and warmer than usual weather conditions in the Northern Hemisphere during the normally high-consumption winter months contributed to the consumption slump. Europe and the US, the two largest coffee importers, consumed 41.1 and 18 million bags this season, more than half of world production.

In India plans to introduce coffee futures contracts are well under way, a response to the impact of price volatility throughout the Indian coffee industry. Both arabica (plantation A) and robusta (cherry AB) contracts of 600 kg are expected to be traded. India produces an annual average of 3 million bags of coffee, about half of which is arabica and half robusta. Indian traders are currently not allowed to trade futures contracts at the New York and London Coffee Exchanges—the only two exchanges currently trading coffee futures contracts. LMC International, however, contends that it remains to be seen whether there will be sufficient liquidity to ensure the sustainability of the new coffee contracts.

The political unrest in Indonesia, which has caused most exporters to close their offices, has resulted in substantial price volatility in London's robusta market. Although the market has steadied somewhat since Suharto's resignation, it is far from stable. Indonesia, the world's largest robusta producer, is expected to produce 6.3 million tons, some 24% of the world's robusta production.

August 1998 15





#### PRICES COME UNDER INCREASING PRESSURE

Auction (4) prices (average auction prices of Calcutta, Colombo, London, and Nairobi/Mombassa) averaged 203¢/kg, down from last quarter's 251¢/kg but close to the 207¢/kg average of the same quarter last year. The London auction price indicator followed a similar pattern but with a sharper decline (from 281¢/kg last quarter to 193¢/kg this quarter).

Despite strong demand, prices may come under increasing pressure. Kenya, which suffered a setback in production last season, is harvesting a record crop; El Niño fears did not materialize for India and Sri Lanka, which are expecting normal crops. Increased production is also expected in Bangladesh, Indonesia, and Malawi. Production in 1997/98 (May–April) from the 10 major tea producers is estimated at 1.45 million tons, up from last season's 1.42 million tons. India, the world's largest producer, accounts for 53% of world production, followed by Kenya and Sri Lanka, each at 18%.

Bringing to a close a three-century tradition, June 29 marked London's last tea-leaf auction. Regular auctions have been held in London for 319 years, ever since the British East India Company held its first auction in March 1679. Tea producing countries now have increased control over tea pricing.

Following Sri Lanka's lead, Nepal is privatizing seven government-owned tea estates.

## FATS AND OILS

## STOCKS HIT 20-YEAR LOW

Growth in world production of fats and oils will be only 1.5 million tons this season, the smallest growth in 5 years, with most of it coming from soybean oil (table 9 reports last season's production and exports of the 17 fats and oils). World demand growth is expected to slow even more, owing mainly to the East Asia financial crisis, high prices for virtually all oils and fats, and low GDP growth in many importing countries.

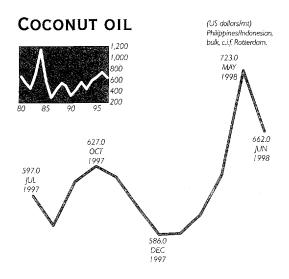
World oilseed production for 1997/98, excluding soybeans, increased 540,000 tons to 131.3 million tons. Higher world rapeseed and sunflower seed production accounted for most of the increase, together with somewhat greater production of cottonseed and peanut.

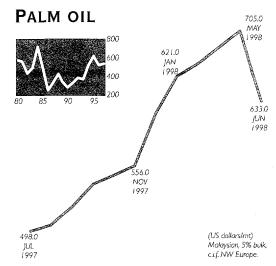
As its population and income have grown, China has become one of world's largest oilseed importers. It is expected to import a record 3.3 million tons in the 1997/98 season. India's recent import tax cut on oils (from 25% to 15%) may boost imports of palm, soybean, sunflower, and rapeseed oils by 40%. The tax cut is likely to reduce domestic prices of palm and soybean oils by as much as 7%.

TABLE 9. 1997 PRODUCTION, EXPORT, AND PRICES OF MAJOR FATS AND OILS

	Production (million	Exports (million	Trade (% of	Price
Oil	tons)	tons)	production)	(\$/ton)
Soybean	20.82	6.67	32	626
Palm	17.62	12.35	70	569
Rapeseed	11.83	1.81	15	646
Sunflower	9.32	0.31	3	690
Tallow and greas	e 7.49	2.01	27	536
Lard	6.19	0.14	2	594
Butter (as fat)	5.70	0.62	11	3,250
Groundnut	4.21	0.24	6	1,044
Cotton	3.95	0.23	6	677
Coconut	3.43	1.89	55	587
Olive	2.68	0.51	19	2,503
Palm Kernel	2.17	1.05	48	609
Corn	1.90	0.69	37	598
Fish	1.13	0.74	65	691
Sesame	0.77	0.02	3	1,476
Linseed	0.68	0.12	18	633
Castor	0.45	0.24	52	85 I
Total	100.33	29.63	30	

Source: Oil World, April 14, 1998, (prices of olive oil, butter, and sesame oil are from *The Public Ledger*).





#### PRICES INCREASE SHARPLY

Coconut oil prices averaged \$667/ton in the second quarter, up 18% from the \$565/ton average in the previous quarter and almost unchanged from the \$667/ton average of the same quarter of last year. In 1997 coconut oil accounted for 3.5% of world production of fats and oils—half of which was internationally traded—and 6% of world trade in fats and oils. The price of palm kernel oil, a close substitute for coconut oil, rose \$150/ton in the second quarter. The market's reading is that lauric oil prices could rise even further.

World production of coconut oil is expected to reach 3.31 million tons in 1997/98, up slightly from the 3.26 million tons of the 1996/97 season (October–September) but far below the record 3.52 million tons of 1994/95. Exports are expected to reach 1.78 million tons, close to last season's 1.76 million tons. Stocks increased slightly from 2.7 million tons last season to 3.9 million tons this season. Palm kernel oil, however, is expected to register a marked decline in 1998, from 522,000 for January–May 1997 to 409,000 during the same period of 1998—a result of lower palm yields.

Reflecting the lagged effects of the El Niñocaused drought on copra production, Philippine exports are expected to decline sharply for the rest of 1988 and into 1999. *Oil World* forecasts that exports will decline to 0.40 million tons over the period April–September 1998.

## LAGGED EL NIÑO EFFECTS LOWER PRODUCTION PROSPECTS

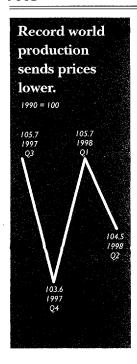
During April–June palm oil prices averaged \$675/ton, a moderate 4% increase over the first quarter but 23% higher than in the second quarter of 1997. Palm oil (a close substitute for soybean oil) accounted for 18% of world production of fats and oils in 1997, more than two-thirds of which was internationally traded.

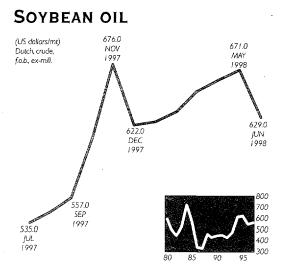
World production in 1998 is projected at 17.11 million tons, some 500,000 tons less than a year ago. Production in Malaysia, which accounts for almost half of the world total, is expected to reach 8.33 million tons (5% lower than last season), while Indonesia, the world's second largest producer, will produce 5.4 million tons (down from 5.15 million tons last year).

Although El Niño is officially over, its effects are still with us. Palm oil yields in 1998 are expected to be down by 10% from the most recent five-year average in Malaysia and 12% in Indonesia. Below-average yields are also expected in 1999. Unfavorable weather has also affected the productivity of palm trees in smaller producing countries such as Thailand and Papua New Guinea.

Oil World reports that world production of palm oil may fall some 1.2–1.3 million tons next season. Lower production combined with already depressed stocks—Malaysian stocks are estimated at 10% lower than last year—could push prices even higher.

August 1998 17





## US TO EXCEED RECORD HIGH PLANTINGS

Second quarter soybean oil prices averaged \$654/ton, 3% higher than in the first quarter and about 20% higher than in April–June 1997. Soybean oil accounted for more than 20% of the world's 1997 production of fats and oils. About one-third of soybean oil production is internationally traded, with the US and Brazil accounting for 85% of exports and the EU accounting for 42% of imports.

World soybean oil production in 1997/98 (October–September) is expected to reach a record 22.45 million tons, up almost 8% from the 20.81 million tons in the 1996/97 season. Exports are expected to reach 6.89 million tons, up from the 6.63 million tons of last season. Despite increased production, ending stocks are expected to drop 2.36 million (from 2.40 million tons last season), bringing stocks to a record low of 10.4% of consumption.

The US Department of Agriculture (USDA) reported that 1998 soybean plantings exceeded the 28.5 million hectare record of 1979, despite less favorable prices relative to competing crops and the increased flexibility in switching crops since the 1996 Farm Bill was passed.

Soybean crushings are expected to reach 125.3 million tons in 1997/98 with the US, the world's largest producer, accounting for 427 million tons, Brazil 212 million tons, and Argentina 142.5 million tons. The US is expected to export 25.1 million tons and Brazil 8.45 million tons.

## **GRAINS**

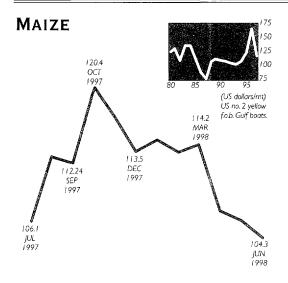
#### WORLD PRODUCTION AT RECORD HIGHS

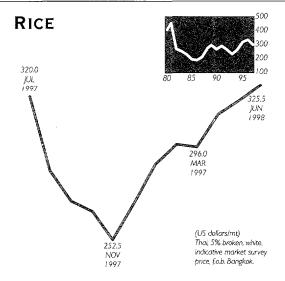
With the grain crop harvest in the Northern Hemisphere well under way, world production appears headed for another record harvest—up 2.5% from last year. Stocks are expected to rise a modest 5 million tons according to the USDA, but early estimates are often low, and actual levels may be higher as the harvest progresses. World grain stocks would rise to about 320 million tons, or 17.2% of expected utilization. This level is well above the 1995/96 low of 250 million tons, or 14.4% of utilization, but slightly below the average of 17.6% during the 1990s. Barring any significant unforeseen developments, the level of world stocks is adequate for the next year and largely precludes a major increase in average world grain prices during the current crop year.

Stocks in the five largest grain exporting countries are expected to total 133 million tons, or 41.0% of world stocks, by the June 1999 end of the 1998/99 crop year. Stocks in these countries were as low as 60 million tons, or 23.5% of world stocks, at the end of the 1995/96 crop year, resulting in a sharp increase in grain prices. Since then world stocks and stocks in the largest grain exporting countries have increased each year.

Production in these five countries has increased 21.0% since 1995/96, while world production is up an estimated 9.7%. The large production response in the major exporters reflects the surplus capacity in these countries and their ability to return such capacity to production when prices appear favorable. Argentina had the largest increase in grain production from 1995/96 to 1998/99, at 50.0%, while the US had the second largest increase, at 25.0%.

World grain trade continues to stagnate, with an estimated 205 million tons of exports expected in 1998/99. Trade has fallen within the range of 200–220 million tons for more than a decade.







## WEAK DEMAND AND LARGE SUPPLIES DEPRESS PRICES

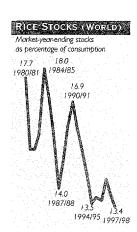
The economic slowdown in East Asia has combined with large global production to take the starch out of the corn market. Prices fell to \$104.3/ton in June, the lowest level since late 1994. Even lower prices seem likely to follow. Imports by East Asian countries have weakened considerably. Maize imports by Indonesia, the Republic of Korea, Malaysia, Philippines, and Thailand—EA5—are expected to be down 12% in 1998/99 from the previous year and 20% from two years ago. Global imports are expected to fall by less, with a decline of about 3% from last year and 6% from two years ago. Imports in Latin America, the Middle East, and North Africa are expected to remain strong and to somewhat offset the lower imports from East Asia. However, there is concern about the impacts of the economic slowdown in East Asia on economic growth in these regions. Lower crude oil prices also could reduce maize import demand in the North Africa region.

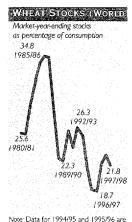
Record world production and stock building in the major grain exporting countries and in the rest of the world are swelling global exportable supplies. Stocks of total coarse grains in the five largest exporters are expected to increase from 28 million tons in 1995/96 to an estimated 83 million tons by the end of the current crop year. Such large stocks will create a burden for exporters and may lead to aggressive export efforts and lower world prices.

#### PRICES RECOVER FROM EARLIER LOWS

Thai rice export prices have recovered from their November 1997 lows of \$252/ton for 5% brokens to \$318.3/ton in June. Rice prices bucked the trend of other grain prices on the strength of import demand from Indonesia, which is expected to import 5 million tons in calendar year 1998 out of total world imports of 23 tons. While the El Niño-related poor harvest of 1997 is largely behind the import surge, severe economic downturn and the need to meet the food requirements of the population may also have contributed. Rice production in Indonesia is projected to recover this year and imports should fall back to more normal levels. The Philippine harvest was hurt by El Niño, with production down about 8% and imports nearly doubling to 1.75 million tons in 1998. Other countries in the region were not as severely affected by poor weather conditions, and their imports remained near normal levels. In South Asia, El Niño caused a poor monsoon season in Bangladesh and led to imports of about 1 million tons of rice in 1998.

World production is expected to increase about 1.2% this year (1998/99) to a record level, and consumption should keep pace. The largest producers, China and India, are both expected to have record harvests and exports of about 1.5 million tons in calendar 1999. Major Asian exporters Thailand and Vietnam are expected to have normal harvests and strong exports of 5.7 and 3.5 million tons.



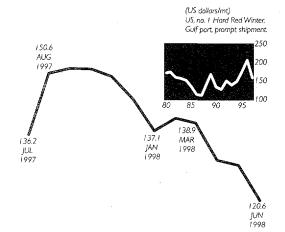


Note: Data for 1994/95 and 1995/96 are estimated.

Source: USDA, FAS.

**AUGUST 1998** 

## WHEAT

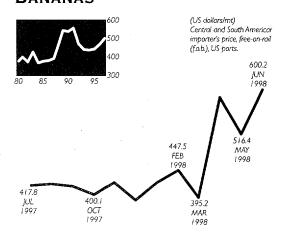


PRICES EXPECTED TO REMAIN WEAK

US export prices fell to \$120.6/ton in June, completing the boom-to-bust cycle that began in 1993, when prices were \$122/ton, and included the rise to a high of \$262/ton in 1996. In between came concerns about a world food shortage, which culminated in the World Food Summit in Rome in 1996. The situation was not too different from that during world food scares, including the 1972–74 crisis that led to even greater price increases. However, the supply response in the world wheat market was swift and substantial as world wheat production rose 16.3% in the three years following the low 1994/95 harvest while consumption grew 7.3%.

The extreme price volatility hardly seems justified when viewed on a stocks to use basis. Year-end wheat stocks were 21.6% of total use in 1994/95. They fell to 19.1% by the end of the 1996/97 crop year but are expected to rebound to 21.8%, by the end of the 1998/99crop year. However, viewed in terms of stock levels in the five largest wheat exporting countries, the price increases are more easily understood. Stocks in these countries fell to 30 million tons in 1995/96 and are expected to rise to 48 million tons by the end of the current crop year in June. Production in these countries rose by 21.0% in the three years following the high prices in 1996. The return to low prices and larger stocks raises the question of whether major exporting countries will return to past policies of selected subsidies.

## BANANAS

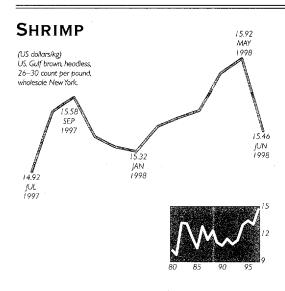


#### **EU** MINISTERS INCREASE IMPORT QUOTAS

Responding to reduced supplies from Ecuador and Central America, the banana price indicator (f.o.b. US ports) averaged \$568/ton, up from the previous quarter's \$422/ton average but unchanged from April-June 1997. In the first three months of 1998 Ecuador's banana exports totaled 1.08 million tons, down 4.7% from the same period in 1997 (1.1 million tons). Ecuador, the world's largest banana exporter, shipped out 4.45 million tons in 1997, mainly to the US.

The Trade Union Workers of the Chiriquì Land Company in Panama, a subsidiary of Chiquita, ended their two-month strike. The dispute affected about half of Chiquita's annual production in Panama and temporarily paralyzed its exports—two-thirds of which go to Europe and the rest to the US. Also, small-scale banana producers in Guadeloupe ended their protest over claims of unfair trading practices by export companies.

Following the World Trade Organization's (WTO) ruling in September 1997 that the EU's banana import restrictions violated WTO rules by discriminating against bananas grown in Latin America, EU ministers agreed to raise the import quota for Latin American bananas by 353,000 tons a year to 2.533 million tons, at the existing duty of \$83/ton. The five countries that brought the case to the WTO were Ecuador, Guatemala, Honduras, Mexico, and the US.



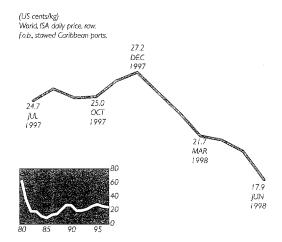
## PRICES WEAKEN ON ASIAN FINANCIAL CRISIS

Slowing demand in Japan and abundant supplies in the world market have weakened prices. Concerns about the potential for disease have led Asian producers to harvest early, which has meant that the bulk of shipments have been of small and medium sizes. Price spreads between the 16/20 and 21/25 counts have widened because of the scarcity of the larger sizes. Japanese demand remains sluggish due to a weaker yen and the deepening recession, with imports during the first five months of 1998 down some 15% from 1997.

US demand remains strong, with shrimp imports some 25% higher than during the same period last year. US Gulf production has also been good, although below production in 1997. Abundant supplies of shrimp are available to the US market, especially from Ecuador and Thailand, the largest exporters to the US market. Ecuador's first quarter exports to the US were more than 30% higher than 1997 shipments, while Thailand's were 23% higher. Ecuador's shipments would have been higher still had poor weather not interfered with shipments to the US market.

Demand in Europe is strong and prices for black tiger shrimp are firm. Supplies are being limited by restrictions on the exporters that are allowed access to the European market due to health concerns. Good catches are reported in Norway.

## **SUGAR**

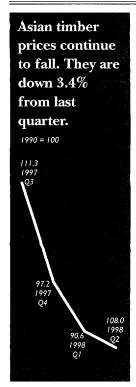


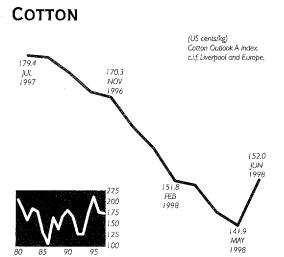
#### PRICES FALL TO 10-YEAR LOW

Sugar prices fell to 10-year lows in June, with the world price averaging 8.1¢ a pound compared to 11.4¢ a pound in 1997. A combination of large supply and weak demand was the primary reasons for the decline; however, other factors such as the weak East Asian currencies and policy changes in several countries also contributed to the declines. World production is expected to be 3.2% higher than last year, and stocks are expected to build for the fourth consecutive year. The southern hemisphere crop is also getting ready to come to market.

Policy changes in Brazil and the Russian Federation contributed to the uncertainty surrounding the market, but both changes point to continued weakness in the world market. In Brazil the government's decision to restore controls over the domestic ethanol price has put may sugar millers in economic jeopardy. The ethanol price was expected to fall when government controls ended in May, and many millers had contracted to provide ethanol at the expected lower price. These millers now find themselves with potential losses on these contracts and are reluctant to meet contract obligations. Instead, they are looking to the export market. In Russia the government decision to impose a tariff on imported sugar has largely halted imports. The duty is designed to protect domestic beet growers against the flood of cheap world market sugar.

August 1998 21





#### PRICES ARE PICKING UP

After reaching a 5-year low of 142¢/kg in May 1998, the medium staple cotton price indicator (Cotlook A Index) averaged 146¢/kg in the second quarter of 1998, 3% below last quarter's average and more than 20% below the same quarter last year. New York futures contracts, which are influenced primarily by US market conditions, picked up; however, reflecting unfavorable weather conditions in Southwestern US, they followed an erratic path.

Apart from the East Asia financial crisis, China's emergence as a cotton exporter has captured the market's attention and is considered to be the main influence on last quarter's record low prices. On May 26 China invited bids for 260,000 tons of the 1997/98 crop; combined with earlier bids for a substantial quantity of the 1996/97 crop, this brought the total to 560,000 tons. In 1998/99 China is expected to switch from being a net importer of 400,000 tons to a net exporter of 300,000 tons.

Recent statistics released by the USDA paint a pessimistic picture of the 1998/99 US crop, which is expected to be some 900,000 tons (about 18%) lower than the 1997/98 level. The reduction reflects unfavorable weather conditions—mainly the absence of pre-planting rains in Texas and dry conditions in California.

Although 1997/98 production in the five South American cotton producing countries—Argentina, Brazil, Bolivia, Colombia, and Paraguay—is now estimated at 800,000 tons, up

from 760,00 tons last season, it is approximately 350,000 tons short of earlier expectations. Adverse weather conditions are also expected to worsen production prospects in Central Asia and Turkey.

Despite expected increases in Chinese and Indian production, the International Cotton Advisory Committee (ICAC) estimates that world production will fall significantly in 1998/99 and will be outpaced by consumption, thus further reducing stocks to an estimated 9.3 million tons and possibly pushing them down to 8.7 million tons in 1999/00. The 1998/99 season A Index average is expected to remain at 1997/98 levels.

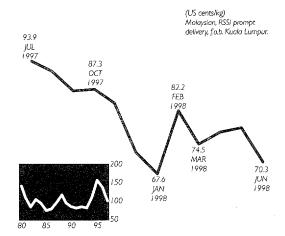
Estimates that China's exports will decline in the 1999/2000 season coupled with an expected world production-consumption deficit of 400,000 tons will induce a tightening in stocks and put upward pressure on prices. ICAC forecasts that the A Index will exceed the long-term average of 163¢/kg by 4¢ to 5¢.

Following the recent revitalization of the GSM-102 Export Guarantee Program by the US, which facilitates substantial sales of cotton to East Asian countries affected by the financial crisis, Australia announced its own program in April, which would provide \$250 million in export trade assistance for cotton shipments to Indonesia through its Export Finance and Insurance Corporation. Australian assistance is also scheduled to go to the Republic of Korea.

On the policy front the Brazilian government introduced minimum support prices for cotton seed; farmers received support in May equal to about 18¢/kg. Following the liberalization efforts of Benin and Togo, Côte d'Ivoire has offered a number of gins for sale to private interests, and several international companies are participating in the two bidding rounds.

The controversy over the EU's imposition of antidumping duties on unbleached cotton cloth from China, Egypt, India, Indonesia, Pakistan, and Turkey continues. Eight EU countries issued a protest calling the antidumping duties a "regrettable decision," the *Financial Times* reported.

## RUBBER



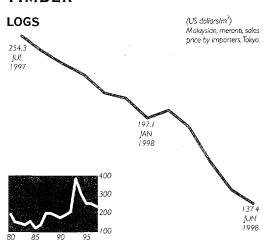
## STOCKS CONTINUE TO DECLINE

After hitting a 20-year low last quarter, the Kuala Lumpur price indicator remained unchanged at 75¢/kg. Singapore and New York spot prices also remained unchanged at 92¢/kg and 73¢/kg. Production in 1997 reached 6.35 million tons for natural rubber and an estimated 10.15 million tons for synthetic rubber. Thailand, Indonesia, and Malaysia, the dominant rubber producers, accounted for 32%, 24%, and 15% of the world's total.

Lower dollar prices pushed natural rubber consumption to 6.57 million tons in 1997, up from 6.13 million tons in 1996. The US imported 1.04 million tons, up from 1.01 million tons a year earlier. Other OECD countries—France, Germany, and Italy among them—also increased their imports.

Thailand's National Rubber Policy Committee met to decide whether the world's largest natural rubber producer should leave the International Natural Rubber Organization (INRO)—consisting of 6 producing and 18 consuming countries. Thailand, which is expected to ask Malaysia and Indonesia to leave INRO as well, charges that INRO failed to boost rubber prices through its stock policies after prices plunged almost 40% over the past 12 months, causing US\$115 million in losses to Thailand alone. Withdrawal by the three dominant producers would signal the end of the world's last nonoil cartel.

## **TIMBER**



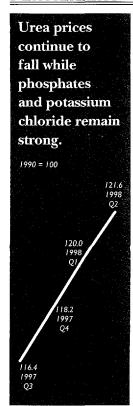
#### PRICES FALL ON WEAKENED YEN

Asian hardwood markets continue to suffer the effects of the financial crisis in the region. Construction and furniture sectors in Japan and the Republic of Korea, traditionally the major markets for Southeast Asian forest products, show little sign of recovery. Timber exports have been hurt by high interest rates and rising production costs. Indonesian and Malaysian exporters are finding it difficult to obtain letters of credit from local banks, while an acute shortage of empty ocean freight containers has increased freight costs.

Japanese log stocks remain high at 5.1 months of supply, and Japan's forest product imports are projected to drop 30% over last year. In the Republic of Korea stocks of hardwood plywood have been nearly depleted, yet demand is extremely low. The Japan Forestry Agency forecasts a 77% decline in African log imports for 1998.

Prices of the African hardwood sapele weakened marginally last quarter, and there are signs of increasing pressure from the low Asian demand and the extremely low prices of Asian alternatives. Despite the Asian competition, African sapele traders expect to maintain their European market share because of sapele wood's superior technical quality. Ongoing supply difficulties in Asia and the sudden price increases for Asian wood during the early 1990s are also contributing to the wait-and-see situation among European buyers.

August 1998 23



## **FERTILIZERS**

## FALLING GRAIN PRICES SPELL TROUBLE FOR FERTILIZER DEMAND

Fertilizer demand is derived primarily from the demand for grains, which are the largest users of fertilizers. And grain prices have been falling sharply for more than two years. Maize prices averaged \$110.0/ton in the first six months of 1998, well below their \$165.8/ton average in 1996. Wheat prices averaged \$132.6/ton, down from \$207.6 in 1996, and rice was down to \$306.1/ton, from \$338.9/ton. As grain prices fall, so does the economically optimal amount of fertilizer to be applied per hectare of land. The total land area devoted to grains has also been declining, and with stocks building and prices falling, grain area is likely to shrink further. World grain stocks are expected to rise to slightly more than 17% of total use by the end of the 1998/99 crop year; stocks were at 14.4% in 1995/96. The increase some 70 million tons of grain—is equivalent to 23 million hectares of cropland at current grain yields of 3 tons per hectare.

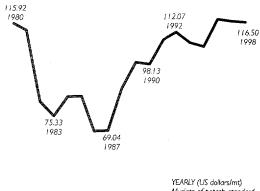
World grain area harvested was down about 15 million hectares in 1998/99 from the 1996/97 peak, and further declines can be expected in 1999/2000 unless grain yields decline or stocks are allowed to continue to build. The EU is considering an expansion of its land set-aside in response to growing surpluses. Add to these factors the weak economic condition in East Asia because of the financial crisis and the outlook for fertilizer demand in 1999 looks dim. World grain demand has increased just 1.3% a year over the past decade, and the East Asia financial crisis makes even slower growth likely.

And while demand has been weakening, supplies of fertilizer keep expanding, with new capacity being introduced regularly.

TABLE 10. FERTILIZER APPLICATION SHARES, 1995
Percent

Potash
8.7
8.3
11.8
16.1

## POTASSIUM CHLORIDE



YEARLY (US dollars/mt) Muriate of potash, standard grade, spot, f.o.b. Vancouver.

#### CONTRACT PRICES REMAIN UNCHANGED

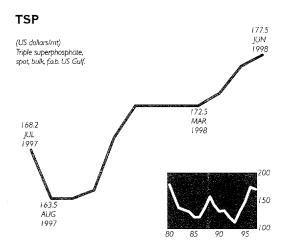
Potassium chloride contract prices remained unchanged at \$116.5/ton during the quarter. Producers expect higher second-half contract prices. However, in response to strong import demand and tight world market supplies, world demand increased 10% in 1997, and demand in developing countries has been growing at nearly 4% a year since 1990. China, India, and Pakistan are expected to be strong buyers in the next few months as they prepare for the next planting season. Recent spot sales to Indian importers have been at \$120/ton, which has added support to exporters' demand for a \$5/ton price increase on second-half sales.

The Indian government has not yet settled on the level of the subsidy for potassium chloride, and until it does, imports are expected to be limited. With the decision on prices delayed and the demand for the coming planting season strong, supplies of potash are reportedly tight. A decision on the subsidy is expected soon.

Canpotex, the Canadian potash export association, was expected to meet with Japanese buyers in July to discuss second-half contract prices. In July Canpotex reportedly negotiated a \$5/ton increase in potash prices with Brazil. Canadian producers are operating at near full capacity and are expected to operate without significant shutdowns throughout the summer.

A 250,000 ton/year SOP plant was recently brought into production in Chile to produce granular product.

## **PHOSPHATES**



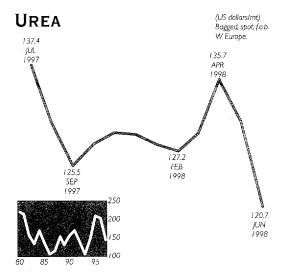


Triple superphosphate (TSP) prices averaged \$175.9/ton during the second quarter, up from \$172.5/ton during the first quarter. Diammonium phosphate (DAP) prices rose from \$194.5/ton in the first quarter to \$205.3/ton during the second. Prices of Moroccan phosphate rock increased to \$43/ton, from \$41/ton during 1997.

TSP prices grew 3.8% a year from 1990 to 1997, from \$131.8/ton to \$171.9/ton, driven primarily by the 2.5% a year growth in demand in developing countries, according to Food and Agriculture Organization (FAO) data. Global demand decreased during this period, pulled down by the strong contraction in demand in the transition economies of the former Soviet Union.

The growth in developing countries' demand reflects both their focus on increasing overall food production and a realization that balanced fertilizer use is essential for maintaining soil fertility and yields. China, India, and other countries have taken explicit steps to improve the fertilizer balance.

China is the largest importer of phosphate fertilizers. As part of a program to increase food production and achieve food self-sufficiency, the Pakistan government increased its budget for DAP fertilizer imports to improve the fertilizer balance. A joint venture with Jordan, scheduled to begin in September, will increase domestic DAP fertilizer production.

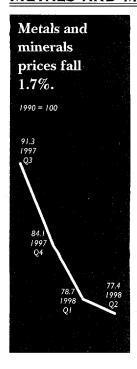


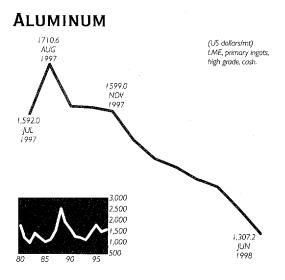
#### PRICES CONTINUE TO DECLINE

Urea prices fell throughout the second quarter, with the average for June at \$120.7/ton and the quarterly average at \$129.0/ton. Additional price weakness is expected, with strong competition among exporters who seem willing to lower prices in order to hold market share.

Demand in countries caught up in the East Asia financial crisis has been under pressure. Philippine fertilizer production fell 18% in 1997 over 1996 in response to weak demand. The devaluation of the peso raised raw material import costs and lowered domestic demand. Indonesia is also facing weak demand following devaluation of the rupiah. In both countries farmers have reacted by reducing applications of phosphate and potash fertilizer more than urea. The sharp fall in international urea prices has made urea more attractive, especially combined with farmers' greater willingness to use urea because of its more visible impact on plant growth than phosphate or potash. Demand has also been weakened by El Niño-related weather conditions in several countries including Vietnam, where drought has reduced rice planting areas.

The government of India raised urea prices some 14% to reduce the urea subsidy. A larger increase had been scheduled, but it was scaled back in response to the strong opposition. The nitrogen/phosphate/potash balance in India is about 1:0.2:0.1, whereas the recommended balance is 1:0.5:0.25.





## PRICES CONTINUE TO SLIDE

Aluminum prices fell for the 10th consecutive month on shrinking demand in Asia and steady growth in production. While first-half prices are 11% below those of a year earlier, the end-June London Metal Exchange (LME) cash price of \$1,285 a metric ton (mt) was 25% below its peak last August. Despite surplus conditions, reported stocks are not rising and it is believed that significant tonnage is being stored off-warrant. Demand remains strong in the US and Europe, and there are continuing production problems in some producing countries. Prices are expected to remain weak during the traditional summer slowdown and could consolidate around the \$1,300 level. Prices would be buoyed by good news out of Asia, but emerging signs of a demand slowdown in the US and Europe will put downward pressure on prices.

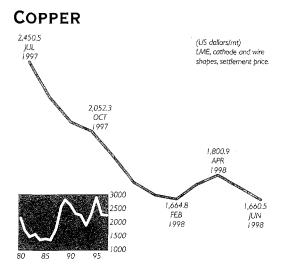
LME stocks fluctuated during the quarter, and had fallen by 2.3% by end-June to 533,000 mt. Stocks fell toward the 500,000 mt mark in July, normally a level that signals market tightness and rising prices. However, with fund selling and bearish sentiment about Japan and the rest of Asia, prices fell lower in early July before starting to recover. And some of the reported drawdowns are thought to be simply a transfer to off-warrant stockpiles. Contango of cash to three-month prices has made stock financing profitable, supporting the view that unreported stocks have been building in

recent months, more so in Europe, where Russian supplies are more readily available, than in the US.

World consumption of primary aluminum fell in the first half of the year, with strong demand in the US and Europe more than offset by double-digit declines in Japan and the rest of Asia. While demand remained strong in the US, growth is thought to have slowed in the second quarter. Construction and aerospace continue to grow strongly, but exports to Asia have fallen. Second-quarter growth is also thought to have slowed in Europe, although robust economic activity is keeping demand high. Demand has fallen sharply in Japan mainly due to the slump in the auto and construction sectors. The situation is even worse in the Republic of Korea, with demand estimated to have fallen as much as 30%, mainly on large declines in auto and machinery output.

World production rose more than 3% in the first half of the year, with the largest increases occurring in Europe and Australia. A number of weather-related production problems have affected supply and will offset some of the growth that had been expected in the second half of the year. Droughts have reduced hydroelectric power supplies to plants in Cameroon, Ghana, and Indonesia, and Indal continues to suffer from power supply problems in India.

For the second half of the year supplies are expected to continue to outstrip demand with the commissioning of new smelting capacity and the reactivation of idle capacity. An expected slowdown in US demand and the continuing slump in Asia should keep prices weak into next year. Any price increases in the near term should be capped by producers selling into price rallies and strong active fund activity. If prices do recede later, they are not expected to fall too much below \$1,300, the level at which production cutbacks would be contemplated. In the short term, however, output is unlikely to be cut because that has the immediate effect of raising unit costs.



#### PRICES TO REMAIN WEAK ON SLOWING DEMAND

Copper prices were 2% higher than in the first quarter, mainly a consequence of a tight market and a price rally in April. Falling stocks and strong demand in Europe and the US lifted prices to a high of \$1,880/mt in April. However, fund selling and the worsening economic situation in Asia helped push prices to \$1,620/mt by the end of June, near the lows of the first half of the year. First-half prices were 30% lower than a year earlier, while the end-June price was 40% below the highs of June 1997.

Demand remains strong in Europe and the US, but weak markets in Asia have put downward pressure on prices. In Europe strong growth in the automotive sector and buoyant economies generally are lifting copper demand. US demand has also been strong from the construction and automotive sectors, although demand is likely to have tailed off with the General Motors strike. US copper demand is expected to slow as rising imports of manufactured goods from Asia affect US production.

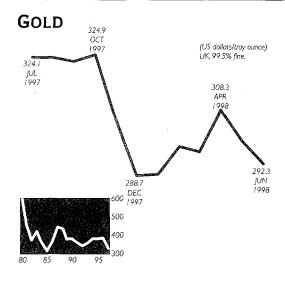
The strong demand pulled large volumes out of inventory in the second quarter, particularly in Europe, where stocks have fallen substantially this year. Total LME stocks fell more than 25% in the second quarter to just under 250,000 mt. There are suspicions that some material is being kept off-warrant, especially in Europe, partly in an effort to keep

supplies tight and premiums at high levels. US stocks have been rising in expensive west coast facilities, likely indicating weakness in the market.

Recessions in Japan and other Asian countries have cut sharply into demand for copper, particularly by the automotive, construction, and manufacturing sectors. In Japan both weak domestic demand and sluggish exports to other Asian countries have curtailed the need for copper. In the Republic of Korea and the other crisis countries in Asia, domestic demand is much weaker, but more competitive manufacturing exports are helping to support copper demand in the region.

A number of production problems and shortages of recycled scrap have helped keep the market in relatively good balance. A 19day strike reduced output from Codelco's Chuquicamata division in Chile, and problems in Russia and Zambia have also reduced production there. Railway bottlenecks in the US southwest affected supplies earlier this year, but the congestion has since eased, alleviating some of the tightness in the US market. Low prices have reduced the availability of scrap metal, especially in the US, causing some smelters and refineries to curtail production one even closed down. Also in response to low prices China announced that it will shut down money-losing mines and smelters this year. This should not affect the market significantly, however, because demand in China is also slowing.

The market is expected to tip into surplus in the second half of the year because of weak or slowing demand in most regions outside of Europe and continued growth in world supplies from new mining developments. Thus there appears to be limited upside potential for prices. Even continued tightness in Europe should not exert too much pressure, given ample stocks elsewhere and the increasingly bearish outlook for demand. Shortages of concentrates and scrap could affect refined copper production (and smelter operations), but rising mine output will ease the supply of raw materials.



## PRICES FALL ON WEAK ASIAN DEMAND

Gold prices averaged nearly \$300 per troy ounce (toz) in the second quarter, up 2% from the first quarter, but 13% lower than a year ago. A small rally drove prices to \$313/toz in April, but prices have been under \$300/toz for much of this year.

Demand has been extremely weak in Asia, and production continues to grow. Marked weaknesses in the South African rand and the Australian dollar have also encouraged producer hedge selling. Nervousness about future central bank sales and a strong US dollar has intensified the bearish market sentiment. Prices are expected to remain under \$300 and could reach new lows, depending on the extent of the economic slowdown in Asia.

Demand in Asia plummeted in the first quarter in response to large currency devaluations and the selling of metal back to the market for badly needed dollars. Demand in the 25 countries monitored by the World Gold Council fell 55% in the first quarter, to 342.1 mt. Demand in developing countries fell 70% to 177.8 mt, accounting for all of the net drop in demand. The government-sponsored gold collection campaign in the Republic of Korea netted sales of 243 mt, and private sector sales in Indonesia shed 64 mt. Thailand, a net seller in the fourth quarter of 1997, became a net buyer in the first quarter of 1998. Demand was lower in other Asian

countries, but it did rise a healthy 17% in India—the world's largest consuming country. Demand was also up 50% in Dubai. Demand was flat in the industrial countries because of a 40% decline in Japan, where gold sales felt the effects of the recession and the depreciation of the yen. Strong growth of 15% in Europe and 10% in the US offset the decline.

Gold production rose 4.5% in the first quarter with increases in all producing countries except South Africa, where output fell 4%. The largest increases in output were in Latin America and Australia, both up well over 10%.

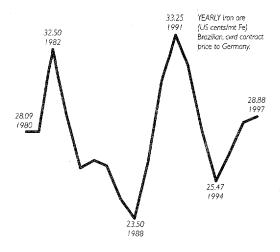
European Central Bank (ECB) President Wim Duisenberg said in early July that the new ECB will hold 15% of its foreign exchange reserves in gold—approximately 900 mt at current prices—when it takes over monetary policy for its 11 members on January 1, 1999. He noted that the ECB would have to approve "all operations in foreign reserve assets" remaining in European central banks, including about 12,000 mt of gold that will no longer be needed for the traditional purpose of backing currencies. While he did not indicate what would happen with these remaining reserves—equivalent to about five years of world production—his remarks leave open the possibility that some of the reserves will be sold.

Belgium and the Netherlands have sold about 800 mt of gold since 1996, and Argentina and Australia sold most of their gold reserves in 1997.

Gold prices have recently been tracking the dollar-yen exchange rate as traders gauge a recovery in Asian gold demand with appreciation of the yen. They feel that a stable yen will keep other Asian countries from sliding further into recession or devaluing their currencies.

The recession in many Asian countries is expected to keep prices weak. Any significant price rises are apt to be capped by producer selling and the possibility of gold reserve sales from central banks.

## IRON ORE AND STEEL



#### STEEL PRICES WEAKEN ON REDUCED ASIAN DEMAND

Steel prices fell nearly 5% in the second quarter in response to rising supplies and weak demand in Asia. Most main products posted even larger price declines, but these were offset by a 2.5% increase in the price of wire rod. The World Bank steel price index was 16% lower in the second quarter than a year earlier and nearly a third below the recent highs in the third quarter of 1995.

Demand has been strong in the US and Europe this year, particularly in the automotive and engineering industries, but rising exports from Asia are putting downward pressure on prices. The US Commerce Department levied antidumping duties of up to 34% on imports of stainless steel wire rod from the Germany, Italy, Japan, the Republic of Korea, Sweden, and Taiwan (China). In a preliminary ruling last September, the US International Trade Commission had found reasonable grounds to believe that the US was being harmed by steel imports from these countries. US producers have long accused foreign governments of illegally subsidizing their domestic companies.

Falling steel prices prompted Ispat International in June to request an immediate 6% reduction in the price it pays for iron ore under its annual fixed-price contract. The unusual move midway through the contract year reflects weak steel prices, particularly for scrap, and perhaps some displeasure with the annual

fixing of prices, which does not allow for flexibility in the event of a market downturn. Suppliers have reportedly refused the request.

Asia is the main source of the oversupply of steel. Domestic demand has fallen in most sectors, although shipbuilding still provides strong support. Since the financial crisis began, demand growth in Asia has been limited to China and Taiwan (China), and even these markets are beginning to soften. Despite production cuts by Asia's long and flat producers, supplies continue to outstrip demand and producer's have turned to export markets for relief. As currencies have depreciated in Asia, producers have become very aggressive in moving products into the US and Europe.

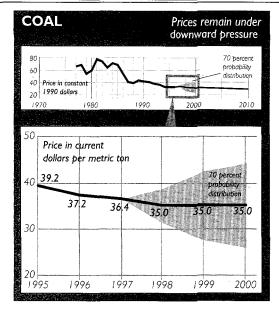
In the first half of the year world steel production was up 1.3% over the same period last year. Production was up 7% in France, Germany, and Italy and more than 6% in the three North American producers. Production fell 1.4% in Asia, and output was also lower in Brazil, Russia, and Ukraine.

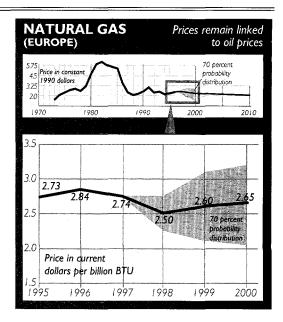
Despite the strength in US demand, the strike at General Motors affected markets, and an expected economic slowdown will curtail future demand. Prices will weaken further as the economy fails to absorb both rising domestic production and imports. European demand is also expected to weaken in the second half of the year, and the severe slump in the Asian crisis countries will continue. Even as Asia begins to recover, no immediate increases in steel demand are likely from such important consuming sectors as construction and infrastructure.

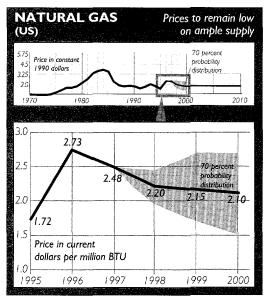
Supplies will continue to exceed demand in the foreseeable future as new capacity comes on stream in the US, Europe, and Asia. In addition, new capacity is contemplated in South Africa, which would further impede a recovery in prices in the next few years. Should the current economic slowdown deepen and widen, steel prices will be under severe downward pressure unless significant production cuts are made. Asian producers are expected to continue aggressively exporting steel until domestic demand recovers.

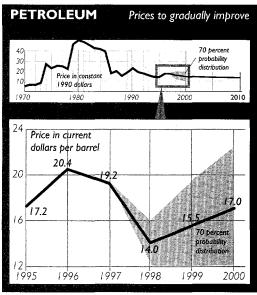
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## **ENERGY**

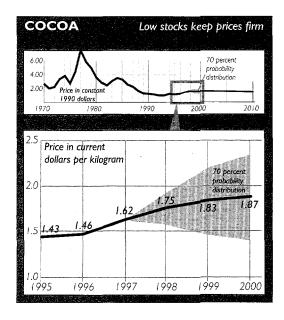


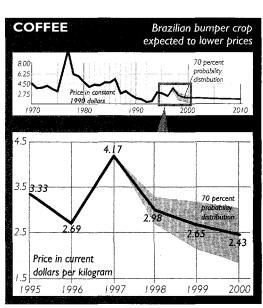


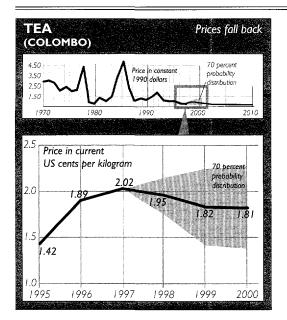


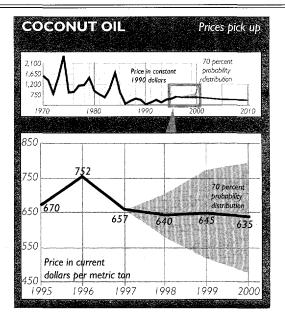


## **BEVERAGES**

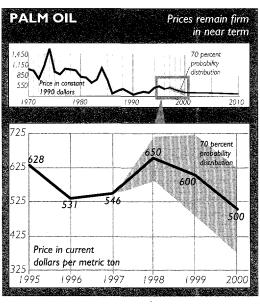


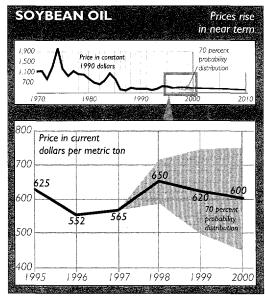




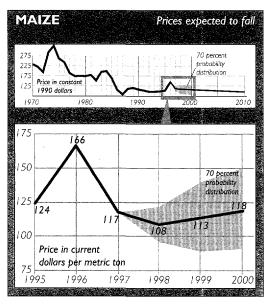


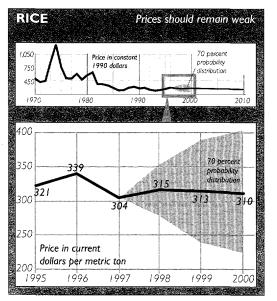




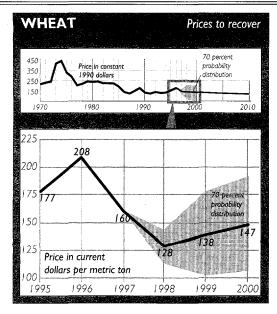


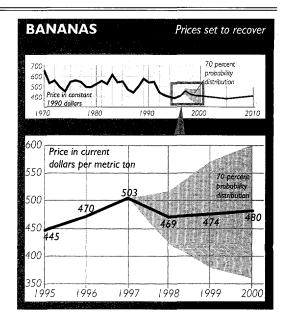


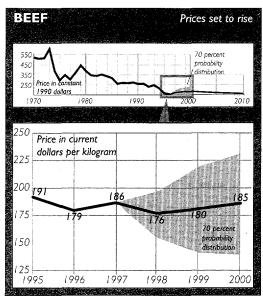


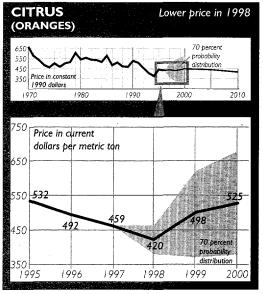


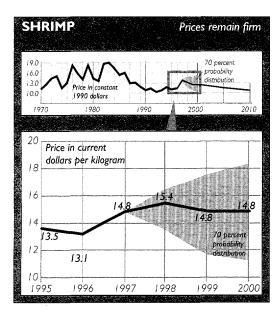
## OTHER FOOD

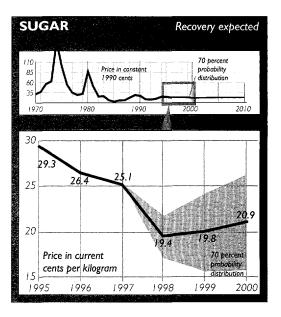


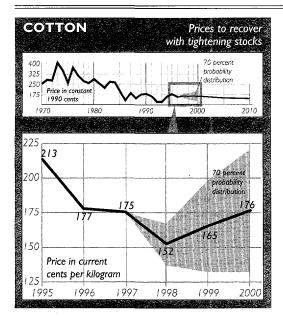


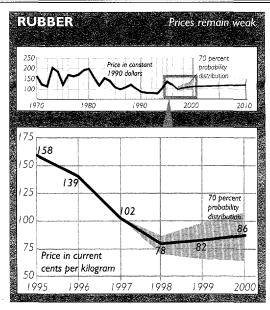




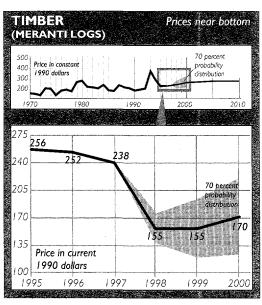


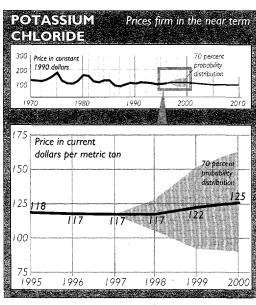




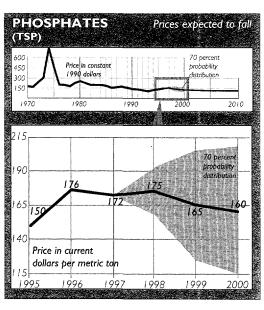


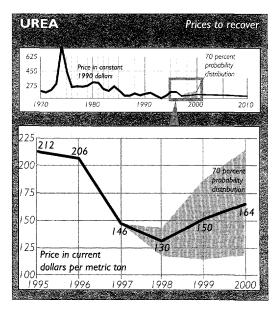
AGRICUL-TURAL RAW MATERIALS



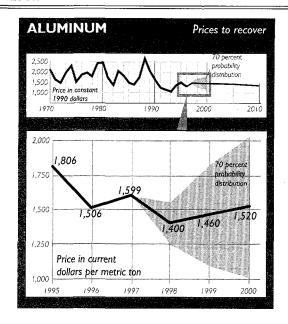


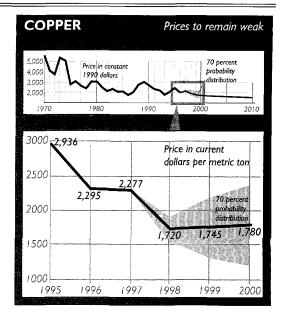


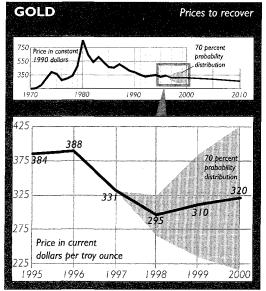




# METALS AND MINERALS







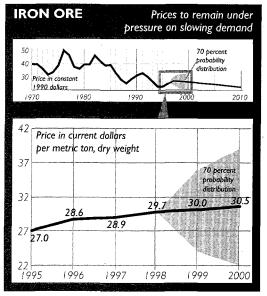


TABLE A1. COMMODITY PRICES AND PRICE PROJECTIONS IN CONSTANT 1990 DOLLARS

					Ac	tual					Short-terr projection		-	-term ections
Commodity	Unit	1970	1980	1985	1990	1994	1995	1996	1997	1998	1999	2'000	2005	2010
Energy														
Coal, US	\$/mt	_	59.88	67.96	41.75	33.10	32.87	32.65	33.64	33.18	32.75	31.93	30.16	28.45
Crude oil, avg. spot	\$/bbl	4.82	51.22	39.62	22.88	[4.4]	14.41	17.91	17.72	13.27	14.50	15.51	15.28	14.93
Natural gas, Europe	\$/mmbtu		4.72	5.39	2.55	2.22	2.29	2.50	2.53	2.37	2.43	2.42	2.21	2.13
Natural gas, US	\$/mmbtu	0.68	2.15	3.57	1.70	1.74	1.44	2.40	2.29	2.09	2.01	1.92	1.89	1.85
Beverages		240	2417	2207	1247	10.47	1000	1077	140.6	1.45.0	1710	1707	1422	1557
Cocoa	c/kg	269.1	361.7	328.6	126.7	126.7	120.2	127.7	149.6	165.9	171.2	170.6	163.3	155.7
Coffee, other milds	c/kg	457.2	481.6 450.6	470.9 386.0	197.2 118.2	300.1	279.5	236.4 158.4	385.2 160.5	282.5 175.4	248.0 164.7	221.7 161.5	204.3 149.6	188.5 136.5
Coffee, robusta Tea, auctions (3), avgª	c/kg c/kg	362.8 332.9	230.5	255.0	205.8	237.7 135.4	232.4 124.9	136.4	190.3	205.8	188.1	175.2	169.7	157.9
Tea, auctions (3), avg Tea, auctions (4), avg	c/kg	358.8	250.5	263.5	205.1	143.1	128.1	148.2	194.3	203.8 214.9 <sup>b</sup>	100.1	1/3.2	107.7	137.7
		330.0	230.1	203.3	200	1 15.1	120.1	1 10.2	171.3	21117				
Food Fats and oils														
Coconut oil	\$/mt	1,584	936.1	860.2	336.5	551.2	561.7	659.3	607.1	606.8	603.5	579.4	535.6	507.8
Copra	\$/mt	896.5	629.0	562.6	230.7	378.7	367.8	428.9	400.9	388.7	402.4	378.7	369.9	343.5
Groundnut meal	\$/mt	407.4	333.9	211.7	184.8	152.7	141.4	186.6	204.3	118,5	191.8	194.3	185.0	183.5
Groundnut oil	\$/mt	1,509	1,193	1,319	963.7	928.0	831.2	787.1	933.9	853.3	748.6	702.6	621.9	583.1
Palm oil	\$/mt	1,037	810.9	729.6	289.8	479.5	527.0	465.8	504.5	616.3	561.4	456.2	373.9	336.4
Soybean meal	\$/mt	409.0	364.6	229.1	200.2	174.6	165.2	234.7	254.9	161.2	151.6	164.2	203.5	194.1
Soybean oil	\$/mt	1,142	830.2	833.7	447.3	558.6	524.4	483.8	522.0	616.3	580.1	547.5	484.9	440.2
Soybeans	\$/mt	466.2	411.5	327.1	246.8	228.5	217.5	267.4	273.1	229.5	224.6	228.1	251.7	243.2
Grains														
Maize	\$/mt	232.9	174.0	163.6	109.3	97.6	103.6	145.5	108.2	102.4	105.7	107.7	105.9	98.5
Rice, Thai, 5%	\$/mt	503.6	570.6	287.0	270.9	242.8	269.2	297.3	280.5	298.7	292.9	282.9	273.2	263.3
Sorghum	\$/mt	206.5	179.0	150.1	103.9	94.3	99.8	131.6	101.3	99.4	102.6	104.5	102.7	95.6
Wheat, US, HRW	\$/mt	218.9	240.0	198.0	135.5	135.9	148.5	182.1	147.4	121.4	129.1	134.1	138.2	126.5
Other food	<i>~</i> / ·	442.2	F24.1	5510	F 40.0	200.1	272.4	4100		4447	442.5	120.0	4101	277.4
Bananas	\$/mt	662.2 520.1	524.1 383.4	551.0 314.0	540.9 256.3	399.1	373.4	412.0	464.6	444.7	443.5	438.0	410.1 177.9	377.6 170.4
Beef, US Oranges	c/kg \$/mt	670.0	556.0	580.7	531.1	211.7 373.2	60.0 445.8	156.6 431.3	171.5 424.2	66,9 398.2	168.4 466.0	16.8.8 479.0	455.2	430.9
Shrimp	c/kg	1,108	1,421	1,529	1,079	1,186	1,136	1,151	1,365	1,460	1,385	1,350	1,268	1,185
Sugar, world	c/kg	32.79	87.75	13.04	27.67	24.22	2 <del>4</del> .56	23.12	23.17	18.39	18.56	19.11	21.71	21.33
Agricultural raw m	aterials													•
Timber														
Logs, Malaysia	\$/m <sup>3</sup>	172.0	271.6	177.4	177.2	2 <b>7</b> 9.1	214.4	221.2	220.2	147.0	145.0	155.1	185.0	206.2
Logs, Cameroon	\$/m <sup>3</sup>	171.5	349.7	253.4	343.5	299.7	284.8	238.3	237.9	233.2	219.9	232.7	277.4	305.8
Sawnwood, Malaysia	\$/m³	697.8	550.2	447.5	533.0	745.0	620.7	650.4	614.2	443.7	449.1	492.7	579.0	647.1
Other raw materials	11	2407	2045	100.1	1010		170.5	155 /	1415					
Cotton	c/kg	269.7	286.5	192.1	181.9	160.0	178.5	155.6	161.5	144.1	154.4	160.6	157.6	147.2
Rubber, RSS I , Malaysia Tobacco	c/kg \$/mt	162.4 4,290	197.9 3,162	110.6 3,807	86.5 3,392	102.2 2,395	132.5 2,214	122.3 2,676	94.1 3,261	74.2 3,034	76.4 2,760	78.5 2,737	87.3 2,614	84.5 2,347
	ψ/11tc	1,270	3,102	5,007	5,572	2,373	2,217	2,070	3,201	٦,٠٠٠	2,700	2,737	2,017	2,537
Fertilizers	\$/mt	2152	2007	244.2	1714	15/0	1017	1070	1040	. 1007	1071	100.7	172.3	1437
DAP Phosphate rock	\$/mt \$/mt	215.3 43.9	308.7 64.9	246.3 49.4	171.4 40.5	156.8 29.9	181.7	187.0 34.2	184.8	189.6	187.1 40.2	180.7 39.2	162.3 35.4	143.6 32.7
Potassium chloride	\$/mt	127.6	160.8	122.4	98.1	29.9 95.9	29.4 98.8	34.2 102.6	37.9 107.7	40.8 110.5	113.7	39.2 114.1	35. <del>4</del> 103.9	32.7 93.7
TSP	\$/mt	171.5	250.4	176.9	131.8	119.9	125.5	154.3	158.9	165.9	154.4	146.0	125.3	110.8
Urea	\$/mt	191.4	308.6	198.7	157.0	134.2	177.4	180.3	135.0	123.3	140.4	149.6	143.3	136.8
Metals and mineral	ls	•												
Aluminum	\$/mt	2,217	2,023	1,517	1,639	1,340	1,515	1,321	1,478	1,327	1,366	1,387	1,427	1,404
Copper	\$/mt	5,645	3,032	2,066	2,661	2,094	2,463	2,013	2,104	1,631	1,633	1,624	1,632	1,600
Gold	\$/toz	143.5	844.7	463.4	383.5	348.4	322.3	340. I	306.0	279.7	290.1	292.0	277.4	263.1
Iron ore	c/dmtu	39.23	39.02	38.71	30.80	23.11	22.61	25.06	26.69	28.15	28.07	27.83	25.4!	23.25
Lead	c/kg	120.8	125.8	57.0	81.1	49.7	52.9	67.9	57.7	52.2	53.3	52.9	49.9	45.9
Nickel	\$/mt	11,348	9,056	7,140	8,864	5,752	6,902	6,580	6,403	4,74	4,772	4,836	5,328	5,085
Silver	c/toz	705.7	2866.9	895.2	482.0	479.5	435.5	454.7	452.2	554.7	538.0	520.1	466.4	419.6
Tin	c/kg	1,465	2,330	1,682	608.5	495.8	521.3	540.8	521.9	521.5	5 4.6	520.1	474.5	433.8
Zinc	c/kg	118.0	105.8	114.2	151.4	90.5	86.5	89.9	121.7	100.5	102.9	104.9	98.5	88.9

Note: Computed from unrounded data and deflated by MUV (1990=100). Forecast as of August 21, 1998. a. London tea auctions were discontinued on June 29, 1998. For details, see series description.

b. 1998 average for auctions (4) refers to January to June.

Source: World Bank, Development Economics, Development Prospects Group.

TABLE A2. COMMODITY PRICES AND PRICE PROJECTIONS IN CURRENT DOLLARS

					A	ctual			-		Short-ten projection	Long-term projections		
Commodity	Unit	1970	1980	1985	1990	1994	1995	1996	1997	1998	1999	2000	2005	2010
Energy														
Coal, US	\$/mt	_	43.10	46.63	41.75	36.48	39.19	37.21	36.39	35.00	35.00	35.00	37.50	40.00
Crude oil, avg. spot	\$/bbl	1.21	36.87	27.18	22.88	15.89	17.17	20.42	19.17	14.00	15.50	17.00	19.00	21.00
Natural gas, Europe	\$/mmbtu	_	3.40	3.70	2.55	2.44	2.73	2.84	2.74	2.50	2.60	2.65	2.75	3.00
Natural gas, US	\$/mmbtu	0.17	1.55	2.45	1.70	1.92	1.72	2.73	2.48	2.20	2.15	2.10	2.35	2.60
Beverages														
Cocoa	c/kg	67.5	260.4	225.4	126.7	139.6	143.2	145.6	161.9	175.0	183.0	187.0	203.0	219.0
Coffee, other milds	c/kg	114.7	346.6	323.1	197.2	330.8	333.2	269.4	416.8	298.0	265.0	243.0	254.0	265.0
Coffee, robusta	c/kg	91.0	324.3	264.9	118.2	262.0	277.1	180.6	173.6	185.0	176.0	177.0	186.0	192.0
Tea, auctions (3), avg <sup>a</sup> Tea, auctions (4), avg <sup>a</sup>	c/kg c/kg	83.5 90.0	165.9 180.2	175.0 180.8	205.8 205.1	49.2  57.7	148.9 152.7	166.1 168.9	206.0 210.2	217.0 226.7 <sup>b</sup>	201.0	192.0	211.0	222.0
, , -	UNE	70.0	100.2	100.0	205.1	157.7	132.7	100.7	210.2	220.7				
Food Fats and oils														
Coconut oil	\$/mt	397.2	673.8	590.2	336.5	607.5	669.6	751.6	656.8	640.0	645.0	635.0	666.0	714.0
Copra	\$/mt	224.8	452.7	386.0	230.7	417.3	438.5	488.9	433.8	410.0	430.0	415.0	460.0	483.0
Groundnut meal	\$/mt	102.2	240.3	145.3	184.8	168.3	168.6	212.8	221.0	125.0	205.0	213.0	230.0	258.0
Groundnut oil	\$/mt	378.6	858.8	904.9	963.7	1022.8	990.9	897.3	1010.4	900.0	0.008	770.0	773.3	820.0
Palm oil	\$/mt	260.1	583.7	500.6	289.8	528.4	628.3	530.9	545.8	650.0	600.0	500.0	465.0	473.0
Soybean meal	\$/mt	102.6	262.4	157.2	200.2	192.4	196.9	267.5	275.8	170.0	162.0	0.08	253.0	273.0
Soybean oil	\$/mt	286.3	597.6	572.0	447.3	615.6	625.1	551.5	564.8	650.0	620.0	600.0	603.0	619.0
Soybeans	\$/mt	116.9	296.2	224.4	246.8	251.8	259.3	304.8	295.4	242.0	240.0	250.0	313.0	342.0
Grains														
Maize	\$/mt	58.4	125.3	112.2	109.3	107.6	123.5	165.8	-117.1	108.0	113.0	118.0	131.7	138.5
Rice, Thai, 5%	\$/mt	126.3	410.7	196.9	270.9	267.6	321.0	338.9	303.5	315.0	313.0	310.0	339.8	370.3
Sorghum Wheat, US, HRW	\$/mt \$/mt	51.8 54.9	128.9 172.7	103.0 135.8	103.9 135.5	103.9 149.7	119.0 177.0	150.0 207.6	109.6 159.5	104.8 128.0	109.6 138.0	114.5 147.0	127.7 171.8	134.4 177.9
	φπιτ	3 1.7	172.7	155.5	133.3	1 12.7	177.0	207.0	137.3	120.0	130.0	1 17.0	171.0	177.2
Other food Bananas	\$/mt	166.1	377.3	378.1	540.9	439.8	445.1	469.6	502.7	469.0	474.0	480.0	510.0	531.0
Beef, US	c/kg	130.4	276.0	215.4	256.3	233.3	190.7	178.5	185.5	176.0	180.0	185.0	221.2	239.6
Oranges	\$/mt	168.0	400.2	398.4	531.1	411.3	531.5	491.7	459.0	420.0	498.0	525.0	566.1	605.9
Shrimp	c/kg	278.0	1,023	1,049	1,079	1,308	1,354	1,312	1,476	1,540	1,480	1,480	1,577	1,666
Sugar, world	c/kg	8.22	63.16	8.95	27.67	26.70	29.28	26.36	25.06	19.40	19.84	20.94	27.00	30.00
Agricultural raw m	aterials													
Timber														
Logs, Malaysia	\$/m <sup>3</sup>	43.1	195.5	121.7	177.2	307.6	255.6	252.1	238.3	155.0	155.0	170.0	230.0	290.0
Logs, Cameroon	\$/m³	43.0 175.0	251.7 396.0	173.9 307.0	343.5 533.0	330.3 821.0	339.5 740.0	271.6 741.4	257.4 664.5	246.0 468.0	235.0 480.0	255.0 540.0	3 <b>4</b> 5.0 720.0	430.0 910.0
Sawnwood, Malaysia	\$/m³	175.0	376.0	307.0	333.0	021.0	740.0	771.7	C.F00	+00.0	<del>1</del> 00.0	340.0	720.0	710.0
Other raw materials Cotton	c/kg	67.6	206.2	131.8	181.9	176.3	2   2.8	177,3	174.8	152.0	165.0	176.0	196.0	207.0
Rubber, RSS I, Malaysia	c/kg	40.7	142.5	75.9	86.5	112.6	158.0	139.4	101.8	78.3	81.6	86.0	108.5	118.8
Tobacco	\$/mt	1,076	2,276	2,612	3,392	2,639	2,639	3,051	3,529	3,200	2,950	3,000	3,250	3,300
Fertilizers														
DAP	\$/mt	54.0	222.2	169.0	171.4	172.8	216.6	213.2	199.9	200.0	200.0	198.0	201.8	202.0
Phosphate rock	\$/mt	11.0	46.7	33.9	40.5	33.0	35.0	39.0	41.0	43.0	43.0	43.0	44.0	46.0
Potassium chloride	\$/mt	32.0	115.7	84.0	98.1	105.7	117.8	116.9	116.5	116.5	121.5	125.0	129.3	131.8
TSP	\$/mt	43.0	180.3	121.4	131.8	132.1	149.6	175.8	171.9	175.0	165.0	160.0	155.8	155.8
Urea	\$/mt	48.0	222.1	136.3	157.0	147.9	211.5	205.5	146.1	130.0	150.0	164.0	178.2	192.4
Metals and mineral	s													
Aluminum	\$/mt	556	1,456	1,041	1,639	1, <del>4</del> 77	1,806	1,506	1,599	1,400	1,460	1,520	1,775	1,975
Copper	\$/mt	1,416	2,182	1,417	2,661	2,307	2,936	2,295	2,277	1,720	1,745	1,780	2,030	2,250
Gold	\$/toz	36.0	608.0	317.9	383.5	384.0	384.2	387.7	331.1	295.0	310.0	320.0	345.0	370.0
Iron ore	c/dmtu	9.84	28.09	. 26.56	30.80	25.47	26.95	28.57	28.88	29.69	30.00	30.50	31.60	32.70
Lead	c/kg	30.3	90.6	39.1	81.1	54.8	63.1	77.4	62.4	55.0	57.0	58.0	62.0	64.5
Nickel	\$/mt	2,846	6,519	4,899	8,864	6,340	8,228	7,501	6,927	5,000	5,100 575.0	5,300	6,625	7,150
Silver	c/toz	177.0 367.3	2,064 1,677	614.2 1,154	482.0 608.5	528.4 546.4	519.1 621.4	518.3 616.5	489.2 . 564.7	585.0 550.0	575.0 550.0	570.0 570.0	580.0 590.0	590.0 610.0
Tin Zinc	c/kg c/kg	367.3 29.6	76.1	78.3	608.5 151.4	99.8	103.1	102.5	131.6	106.0	110.0	115.0	122.5	125.0
Not available.	U Ng	27.0	7 0.1	, 0,5	151.1	77.0		. 02.0	131.0	. ,00.0	0.0			, 25.0

Note: Computed from unrounded data and deflated by MUV (1990=100). Forecast as of August 21, 1998. a. London tea auctions were discontinued on June 29, 1998. For details, see series description.

b. 1998 average for auctions (4) refers to January to June. Source: World Bank, Development Economics, Development Prospects Group.

TABLE A3. WEIGHTED INDEX OF COMMODITY PRICES IN CURRENT DOLLARS AND IN CONSTANT 1990 DOLLARS 1990=100

						Agricultu	ire					
		Nonenergy				For	od		Raw m	naterials		Metals
		commod-	Total		Total	Mark The Control of t		Other	Total raw			and
Year	Energy (100)	ities (100)²	agriculture (69.1)ª	Beverages (16.9) <sup>a</sup>	food (29.4)ª	Fats and oils (10.1) <sup>a</sup>	Grains (6.9)ª	foods (12.4)²	materials (22.8)ª	Timber (9.3)²	Fertilizers (2.7)ª	minerals (28.2)ª
AMERICAN PROPERTY AND ASSESSMENT OF THE PERSON OF THE PERS						Current de	ollars			<u>''''</u>		
1980	161.2	125.9	138.3	182.4	139.3	148.7	134.3	134.3	104.6	79.0	128.9	95.1
1985	118.8	91.4	100.2	164.1	86.3	113.0	89.2	62.8	70.8	59.1	89.0	70.2
1990	0.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	83.1	91.8	94.0	77.5	100.0	111.7	101.7	89.5	98.3	114.5	95.8	86.1
1993	73.6	91.4	98.8	83.6	98.6	111.5	93.7	90.7	110.3	152.4	83.7	73.9
1994	69.4	111.6	123.3	148.8	106.8	125.9	102.1	93.9	125.8	156.6	93.4	84.6
1995	75.I	122.2	131.3	151.2	116.9	136.6	120.4	98.8	135.2	139.5	103.6	101.6
1996	89.3	115.1	125.5	126.5	123.6	147.0	140.6	95.0	127.1	139.5	119.8	89.1
1997	83.8	117.6	128.7	171.0	116.1	147.7	112.1	92.4	113.7	125.8	119.7	90.2
1998	61.2	100.5	108.9	142.9	105.5	131.1	105.0	84.7	88.1	87.7	123.0	77.7
1999	67.8	99.7	107.3	133.7	105.0	124.7	108.2	87.1	90.6	89.7	118.2	79.4
2000	74.3	101.1	108.4	128.1	105.3	120.8	111.0	89.5	97.9	100.6	115.8	81.7
2005	83.0	114.4	123.7	136.0	119.0	138.6	124.5	99.7	120.8	134.4	114.2	91.6
2010	91.8	123.7	134.0	143.1	124.5	147.0	132.4	101.6	139.5	169.8	114.9	99.2
						Constant 199	0 dollars					
1980	223.9	174.9	192.2	253.4	193.5	206.6	186.6	186.6	145.3	109.8	179.1	132.1
1985	173.2	33.3	146.0	239.2	125.8	164.7	130.1	91.5	103.3	86.1	129.8	102.3
1990	100.0	100.0	100.0	0.00	100.0	0.00 ا	100.0	100.0	100.0	100.0	100.0	100.0
1992	78.0	86.1	88.1	72.6	93.8	104.7	95.4	84.0	92.2	107.3	89.8	80.8
1993	69.2	85.9	92.9	78.6	92.7	104.9	88.1	85.3	103.7	143.3	78.7	69.5
1994	63.0	101.3	111.9	135.0	96.9	114.3	92.6	85.2	114.2	142.1	84.7	76.8
1995	63.0	102.5	110.2	126.8	98.1	114.6	0.101	82.9	113.4	117.1	86.9	85.2
1996	78.3	101.0	1   0.	110.9	108.5	129.0	123.3	83.3	111.5	122.4	105.1	78.2
1997	77.5	108.7	119.0	158.1	107.3	136.6	103.6	85.4	105.1	116.3	110.7	83.4
1998	58.0	95.3	103.2	135.5	100.0	124.3	99.6	80.3	83.5	83.2	116.6	73.6
1999	63.4	93.3	100.4	125.1	98.3	116.7	101.2	81.5	84.8	83.9	110.6	74.3
2000	67.8	92.3	98.9	116.8	96.1	110.2	101.2	81.7	89.3	91.8	105.7	74.6
2005	66.8	92.0	99.5	109.3	95.7	111.5	100.1	80.2	97.2	108.1	91.8	73.6
2010	. 65.3	87.9	95.3	8.101	88:5	104.5	94.1	72.2	99.2	120.7	81.7	70.5

Note: Figures for 1998-2010 are projections, Weights used are the average 1987-89 export values for low- and middle-income economies. Forecast as of August 21, 1998. a. Percentage share of commodity group in nonenergy index.

Source: World Bank, Development Economics, Development Prospects Group.

TABLE A4. INFLATION INDICES FOR SELECTED YEARS

	G-5 MI	JV indexª	US GDI	P deflator
Year	1990=100	% change	1990=100	% change
1980	71.98		64.53	
1985	68.61	-0.95	83.76	5.36
990	100.00	7.83	100.00	3.61
1991	102.23	2.23	103.95	3.95
1992	106.64	4.31	106.84	2.77
1993	106.33	-0.29	109.66	2.64
1994	110.21	3.65	112.28	2.39
1995	119.21	8.17	115.13	2.54
1996	113.99	-4.38	17.75	2.27
1997	108.19	-5.09	120.09	1,99
1998	105.47	-2.52	122.01	1.60
1999	106.87	1.32	124.32	1.90
2000	109.60	2.56	127.43	2.50
2005	124.35	2.56	141.80	2.16
2010	140.62	2.49	157.33	2.10

Note: Figures for 1998–2010 are projections. For 1997, US GDP deflator is actual; MUV is a preliminary estimate. Forecast as of May 6, 1998. Growth rates for years 1985, 1990, 2000, 2005 and 2010 are compound annual rates of change between adjacent end-point years; all others are annual growth rates from the previous year. a. Unit value index in US dollar terms of manufactures exported from the G–5 countries (France, Germany, Japan, UK, and US), weighted proportionally to the countries' exports to the developing countries.

Source: G-5 MUV index, G-5 GDP/GNP deflator, and G-7 CPI: World Bank, US GDP deflator; US Department of Commerce.

August 1998 37

TABLE A5. COMMODITY PRICE PROBABILITY DISTRIBUTIONS IN CONSTANT 1990 DOLLARS

		70% probability distribution									
Commodity	Unit	1998	1999	2000	2005						
Energy											
Coal, US	\$/mt	29.87-36.50	25.73-39.77	23.72-40.15	18.90-41.42						
Crude oil, avg. spot	\$/bbl	11.38-15.17	10.76-18.25	10.49-20.53	8.85-21.71						
Natural gas, Europe	\$/mmbtu	2.13–2.61	1.97–2.90	1.87-2.92	1.45-2.98						
Natural gas, US	\$/mmbtu	1.85–2.32	1.59-2.53	1.37–2.46	1.13–2.65						
Beverages	***************************************										
Cocoa	¢/kg	149-183	137–206	128–214	114-212						
Coffee, other milds	¢/kg	254–311	198-297	166–276	143–266						
Coffee, robusta		158–193	132–198	121–203	105-195						
Tea, auctions (3), avg.	¢/kg ¢/kg	185–175	151–226	131–219	119–220						
	A KB	105-226	. 131-220	131-217	117-220						
Food Fats and oil											
	C /	F4/ //7	402 704	424 724	274 (0)						
Coconut oil	\$/mt	546667	483-724	434–724	374696						
Copra	\$/mt	350-428	322–483	284–474	259-481						
Groundnut meal	\$/mt	107–130	153–230	146–243	129–240						
Groundnut oil	\$/mt	768–939	599–898	527–879	435–808						
Palm oil	\$/mt	555–678	449-674	342–570	262–487						
Soybean meal	\$/mt	145–177	122–182	123–205	142–265						
Soybean oil	\$/mt	555–678	464–696	411–684	339–630						
Soybeans	\$/mt	207–252	180–269	171–285	176–328						
Grains											
Maize	\$/mt	90-115	82-130	82-136	69–148						
Rice,Thai, 5%	\$/mt	263–335	223–363	204–368	164–383						
Sorghum	\$/mt	87–JTI	80-126	79-132	67-144						
Wheat, US, HRW	\$/mt	107–136	96–165	97–174	86–193						
Other food											
Bananas	\$/mt	400-489	355-532	328-547	287-534						
Beef, US	¢/kg	147-187	132-205	127-211	119-237						
Oranges	\$/mt	358-438	345-578	345-618	305605						
Shrimp	¢/kg	1,280-1,564	1,093-1,639	1,026-1,674	888-1,649						
Sugar, world	¢/kg	16.19-20.60	14.57-22.56	14.33-23.88	14.55-28.88						
Agricultural raw material	s										
Timber	-										
_ogs, Malaysia	\$/m <sup>3</sup>	129-165	110-180	112199	111-259						
ogs, Cameroon	\$/m <sup>3</sup>	205261	163-277	163302	161-394						
Sawnwood, Malaysia	\$/m <sup>3</sup>	390-497	341-557	355–631	347-811						
Other raw materials											
Cotton	¢/kg	130-159	124-185	120-201	110205						
Rubber, RSS I., Malaysia	¢/kg	67–82	61–92	58–98	61-113						
Горассо	\$/mt	2,731–3,337	2,167–3,354	2,053–3,422	1,751-3,476						
Fertilize <b>r</b> s											
DAP	\$/mt	171209	142-232	130-235	105-219						
Phosphate rock	\$/mt	36–46	31–50	28–51	23–48						
rnospnate rock Potassium chloride <sup>a</sup>		99–122	31–30 86–141	82-148	23–46 62–146						
rotassium chionde" TSP	\$/mt	149183	117–191	105-190	75–175						
Jrea	\$/mt \$/mt .	111–136	107-174	105–190	75–175 86–201						
	Ψ/11/1 .	111-130	107-17-	100-175	00-201						
Metals and minerals Aluminum	\$/mt	1,185–1,470	1,025–1,708	922–1,852	856–1,998						
	•			· ·							
Copper	\$/mt	1,460-1,801	1,226–2,040	1,095–2,153	965–2,292						
Gold	\$/toz	251–308	220–360	196–388	169–386						
ron ore	¢/dmtu	28.15–28.15	22.46–33.69	20.07–35.58	16.89-33.78						
_ead	¢/kg	46–58	40-66	36–70	30–70						
Vickel	\$/mt	4,219–5,262	3,556–5,989	3,239–6,432	3,1977,459						
Silver	⊄/toz	498–612	402–674	347–693	280–653						
Γin	¢/kg	465–578	384–646	347–693	281667						
Zinc	¢/kg	90-111	77-129	70-140	59-138						

Note: Forecast as of August 21, 1998.
a. Also known as muriate of potash.
Source: World Bank, Development Economics, Development Prospects Group.

TABLE A6. COMMODITY PRICE PROBABILITY DISTRIBUTIONS IN CURRENT DOLLARS

		70% probability distribution								
Commodity	Unit	1998	1999	2000	2005					
Energy										
Coal, US	\$/mt	31.50-38.50	27.50-42.50	26.00-44.00	23.50-51.50					
Crude oil, avg. spot	\$/bbl	12.00-16.00	11.50-19.50	11.50-22.50	11.00-27.00					
Natural gas, Europe	\$/mmbtu	2.25–2.75	2.10–3.10	2.05-3.20	1.80-3.70					
Natural gas, US	\$/mmbtu	1.95-2.45	1.70-2.70	1.50-2.70	1.40–3.30					
-	флинош	1.75 2.15	1.70 2.70	1.50 2.70	1.10 3.30					
<b>Beverages</b> Cocoa	<b>¢</b> /kg	158-193	146–220	140-234	142–264					
Coffee, other milds	. •	268–328	212–317	182–303	178–331					
	¢/kg									
Coffee, robusta	¢/kg	167–204	141–212	133-222	130-242					
Tea, auctions (3), avg.	<b>¢</b> /kg	195–239	161–241	144–240	148–274					
Food	>									
Fats and oil										
Coconut oil	\$/mt	576704	516–774	476–794	466–866					
Copra	\$/mt	369 <del>–4</del> 51	344–516	311–519	322–598					
Groundnut meal	\$/mt	113-138	164-246	160-266	161-299					
Groundnut oil	\$/mt	810-990	640-960	578–963	541-1,00					
Palm oil	\$/mt	585-715	480–720	375–625	326-605					
Soybean meal	\$/mt	153–187	130-194	135–225	177–329					
••			496–744		422-784					
Soybean oil	\$/mt	585-715		450–750						
Soybeans	\$/mt	218–266	192–288	188–313	219–407					
<b>Grains</b> Maize	# /	OE 131	88–139	00 140	97 194					
	\$/mt	95-121		90-149	86-184					
Rice,Thai, 5%	\$/mt	277–353	238–388	223–403	204–476					
Sorghum	\$/mt	92-117	85-135	87–1 <del>44</del>	83–179					
Wheat, US, HRW	\$/mt	113-143	102-177	106–191	107–241					
Other food										
Bananas	\$/mt	422-5 6	379–569	360–599	357–664					
Beef, US	¢/kg	155–197	141-219	139–231	148–294					
Oranges	\$/mt	378 <del>–4</del> 62	369-618	378-677	379-753					
Shrimp	¢/kg	1,350-1,650	1,168-1,752	1,125-1,835	1,104-2,05					
Sugar, world	¢/kg	17.07-21.73	15.57-24.11	15.71-26.18	18.09-35.9					
Agricultural raw materials										
Timber										
Logs, Malaysia	\$/m <sup>3</sup>	136-174	118-192	122-218	138-322					
Logs, Cameroon	\$/m <sup>3</sup>	216-276	174-296	179-332	200-490					
Sawnwood, Malaysia	\$/m <sup>3</sup> .	412-524	365-595	389-691	432-1,00					
Other raw materials										
Cotton	¢/kg	137–167	132-198	132-220	137-255					
Rubber, RSS1, Malaysia	¢/kg	70–86	65–98	64-107	76-141					
Tobacco	\$/mt	2,880-3,520	2,316–3,584	2,250–3,750	2,178-4,32					
Fertilizers	<b>4</b>	_,=====================================		2,200 0,100	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Perulizers DAP	⊈/m+	180 220	150 040	1/12 257	רלר וכן					
	\$/mt	180–220	152-248	143–257	131-272					
Phosphate rock	\$/mt	38–48	33–53	31–56	29–59					
Potassium chloride <sup>a</sup>	\$/mt	105–128	92-151	90–163	78–181					
TSP	\$/mt	158–193	125-205	115–208	93–218					
Urea	\$/mt	117-143	114-186	118–213	107249					
Metals and minerals										
Aluminum	\$/mt	1,250-1,550	1,095-1,825	1,010-2,030	1,065–2,48					
Copper	\$/mt	1,540-1,900	1,310-2,180	1,200-2,360	1,200-2,85					
Gold	\$/toz	265-325	235-385	215-425	210-480					
Iron ore	∉/dmtu	29.69–29.69	24.00–36.00	22.00–39.00	21.00-42.0					
Lead	¢/kg	49.00–61.00	43.00–71.00	39.00–77.00	37.20–86.8					
Nickel	\$/mt									
	-	4,450–5,550	3,800–6,400	3,550–7,050	3,975–9,27					
Silver	¢/toz	525–645	430–720	380–760	348-812					
Tin —	¢/kg	490–610	410690	380–760	350–830					
Zinc	¢/kg	95–117	82-138	77–153	74–172					

August 1998 39

Note: Forecast as of August 21, 1998, a. Also known as muriate of potash. Source: World Bank, Development Economics, Development Prospects Group.

TABLE A7. RECEN	т соммо	DITY PRIC	ES										
		F	Annual averd	iges '			Quai	rterly avera	ges		Мс	nthly aver	oges <sub>,</sub>
Commodity	Unit	Jan-Dec 1996	Jan-Dec 1997	jan-jun 1998		Apr–Jun 1997	Jul-Sep 1997	Oct–Dec 1997	Jan-Mar 1998	AprJun 1998	Apr 1998	May 1998	Jun · 1998
			-			-							
Energy Coal, Australia	\$/mt	38.07	35.10	31.36		35.21	36.36	34.05	32.24	30.49	31.18	30.28	30.00
Coal, US	\$/mt	37.21	36.39	35.00		36.84	35.26	35.66	35.24	34.76	34.88	3 <del>4</del> .76	34.63
Crude oil, average spot <sup>a</sup>		20.42	19.17	13.71		18.39	18.56	18.74	14.07	13.36	13.51	14.03	12.53
Brent <sup>a</sup>	\$/bbl	20.65	19.09	13.68		18.05	18.52	18.62	14.08	13.29	13.41	14.39	12.06
Dubai <sup>a</sup>	\$/bbl	18.54	18.10	12.26		17.52	17.67	17.87	12.44	12.08	11.79	12.79	11.67
West Texas Int. <sup>a</sup>	\$/bbl	22.07	20.33	15.17		19.59	19.50	19.73	15.69	14.64	15.32	14.90	13.71
Natural gas, Europe	\$/mmbtu	2.84	2.74	2.57		2.76	2.68	2.65	2.63	2.52	2.54	2.51	2.50
Natural gas, US	\$/mmbtu	2.73	2.48	2.21		2.16	2.50	2.80	2.18	2.24	2.42	2.14	2.17
Beverages													
Cocoa <sup>b</sup>	c/kg	145.6	161.9	171.0		161.0	169.9	172.5	167.8	174.2	172.0	178.1	172.3
Coffee	· ·												
Other Milds <sup>b</sup>	c/kg	269.4	416.8	340.5		511.7	419.7	371.4	377.5	303.5	331.5	303.6	275. <del>4</del>
Robusta <sup>b</sup>	c/kg	180.6	173.6	187.9		190.9	168.5	171.3	183.0	192.9	196.2	200.1	182.4
Tea													
Auctions (4), average <sup>b</sup>	c/kg	168.9	210.2	226.7		206.7	222.5	235.5	250.8	202.5	216.5	195.4	195.6
London auction <sup>b</sup>	c/kg	177.4	222.9	236.7		22 <b>4</b> .1	225.6	243.I	280.6	192.7	206.3	173.5	198.4
Food													
Fats and Oils													
Coconut oil <sup>b</sup>	\$/mt	751.6	656.8	616.3		667.0	593.0	609.7	565.0	667.7	618.0	723.0	662.0
Copra	\$/mt	488.9	433.8	390.2		436.3	395.7	406.0	375.7	404.7	380.0	420.0	414.0
Groundnut meal	\$/mt	212.8	221.0	125.8		248.7	220.7	175.7	137.3	114.3	116.0	114.0	113.0
Groundnut oil <sup>b</sup>	\$/mt	897.3	1010.4	958.7		988.7	1090.7	1077.0	0.1101	906.3	928.0	900.0	0.188
Palm oil <sup>b</sup>	\$/mt	530.9	545.8	662.8		549.3	509.0	556.3	650.3	675.3	688.0	705.0	633.0
Soybean meal <sup>b</sup>	\$/mt	267.5	275.8	185.8		291.7	257.3	266.7	209.7	162.0	165.0	162.0	159.0
Soybean oil <sup>b</sup>	\$/mt	551.5	564.8	645.5		544.0	544.7	636.3	637.0	654.0	662.0	671.0	629.0
Soybeans <sup>b</sup>	\$/mt	304.8	295.4	259.0		304.7	280.0	283.3	2,70.3	247.7	259.0	242.0	242.0
Grains													
Maize <sup>b</sup> Rice	\$/mt	165.8	117.1	10.0		118.4	110.4	117.0	[]4.[	105.8	107.1	106.1	104.3
Thai, 5% <sup>b</sup>	\$/mt	338.9	303.5	306.1		317.4	291.9	262.6	293.8	318.4	311.5	318.3	325.5
Thai, 35%	\$/mt	275.8	246.8	242.5		254.3	241.3	222.9	235.3	249.7	245.3	248.3	255.5
Thai, A1 special	\$/mt	232.7	210.4	194.0		217.8	209.3	189.5	188.2	199.8	196.8	197.0	205.5
Sorghum <sup>b</sup>	\$/mt	150.0	109.6	105.8		112.2	102.4	111.8	111.2	100.4	103.9	100.8	96.5
Wheat	4												
Canada	\$/mt	230.8	181.4	167.0		187.3	178.6	172.7	168.7	165.3	167.5	166.5	161.8
US, HRW <sup>b</sup>	\$/mt	207.6	159.5	132.6		168.2	146.2	148.7	138.7	126.6	130.2	128.9	120.6
US, SRW	\$/mt	187.4	143.7	20.9		147.6	137.3	139.2	129.1	112.6	118.3	112.3	107.2
Other food													
Bananas <sup>b</sup>	\$/mt	469.6	502.7	494.9		567.1	423.9	404.8	422.2	567.5	585.9	516.4	600.2
Beef	c/kg	178.5	185.5	178.7		189.3	180.0	181.7	181.3	176.1	180.2	177.3	170.8
Fishmeal	\$/mt	586.0	606.3	688.0		551.0	613.0	698.3	694.7	681.3	684.0	685.0	675.0
Lamb	c/kg	329.5	339.3	293.3		332.8	326.0	333.0	312.5	274.I	296.6	262.8	262.8
Oranges <sup>b</sup>	\$/mt	491.7	459.0	416.6		453.7	544.7	420.5	388.2	445.0	443.8	448.8	442.4
Shrimp	c/kg	1311.9	1476.3	1552.7		1464.4	1531.6	1516.5	1539.3	1566.2	1579.1	1591.7	1527.8
Sugar	- 10				*								
EU, domestic <sup>b</sup>	c/kg	68.31	62.72	59.76		63.59	60.49	60.50	59.94	59.59	60.91	59.11	58.74
US, domestic <sup>b</sup>	c/kg	49.29	48.36	48.60		47.81	48.93	48.52	48.05	49.15	48.81	49.19	49.45
World <sup>b</sup>	c/kg	26.36	25.06	21.71		24.86	25.17	26.27	23.57	19.85	21.34	20.35	17.86
Agricultural Raw M	laterials												
Logs Malaysia <sup>b</sup>	\$/m <sup>3</sup>	252.1	238.3	173.5		252.2	243.8	217.8	196.9	150.2	166.5	146.7	137.4
	\$/m <sup>3</sup>	252.1 271.6	256.5 257.4	173.5 247.7		259.6	245.6 246.8	255.0	246.0	249.4	246.6	252.0	249.5
Cameroon	۵/m² c/sheet	271.6 529.5	485.0	380.0		239.6 508.0	497.3	439.5	403.6	356.4	372.1	348.6	348.6
Plywood Sawnwood	Calleer	J <b>Z7</b> .J	U.Cor	300.0		200.0	т//.3	コンア・ン	402.0	JJULT	J/ Z. I	5 10.0	0.01 د
Malaysia <sup>b</sup>	\$/m <sup>3</sup>	741.4	664.5	475.6		747.4	650.0	509.4	474.6	476.7	506.0	472.7	451.4
,	\$/m <sup>3</sup>	540.8	567.5	545.5		576.6	566.4	578.3	561.6	529.3	537.3	526.3	524.4
Ghana													

TABLE A7. RECENT COMMODITY PRICES

			Annual avera	ges		Quai	terly avera	Monthly averages				
Commodity	Unit	jan-Dec 1996	Jan-Dec 1997	jan-jun 1998	Apr-Jun 1997	Jul-Sep 1997	Oct–Dec 1997	Jan–Mar 1998	Apr–Jun 1998	Apr 1998	May 1998	Jun 1998
Other Raw Materials												
Cottonb	c/kg	177.3	174.8	150.1	175.5	178.0	168.5	153.9	146.2	144.8	141.9	152.0
lute	\$/mt	457.5	304.6	251.0	324.0	287.2	242.3	243.3	258.8	256.3	260.0	260.0
, Rubber												
Malaysia <sup>b</sup>	c/kg	139.4	101.8	75.0	112.3	90.8	81.3	74.8	75.3	77.2	78.2	70.3
NY '	c/kg	160.7	121.6	92.4	128.6	114.9	103.3	92.8	92.0	91.0	94.0	91.1
Singapore	c/kg	140.9	101.0	73.2	111.0	90.8	80.8	73.1	73.4	73.5	76.5	70.2
Sisal	\$/mt	868.3	776.6	790.8	770.0	767.5	760.0	778.3	803.3	790.0	790.0	830.0
Wool	c/kg	416.3	430.3	362.5	442.6	441.4	412.9	374.3	350.8	358.2	356.7	337.4
Fertilizers												
DAP	\$/mt	213.2	199.9	199.9	199.8	199.2	200.1	194.6	205.3	201.8	. 204.8	209.1
Phosphate_rock <sup>b</sup>	\$/mt	39.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
Potassium chloride	\$/mt	116.9	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5
TSP <sup>b</sup>	\$/mt	175.8	171.9	174.2	172.5	165.1	168.7	172.5	175.9	173.7	176.3	177.5
Urea	\$/mt	205.5	146.1	128.8	147.6	131.2	128.9	128.5	129.0	135.7	130.7	120.7
Metals and Minerals												
Aluminum <sup>b</sup>	\$/mt	1505.7	1599.3	1413.2	1584.8	1637.7	1579.1	1463.0	1363.4	1418.2	1364.7	1307.2
Copper <sup>b</sup>	\$/mt	2294.9	2276.8	1715.9	2506.0	2269.7	1910.7	1700.4	1731.3	1800.9	1732.5	1660.5
Gold	\$/toz	387.7	331.1	297.0	343.0	323.6	306.6	294.2	299.9	308.3	299.1	292.3
ran are <sup>b</sup>	c/dmtu	28.57	28.88	29.69	28.88	28.88	28.88	29.69	29.69	29.69	29.69	29.69
Lead <sup>b</sup>	c/kg	77.4	62.4	54.2	62.5	62.6	56.3	53.6	54.8	57.3	54.4	52.8
Nickel <sup>b</sup>	\$/mt	7500.8	6927.4	5194.0	7287.0	6700.2	6155.1	5424.8	4963.2	5393.9	5020.0	4475.7
Silver	c/toz	518.3	489.2	598.0	475.6	453.3	526.2	624.8	571.2	628.9	558.7	526.1
Steel products (8) index <sup>c</sup> Steel		96.3	89.1	78.6	91.3	90.7	84.5	80.4	76.7	77.8	75.4	77.0
Cold rolled coilsheet	\$/mt	483.9	448.2	401.7	450.0	459.3	443.3	416.7	386.7	0.00	380.0	380.0
Hot rolled coilsheet	\$/mt	365.6	337.3	305.0	340.0	347.3	330.0	316.7	293.3	300.0	290.0	290.0
Rebar	\$/mt	360.2	325.2	278.3	340.0	324.0	306.7	296.7	260.0	260.0	250.0	270.0
Wire rod	\$/mt	438.5	382.7	332.5	393.3	397.3	346.7	328.3	336.7	340.0	330.0	340.0
Tin⁵	c/kg	616.5	564.7	558.1	566.4	545.6	557.8	530.9	585.3	571.5	587.5	597.0
Zinc <sup>b</sup>	c/kg	102.5	131.6	106.0	130.2	160.4	118.5	106.3	105.6	109.7	106.1	101.0
<b>W</b> orld <b>Bank</b> comm	odity price	indices fo		l middle inc 59.9	ome countri 80.4	•	•	<b>715</b>	50.4	50.1	(12	F40
Petroleum		89.3 115.1	83.8 117.6	103.5	126.0	81.1 115.9	81.9 109.4	61.5	58.4 101.0	59.1 104.2	61.3 101.3	54.8 97.5
Nonenergy Commoditi	es es	125.5	128.7		139.6	115.9	119.3		101.0		101.3	105.6
Agriculture			128.7	113.1	139.6			116.5		113.5	145.1	
Beverages Food		126.5 123.6	171.0	154.5 108.0	197.8	173.6 110.2	62.1   12.0	164.9 109.1	144.1 106.9	†52.4 [08.8	145.1	134.8
		123.6	116.1			110.2	146.3				135.8	
Fats and oils		147.0		136.3	151.8			140.0	132.5	134.3		127.6
Grains Other food			112.1	105.1	116.5 94.8	105.7	103.6	105.7	104.5	104.7	105.1	. 103.8
Other food		95.0	92.4	86.5		89.7	88.7	85.8	87.3	90.2	86.0	85.7
Raw materials		127.1	113.7	89.2	122.4	111.0	97.1	90.3	88.0	90.8	87.8	85.6
Timber		139.5	125.8	90.4	140.5	124.0	98.7	91.9	88.8	94.8	87.9	83.8
Other raw materials		118.7	105.5	88.4	1.0.1	102.1	96.1	89.2	87.5	88.0	87.7	86.8
Fertilizers		119.8	119.7	120.8	120.0	116.4	118.2	120.0	121.6	120.6	121.9	122. <del>4</del> 75.1
Metals and Minerals		89.1	90.2	78.1	93.1	91.3	84.1	78.7	77.4	79.7	77.6	

Note: Prices as of July 8, 1998. Monthly updates of commodity prices are available on the internet at http://www.worldbank.org/html/ieccp/ieccp.html

August 1998 41

a. Included in the petroleum index.

b. Included in the nonenergy index.

c. Steel not included in the nonenergy index.

Source: World Bank, Development Economics, Development Prospects Groups.

## COMMODITY DESCRIPTIONS

#### Energy

Coal (Australian), thermal, 12,000 btu/lb, less than 1.0% sulfur, 14% ash, f.o.b. piers, Newcastle/Port Kembla

Coal (US), thermal, 12,000 btu/lb, less than 1.0% sulfur, 12% ash, f.o.b. piers, Hampton Road/Norfolk

Crude oil (spot), average spot price of Brent, Dubai and West Texas Intermediate, equally weighed

Crude oil (spot), U.K. Brent 38° API, f.o.b. UK ports

Crude oil (spot), Dubai Fateh 32° API, f.o.b. Dubai

Crude oil (spot), West Texas Intermediate (WTI) 40° API, f.o.b. Midland Texas

Natural Gas (Europe), average import border price

Natural Gas (U.S.), spot price at Henry Hub, Louisiana

Cocoa (ICCO), International Cocoa Organization daily price, average of the first three positions on the terminal markets of New York and London nearest three future trading months

Coffee (ICO), International Coffee Organization indicator price, other mild Arabicas, average New York and Bremen/Hamburg markets, ex-dock

Coffee (ICO), International Coffee Organization indicator price, Robustas, average New York and Le Havre/Marseilles markets, ex-dock

Tea (Average 3 auctions, ), leaf at Calcutta auction, and all tea at Colombo and Nairobi/Mombassa auctions; arithmetic averages of weekly quotes

Tea (Average 4 auctions), quotations for the three auctions listed above, along with London auctions all tea; arithmetic averages of weekly quotes.

Tea (London auctions), all tea, arithmetic averages of weekly quotes. London auctions closed on June 29, 1998.

#### **Foods**

#### Fats and oils

Coconut oil (Philippines/Indonesian), bulk, c.i.f. Rotterdam Copra (Philippines/Indonesian), bulk, c.i.f. N.W. Europe

Groundnut meal (Argentine), 48/50%, c.i.f. Rotterdam

Groundnut oil (any origin), c.i.f. Rotterdam

Palm oil (Malaysian), 5% bulk, c.i.f. N.W. Europe

Soybean meal (any origin), Argentine 45/46% extraction, c.i.f. Rotterdam; prior to 1990, US 44%

Soybean oil (Dutch), crude, f.o.b. ex-mill

Soybeans (US), c.i.f. Rotterdam

#### Grains

Maize (US), no. 2, yellow, f.o.b. US Gulf ports

Rice (Thai), 5% broken, WR, milled, indicative market price based on weekly surveys of export transactions (indicative survey price), government standard, f.o.b. Bangkok

Rice (Thai), 35% broken, WR, milled, indicative survey price, government standard, f.o.b. Bangkok

Rice (Thai), 100% broken, A.1 Special, broken kernel obtained from the milling of WR 15%, 20%, and 25%, indicative survey price, government standard, f.o.b. Bangkok Sorghum (US), no. 2 mile yellow, f.o.b. Gulf ports

Wheat (Canadian), no. 1, Western Red Spring (CWRS), in store, St. Lawrence, export price

Wheat (US), no. 1, hard red winter, ordinary protein, export price delivered at the Gulf port for prompt or 30 days shipment

Wheat (US), no. 2, soft red winter, export price delivered at the Gulf port for prompt or 30 days shipment

#### Other foods

Bananas (Central & South American), first-class quality tropical pack, importer's price to jobber or processor, f.o.b. US ports

Beef (Australian/New Zealand), cow forequarters, frozen boneless, 85% chemical lean, c.i.f. US port (East Coast), ex-dock

Fishmeal (any origin), 64-65%, c&f Hamburg, nfs

Lamb (New Zealand), frozen whole carcasses, wholesale price, Smithfield market,

Oranges (Mediterranean exporters) navel, EEC indicative import price, c.i.f. Paris Shrimp (US), frozen, Gulf brown, shell-on, headless, 26 to 30 count per pound, wholesale price at New York

Sugar (EU), European Union negotiated import price for raw unpackaged sugar from African, Caribbean and Pacific (ACP) under Lome Conventions c.i.f. European

Sugar (US), import price, nearest future, c.i.f. New York

Sugar (world), International Sugar Agreement (ISA) daily price, raw, f.o.b. and stowed at greater Caribbean ports

#### Agricultural raw materials

#### Timber

Logs (Malaysian), meranti, Sarawak, sale price charged by importers, Tokyo; prior to February 1993, average of Sabah and Sarawak weighted by Japanese import

Logs (West African), sapelli, high quality (loyal and marchand), f.o.b. Cameroon Plywood (Southeast Asian), Lauan, 3-ply, extra,  $91 \text{ m}^3 \times 182 \text{ m}^3 \times 4 \text{ mm}$ , wholesale price, spot Tokyo

Sawnwood (Malaysian), dark red seraya/meranti, select and better quality, General Market Specification (GMS), width 6 inches or more, average 7 to 8 inches; length 8 inches or more, average 12 to 14 inches; thickness 1 to 2 inch(es); kiln dry, c&f UK ports

Sawnwood (Ghanaian), sapele, bundled, f.o.b. Takoradi

Woodpulp (Swedish), softwood, sulphate, bleached, air-dry weight, c.i.f. North Sea ports

#### Other raw materials

Cotton (cotton outlook, A index), middling 1-3/32 inch, c.i.f. Europe

Jute (Bangladesh), raw, white D, f.o.b. Chittagong/Chalna

Rubber (Malaysian), RSS no. 1, in bales, Malaysian Rubber Exchange & Licensing Board, midday buyers' asking price for prompt or 30 days delivery, f.o.b. Kuala

Rubber (any origin), RSS no. I, in bales, Rubber Traders Association (RTA), spot, New

Rubber (Asian), RSS no. I, in bales, Rubber Association of Singapore Commodity Exchange (RASCE)/ Singapore Commodity Exchange, midday buyers' asking price for prompt or 30 days delivery; prior to June 1992, spot, Singapore Sisal (East African), UG (rejects), c.i.f. UK

Wool (Dominion), crossbred, 56's, clean, c.i.f. UK

#### **Fertilizers**

DAP (diammonium phosphate), bulk, spot, f.o.b. US Gulf Phosphate rock (Moroccan), 70% BPL, contract, f.a.s. Casablanca Potassium chloride (muriate of potash), standard grade, spot, f.o.b. Vancouver TSP (triple superphosphate), bulk, spot, f.o.b. US Gulf Urea (varying origins), bagged, spot, f.o.b. West Europe

#### Metals and minerals

Aluminum (LME) London Metal Exchange, unalloyed primary ingots, high grade, minimum 99.7% purity, cash price

Copper (LME), grade A, minimum 99.9935% purity, cathodes and wire bar shapes, settlement price

Gold (UK), 99.5% fine, London afternoon fixing, average of daily rates

Iron ore (Brazilian), CVRD Southern System standard sinter fines (SSF), 64.2% Fe (iron) content (dry weight) ores, moisture content 6.5%, contract price to Europe, f.o.b. Tubarao. Unit dry metric ton unit (dmtu) stands for mt 1% Fe-unit. To convert price in cents/dmtu to \$/dmt SSF (dry ore), multiply by percent Fe content. For example, 28.88 cents/dmtu is \$18.54 /dmt SSF.To convert to wet mt SSF (natural or wet ore), multiply by percent Fe content by (1 minus percent moisture content). 28.88 cents/dmtu is \$17.34 /Wet mt SSF. Iron ore in most countries is traded in terms of dry mt, and shipped in wet mt. For 1989-96, Fe content was 64.3% and moisture content 6.9%

Lead (LME), refined, 99.97% purity, settlement price

Nickel (LME), cathodes, minimum 99.8% purity, official morning session, weekly average bid/asked price

Silver (Handy & Harman), 99.9% grade refined, New York

Steel products price index, 1990=100, (Japanese), composite price index for eight selected steel products based on quotations f.o.b. Japan excluding shipments to the United States and China, weighted by product shares of apparent combined consumption (volume of deliveries) at Germany, Japan and the United States. The eight products are as follows: rebar (concrete reinforcing bars), merch bar (merchant bars), wire rod, section (H-shape), plate (medium), hot rolled coil/sheet, cold rolled coil/sheet, and galvanized iron sheet

Tin (LME), refined, 99.85% purity, settlement price

Zinc (LME), special high grade, minimum 99.995% purity, weekly average bid/asked price, official morning session; prior to April 1990, high grade, minimum 99.95% purity, settlement price



## A World Bank Business Quarterly

Commodity Markets and the Developing Countries is produced by the Development Prospects Group of the Development Economics Vice Presidency of the World Bank. For information about the contents call Donald Mitchell at 202-473-3854 or fax 202-522-3564. The opinions expressed are those of the authors and should not be attributed in any manner to the World Bank, to its Board of Executive Directors, or to the countries they represent. It is published quarterly in February, May, August, and November. The annual subscription rate is \$150.00. Send subscription orders to World Bank Publications, Box 7247-7956, Philadelphia, PA 19170-7956, USA, telephone 201-476-2192

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1818 H Street, NW, Washington, DC 20433, USA
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Manufactured in the United States of America
Vol. 5, no. 4
ISSN 1020-0967
ISBN 0-8213-4329-7



