

# COMMODITY MARKETS

AND THE DEVELOPING COUNTRIES

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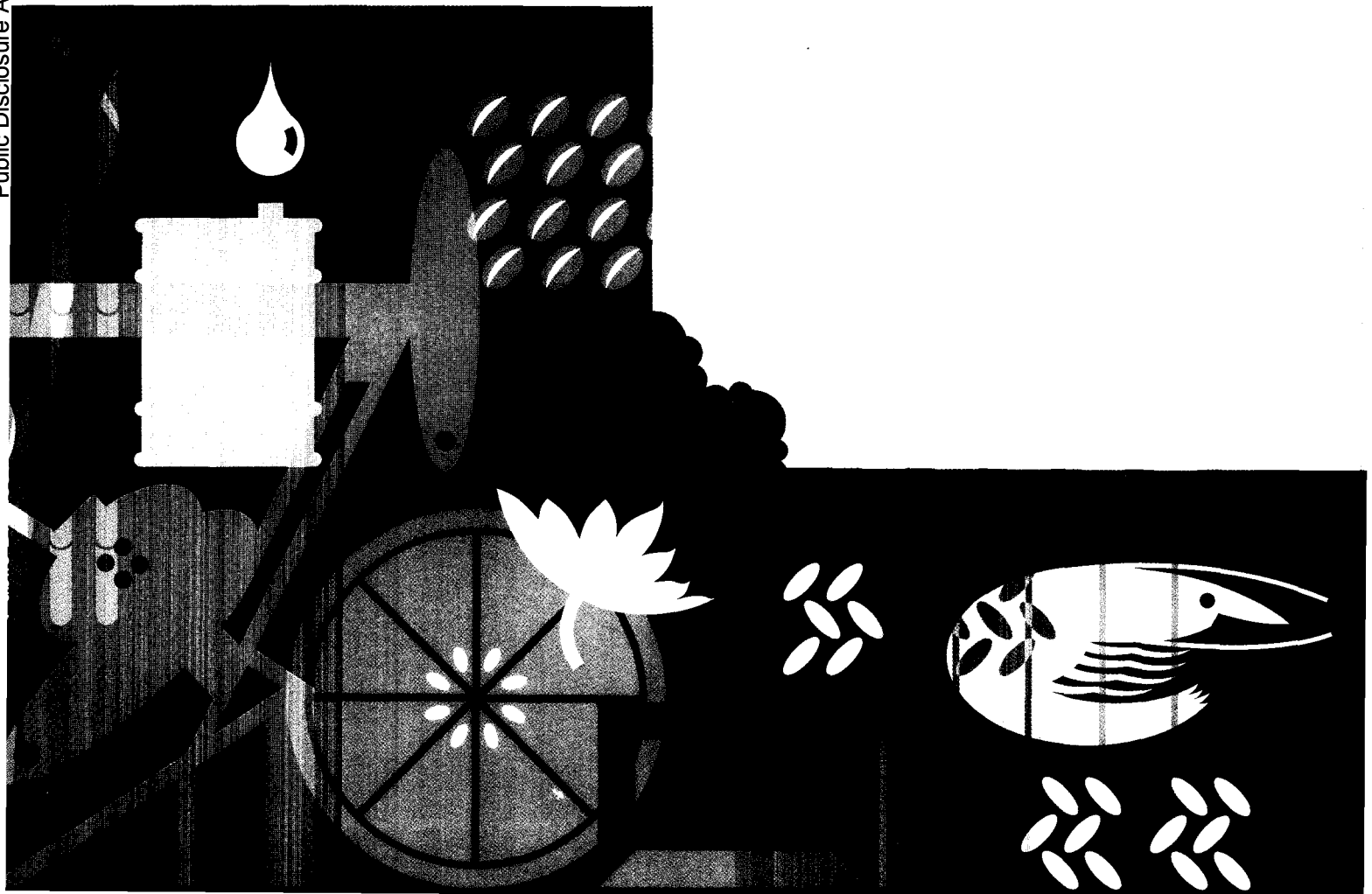
November

Beyond East Asia—the impact on Africa

Oil prices keep falling

Beverage prices drop 10.5%

Metals prices down 3.7%



To our readers:

This is our last issue of *Commodities Markets and the Developing Countries*. We thank you for your continued readership and support. In January, we will launch our new quarterly publication, *Global Commodity Markets*. It will include more comprehensive coverage on each commodity as well as several important new features. It will be published in a more timely manner, be available in electronic form, and include a monthly update. The new features will include a review of the global macroeconomic situation, coverage of ocean freight rates, regional commodity price indexes, and futures prices for some commodities. We will continue to present a Special Feature on issues of importance to commodity markets, such as the East Asian financial crisis.

*Global Commodity Markets* will feature a two-page design for each commodity that will provide a blend of historical and current information, as well as price forecasts. To provide more timely and up-to-date coverage of commodity markets, we will publish a monthly update that will include the most recent prices as well as a review of major developments during the month. The monthly update will be available to subscribers in electronic form. Our analysis will continue to focus on recent developments and their implication for nearby and long-term price trends.

Current subscribers to *Commodity Markets and the Developing Countries* will receive the quarterly report for the balance of their subscription. New subscribers will be able to receive both print and electronic versions of the quarterly report and the electronic version of the monthly update. Ordering information is included inside the back cover of this report.

Sincerely,



Donald Mitchell  
Senior Economist and Editor  
Commodity Markets and the Developing Countries

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■ **FERTILIZERS** PAGE 23

Prices remain relatively high despite the sharp downturn in grain prices.

**Commodity prices continue to decline. Energy prices are down 2.6% and nonenergy prices 5.7% in the third quarter.**

**CHANGE IN QUARTERLY PRICES, 2Q98 TO 3Q98**  
Percent

Energy	-2.6
Nonenergy	-5.7
Total agriculture	-6.5
Beverages	-10.5
Total food	-5.4
Fats and oils	-5.9
Grains	-6.8
Other foods	-3.2
Raw materials	-2.8
Timber	-3.4
Fertilizers	-0.3
Metals and minerals	-3.7

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## COMMODITY PRICES

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## SUMMARY

Commodity exporters worldwide have been hit hard by the more than year-long plunge in commodity prices, which has seen energy prices fall 29.2% and nonenergy prices fall 24.4% since the second quarter of 1997. The declines seem to go beyond what can be explained by the fundamentals of demand and supply, which suggests either a major change in expectations or a case of overshooting of prices.

Energy prices face the familiar situation of weak demand and rising inventories. OPEC producers have not yet cut production enough to balance the market, which leaves a surplus at current prices. Prices are expected to remain

depressed well into next year barring an extraordinary surge in demand or a major disruption in supplies.

Beverages prices were down 10.5% over the previous quarter and down 21.5% from the first quarter of 1998. The decline was concentrated in arabica coffee following a large South American crop, and in tea due to higher production in major exporting countries. Kenya and Sri Lanka, the two largest tea exporters, both had large crops and strong exports. Weak tea imports to the Russian Federation, due to the financial turmoil in that country, contributed to the fall in tea prices. Robusta coffee prices remained firm because of the reduced production in Asia and Africa because of El Niño.

Food prices were down more than 5% over the previous quarter as grains, soybeans, and sugar all tumbled. Grain production estimates were lowered, and prices seem to be below sustainable levels, but prices have yet to show strong signs of recovery. Soybean prices fell in response to the second consecutive year of large world production and rising stocks. Weak maize prices contributed to the decline in soymeal prices and the overall weakness in soybean prices. Sugar prices fell to 10-year lows, and there is little reason to expect prices to rally soon. Large stocks and a steady flow of sugar exports are expected over the next few months from Australia, Brazil, and South Africa. This will be met by weak demand from the traditionally large importers as such as China, India, and the Russian Federation.

Metals prices continued to fall, ending the quarter down 3.7%. Asian demand is down. Aluminum and copper demand are both expected to fall 10% in Japan in 1998 compared with 1997. The Republic of Korea has seen an even more severe decline, with copper demand down an estimated 20%. Precious metals have also seen demand fall, with gold demand down 28% in the first half of 1998 compared with the year-earlier level. India remains a bright spot for gold as demand is up 15% in 1998.

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

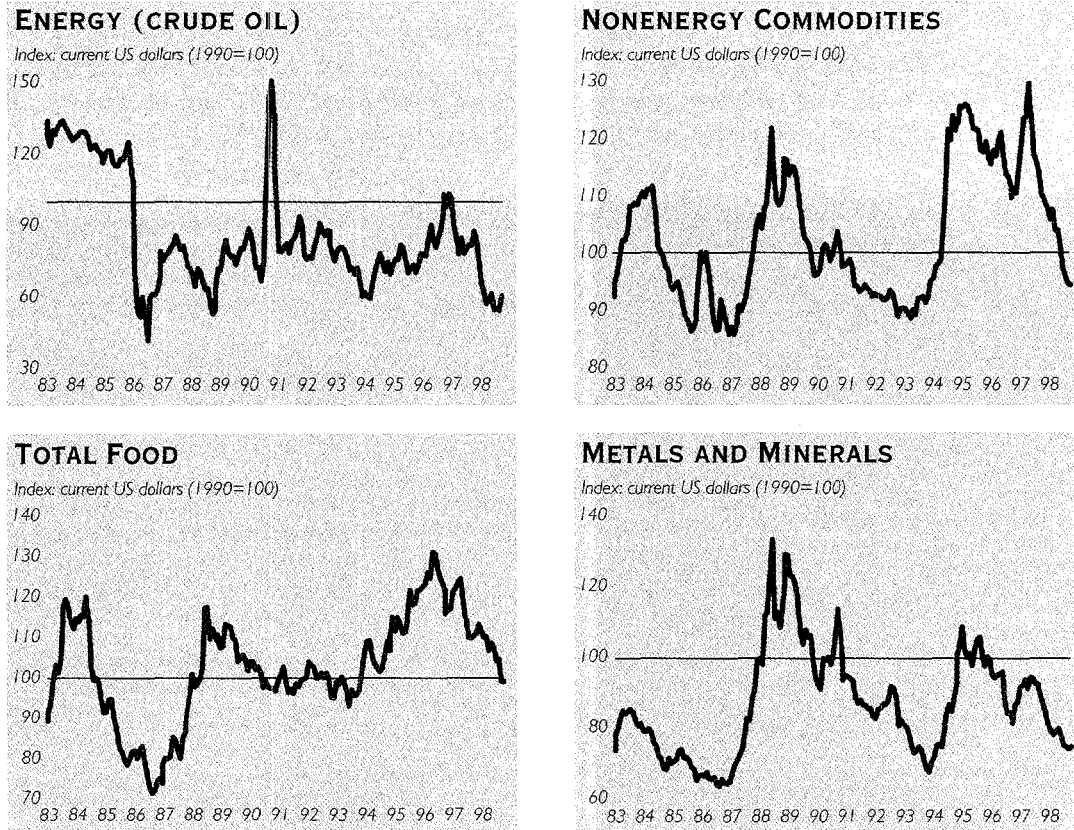


TABLE 1. WEIGHTED INDEX OF PRIMARY COMMODITY PRICES FOR LOW- AND MIDDLE-INCOME ECONOMIES IN CURRENT DOLLARS (1990=100)

	Energy (100) <sup>a</sup>	Nonenergy commodities (100)	Total agriculture (69.1)	Beverages (16.9)	Total food (29.4)	Fats and oils (10.1)	Grains (6.9)	Other food (12.4)	Total raw materials (22.8)	Timber (9.3)	Fertilizers (2.7)	Metals and minerals (28.2)
<b>Annual</b>												
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	119.81	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
<b>Quarterly</b>												
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	105.91	116.38	164.31	109.12	140.01	105.66	85.76	90.32	91.90	121.82	78.66
1998Q2	58.38	100.98	109.68	144.23	106.92	132.46	104.54	87.33	87.72	88.82	123.43	77.44
1998Q3	56.85	95.24	102.58	129.02	101.14	127.23	98.32	81.36	84.91	86.30	123.02	74.53
<b>Monthly</b>												
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 Jan	65.65	105.94	116.31	168.59	110.22	142.00	104.58	87.37	85.51	81.93	121.82	78.96
1998 Feb	61.50	107.61	119.08	168.53	110.23	141.64	106.35	86.68	93.93	97.14	121.82	78.07
1998 Mar	57.30	104.17	113.75	155.80	106.89	136.37	106.04	83.22	91.52	96.61	121.82	78.96
1998 Apr	59.05	104.24	113.52	152.62	108.77	134.27	104.69	90.17	90.76	94.79	122.40	79.67
1998 May	61.32	101.38	110.20	145.55	107.60	135.76	105.09	85.96	87.42	87.90	123.67	77.56
1998 Jun	54.77	97.33	105.33	134.53	104.37	127.36	103.83	85.85	84.98	83.75	124.23	75.10
1998 Jul	55.51	96.26	103.94	129.33	104.77	128.75	102.39	86.45	84.10	81.31	124.23	74.72
1998 Aug	54.59	94.85	102.18	132.38	99.40	125.40	96.62	79.67	83.45	84.39	123.02	74.14
1998 Sep	60.45	94.60	101.63	125.35	99.25	127.54	95.94	77.95	87.18	93.19	121.82	74.72

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

a. Crude oil index.

Source: World Bank, Development Prospects Group.

## IMPLICATIONS OF THE EAST ASIAN CRISIS FOR SUB-SAHARAN AFRICA

Sub-Saharan Africa is the most commodity-dependent region of the world both in income and export earnings terms. Though commodities constitute less than one-fifth of world trade, they constitute three-fourths of Sub-Saharan exports (excluding South Africa). In many cases a single commodity accounts for as much as 10% of GDP—and even more of export earnings (tables 2 and 3). For example, although Sub-Saharan Africa accounts for 7% of the world's cotton production, its export share is 17%—and rising. Sub-Saharan Africa accounts for more than two-thirds of global cocoa production (Côte d'Ivoire has a 42% share, and Ghana 12%), about half of robusta coffee production, one-fourth of tea production, and 5% of oil production. Petroleum accounts for 25% of Sub-Saharan Africa's merchandise exports, while making up just 9% of world oil exports.

Sub-Saharan Africa is also the poorest region of the world. Excluding South Africa and Nigeria, it accounts for only 1% of the world's GDP, yet it has 10% of the world's population—one-tenth of the world's population generates only one one-hundredth of the world's income. Economic growth in Africa also lags by a substantial margin. In the past 12 years while the world's per capita income grew at an average annual rate of 1.1%, Sub-Saharan Africa's shrank 0.6% a year.

Africa's dependence on a relatively small number of commodities in combination with its low income makes it especially vulnerable in periods of low commodity prices. This vulnerability is particularly acute now, because of

**TABLE 2. AFRICA'S COMMODITY EXPORTS**

Commodity	Percent	
	Africa's share of world exports	Major exporters
Cocoa	69	Ghana, Côte d'Ivoire
Coffee (robusta)	48	Uganda, Côte d'Ivoire
Tea	25	Kenya, Malawi
Cotton	17	Mali, Benin

Source: World Bank.

**TABLE 3. AFRICA'S MINERAL PRODUCTION**

Commodity	Percent	
	Africa's share of world production	Major producers
Platinum	66	South Africa
Diamonds	46	Dem. Rep. of Congo, Botswana, South Africa
Gold	29	South Africa, Ghana, Zimbabwe
Coal	21	South Africa
Petroleum	5	Nigeria, Angola, Gabon, Cameroon

Source: World Bank.

the effects of the financial crisis, which began in East Asia and later spread to other countries—notably Russia and several Latin American countries. The resultant currency devaluations and economic slowdown have contributed to substantial declines in virtually all commodity prices. For example, between June 1997 and September 1998 the price of timber fell 49%, beverages 32%, and petroleum 31%.

Given that a global economic slowdown is now a reality (world GDP growth is expected to slow to 1.9% in 1998, down from 3.2% in 1997, with little if any recovery in 1999), the implications for Africa could be more severe than initially anticipated and extend beyond the direct trade effects.

Apart from the effects of the direct trade with East Asia, there are a number of other ways in which African countries could be affected by the crisis, including a reduction in financial flows, loss of competitiveness, and deterioration in the terms of trade.

### TRADE WITH EAST ASIA

While Sub-Saharan African trade with East Asia varies across countries, overall it is modest (table 4). East Asia accounts for one-third of Zambia's total merchandise exports and slightly more than a quarter of Mali's exports. After that the share falls to 16% for Ethiopia and then to 10% for South Africa, Togo, and Zimbabwe. For the other Sub-Saharan countries, East Asia accounts for less than 10%—and as little as 0.6% for Angola and 0.3% of Rwanda.

On the import side too, only Ethiopia, Mali, and Zambia exhibit concentration in a few

**TABLE 4. AFRICA'S AVERAGE ANNUAL EXPORTS TO EAST ASIA, 1995-97**

Percentage share of exports

	Japan	Thailand	Indonesia	Malaysia	Philippines	Hong Kong	Singapore	Total	Export value (US\$ dollars)
Zambia	14.7	10.9	0.8	3.3	0.1	0.3	3.2	33.3	1,040
Mali	0.8	20.5	1.6	2.3	0.5			25.7	271
Ethiopia	11.5	0.4	0.5	0.9		0.1	2.4	15.8	494
South Africa	5.4	0.6	0.6	0.7	0.2	1.8	1.1	10.4	30,627
Togo	2.5	1.0		1.8	2.9	0.3	2.1	10.6	388
Zimbabwe	7.0	0.6	0.7	0.4	0.7	0.5	0.5	10.4	2,280
Malawi	6.7			0.1				6.8	493
Congo, Dem. Rep.	4.5	0.3		0.2			0.2	5.2	1,445
Gabon	3.9	0.1		0.1	0.1	0.5	0.4	5.1	2,813
Cameroon	1.3	1.5	0.2	0.4	0.1	0.4	0.3	4.2	2,351
Mauritius	1.0	0.1		0.1		0.7	0.9	2.8	1,526
Sierra Leone	1.1	1.0	0.1	0.4				2.6	220
Nigeria	1.0	0.1	0.9		0.2		0.3	2.5	14,660
Congo, Rep.	0.3	1.9				0.1		2.3	1,609
Central African Republic	0.1		0.2	0.6	0.1	0.1		1.1	239
Angola	0.3	0.2			0.1			0.6	4,073
Rwanda	0.1			0.2				0.3	132

Source: World Bank.

countries. Japan and Thailand account for 15% and 11% of Zambia's merchandise exports, Thailand accounts for 21% of Mali's exports, and Japan accounts for 12% of Ethiopia's exports. Therefore, apart from these three exporting countries, the direct trade effects from the East Asian crisis are not very important.

#### SMALLER FINANCIAL FLOWS

Financial flows to Africa go mainly to commodity-related activities, especially in the metal and mineral subsectors. Although the region's reliance on private financial flows has increased markedly in recent years, official finance still dominates. For example, total private flows averaged only \$0.3 billion in 1990-93, whereas they averaged \$6.8 billion in 1994/97. Over the same periods, official development assistance averaged \$16 billion and \$14 billion (table 5). Of aggregate net

resource flows to Africa of almost \$21 billion in 1997, official development assistance accounted for \$13 billion. South Africa absorbed about half of the \$8 billion in private flows, so only \$4 billion went to the rest of Sub-Saharan Africa. Private flows are expected to decline, but, except for South Africa, the impact will be blunted by the recent debt rescheduling (for which a number of African countries are eligible).

#### LOSS OF COMPETITIVENESS

The currency devaluation of the East Asian economies made their products less expensive in dollar terms and hence increased their competitiveness. Inevitably, other commodity producing countries devalued their own currencies in order to stay competitive. The currencies of the five East Asian countries (upper part of figure 2) depreciated an average of 36% in real terms. Other things being equal,

**TABLE 5. AGGREGATE NET RESOURCE FLOWS (LONG-TERM) TO SUB-SAHARAN AFRICA, 1990-97**

Billions of US dollars

	1990	1991	1992	1993	1994	1995	1996	1997
Official development finance	17.0	15.3	16.3	14.8	15.7	14.4	12.8	12.7
Official development assistance	16.6	15.0	15.7	14.5	16.2	15.3	14.4	13.9
Other Nonconcessional loans	0.4	0.3	0.6	0.3	-0.5	-0.9	-1.5	-1.2
Total private flows	0.2	0.8	0.4	-0.2	4.8	9.7	4.4	8.1

Source: World Bank.

the dollar price of their products was thus one-third less than before the crisis. Over the same time period, the currencies of five important commodity producing countries—Australia, Brazil, Chile, Colombia, Russia—depreciated an average of 21% (middle part of figure 2), to a large extent matching the competitive gains of East Asia.

The picture for Sub-Saharan African commodity producers is mixed, however. Some countries (Malawi, Uganda, Zimbabwe) improved their competitiveness through currency devaluations that led to substantial depreciations. Others did not. And some countries (Democratic Republic of Congo, Côte d'Ivoire, Ghana, Kenya) experienced substantial currency appreciations of 10% to 30%.

#### TERMS OF TRADE DETERIORATION

Terms of trade deterioration in 1998 has been substantial for oil-exporting Sub-Saharan African countries, at more than 20%, or 5 times that in the rest of the region (in 1997 these countries experienced no change in their terms of trade). This translates to a real income decline of almost 7%. The other Sub-Saharan African countries (including South Africa) are expected to experience a loss of only 3%. So while these countries receive lower prices for their exports, most of that loss should be balanced by the lower prices they pay for imported commodities—especially energy and food. In 1997, Sub-Saharan African countries (excluding South Africa and the three oil producers) experienced a terms of trade gain of 7%. Thus, except for the oil producing countries, terms of trade losses due to the crisis have not been very large.

**FIGURE 2. REAL EFFECTIVE EXCHANGE RATES (JUNE 1997–SEPTEMBER 1998)**



Source: World Bank.

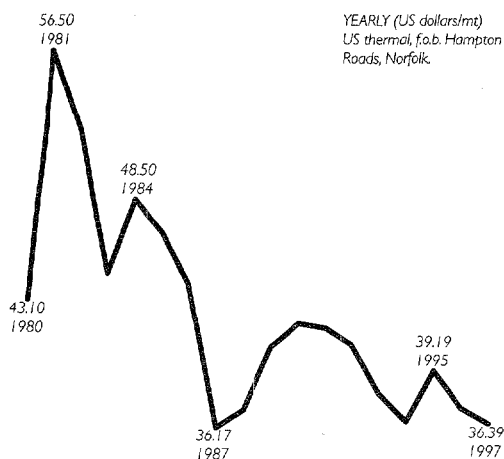
#### CAUTIOUS OPTIMISM

Most Sub-Saharan African countries are unlikely to suffer further blows from the global economic crisis, largely because of their low degree of integration with the global economy, the currency depreciations in a number of countries, and the relative strength of their terms of trade. There are exceptions to this relatively optimistic picture, however, including South Africa, whose economy is well integrated with the rest of the world and, therefore, has taken the hardest hit, and the oil producers, whose export revenues are falling fast.

Growth in Sub-Saharan Africa is expected to exceed 2% in 1998 and 3% in 1999 (it was 4.2% in 1996 and 3.5% in 1997). The relatively high population growth rate (estimated at around 3%) will, however, be translated to a decline in per capita income in 1998 and only a very slight increase in 1999.



## COAL



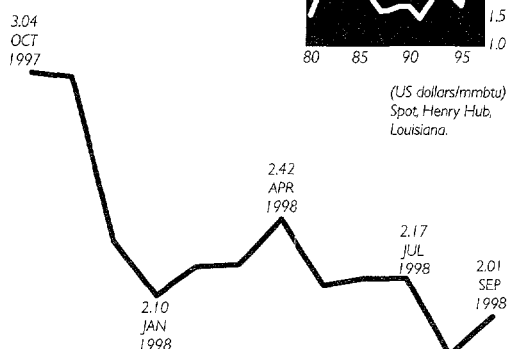
## INTERNATIONAL PRICES FALL ON OVERSUPPLY

International coal prices continued to decline sharply, pulled down by slumping demand and steadily rising supply. Currency depreciations in many of the major producing countries have contributed to the excess supply by undermining the production response to lower prices.

The fall negotiations of 1999 prices between Japanese utilities and major exporters are expected to result in prices well below last year's benchmark price of \$34.50 per metric ton (mt). Spot prices have been more than \$10 below that level this year, as buyers increasingly rely on spot purchases to manage inventories and minimize costs. Negotiations between Japanese steel mills and producers are also expected to result in lower prices for coking coal. The bleak outlook stems from lower demand forecasts, rising supplies, and falling production costs and currencies. Should buyers continue to give up security of supply in favor of more flexible contract terms and pricing, pressure on prices will build.

US coal prices have fallen much less despite mild summer weather after the early heat wave in the south. Demand from Ontario Hydro, following shut-down of its nuclear capacity, has helped keep prices firm. US coal exporters will likely see a decline in international prices next year as their material becomes less competitive, particularly coking coal. Prices are expected to decline next year.

## NATURAL GAS



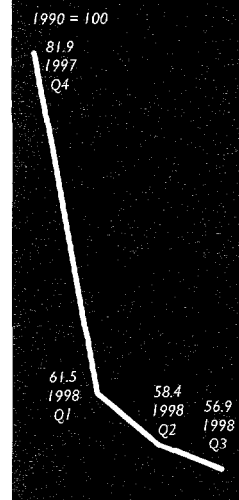
## US PRICES REMAIN WEAK ON HIGH INVENTORIES

US natural gas prices fell in the third quarter on weak demand and high levels of inventories. Prices dipped well below \$2 per million btus (mmbtu) before spiking above \$2 in September, when hurricane activity in the Gulf caused a temporary shut-in of production.

So far this year, domestic gas output is moderately higher and imports are up 3% over last year. Demand is 2% lower, however, due to mild weather in both winter and summer. This has allowed continued large injections into storage, which has kept inventories well ahead of last year's levels, and has weighed heavily on prices. The interruption in US gulf production in September resulted in lower storage injections and briefly took some of the pressure off prices.

But even with the slowdown of injections, inventories could exceed 3,100 billion cubic feet (bcf) by the end of October, 8% higher than a year earlier. As the market moves into the heating season, the gradual reduction in demand for storage will allow prices to move higher, but the size of the surplus will limit any significant price increases. In addition, by the end of this year 1.1 bcf per day of new export capacity from Canada will be available from the Transcanada and Northern Border pipeline expansions. And Transcanada will add another 450 mmcf per day of new capacity in November 1999.

Oil prices  
continue to  
slide down  
2.6% for the  
quarter.



The outlook for the winter depends largely on the weather. An early cold start to the heating season would support somewhat higher prices, but a spike is unlikely given the surplus and anticipated increase in imports. Barring a long stretch of extremely cold weather, prices in the first quarter of 1998 are expected to average below \$2.50 mmbtu.

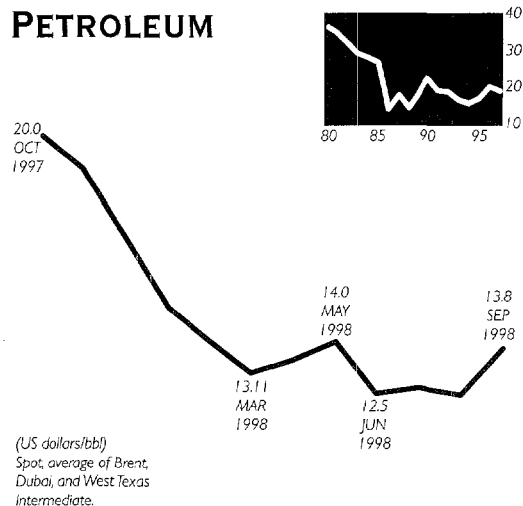
US demand is expected to be nearly 4% higher in 1998 assuming normal weather, but production is expected to grow by 1% and imports by 7.5%. Prices are not expected to strengthen until seasonal inventories return to more typical levels, likely in the second half of next year. Even then, average annual prices are expected to be similar to this year's.

European gas prices continue to fall, reflecting the lagged indexation of contracts to petroleum product prices. The price declines have been much less than the average drop in crude oil prices, however, because of links to strong product prices (fuel oil and gasoil), as well as time lags and other elements in the contract formulas. While industrial customers on the continent are benefiting from lower gas prices, prices are lower still in the UK, where market forces alone determine prices.

In October, gas starts flowing through the 1.93 bcf per day Interconnector pipeline linking the fully liberalized UK market with the heavily regulated continental market. The initial flow will affect only the margins of the large mainland market, which is dominated by long-term contracts.

The new EU natural gas directive allows large industrial users to choose their own suppliers starting 2 years from now, and at least a third of the market is to be liberalized within 10 years. Propelled by the momentum of competition, however, a larger share of the market is expected to be liberalized over that period. For example, with growing gas-to-gas competition, new indexation formulas may emerge and contracts may shorten.

## PETROLEUM



### PRICES REMAIN LOW ON WEAK DEMAND AND HIGH INVENTORIES

Petroleum prices declined slightly in the third quarter, amid continued weak demand and high inventories. Prices averaged \$13.01 per barrel (bbl) in the quarter, a third lower than the average for 1997. August's average of \$12.49/bbl was the lowest of the year, but prices bounced up to \$13.83 in September as both stocks and OPEC production began to recede. However, the supply overhang in the market is still very large and will take time to dissipate. The direction of prices will depend largely on the weather and on any reduction in supplies. OPEC meets in November to consider further cutbacks, and Iraqi supplies could be interrupted given its recent uncooperative stance with the United Nations weapons inspections. With the large surplus, however, prices are expected to remain depressed well into next year, barring any extraordinary demand surge or supply disruption.

Oil stocks remain high in the main consuming markets of North America and Europe. Crude oil stocks in August were above year-earlier levels by 9% and 15% respectively in these two regions. Petroleum product stocks also remain high, particularly in North America where inventories are 10% higher than last year.

In the US, crude oil stocks declined significantly in September, contributing to higher prices, but started to rise markedly in October,

partly due to a large reduction in refinery runs. Gasoline stocks finally fell back within a more typical seasonal range in early October, albeit at the high end of the range. Middle distillate stocks, which have been well above the typical range since last winter, are moving closer to "normal" but are still high, particularly on the East Coast. The movement in heating oil stocks will largely depend on the severity of winter weather.

Unlike the US, crude oil stocks in Europe and Japan appeared to have moved higher in September, as did product stocks in Japan.

On a global basis, inventories and miscellaneous rose only 0.3 mb/d in the third quarter because of the reduction in OPEC supplies. While this is much lower than normal, it nonetheless did little to reduce the supply overhang in the market. Stocks had previously posted an abnormal build of 1.6 mb/d in the first quarter and a large 3.3 mb/d gain in the second quarter.

OPEC production, excluding Iraq, continues to fall as the organization gets closer to its agreed targets. OPEC set a production target of 24.37 mb/d for the year commencing July 1998, which is 2.6 million barrels per day (mb/d) lower than the February base level from which cuts are made. Production in the third quarter averaged 24.79 mb/d, which was only 0.4 mb/d above target and more than 2.0 mb/d lower than in February. Many countries are near their assigned levels, with Iran (0.15 mb/d) and Venezuela (0.13 mb/d) the main overproducers. Saudi Arabia and Kuwait were over by a combined 0.1 mb/d including their equal shares of Neutral Zone output (table 6). Production in Nigeria has been affected by political unrest, which forced the temporary shut-in of a portion of its output in recent months.

In September OPEC production averaged 24.44 mb/d, less than 0.1 mb/d above target. Saudi Arabia's output dropped 0.1 mb/d below target, including its production from the Neutral Zone. Iran and Venezuela continued to reduce their production, but remained above quota by a combined 0.14 mb/d.

**TABLE 6. OPEC CRUDE OIL PRODUCTION AND QUOTAS**

Millions of barrels per day

	1Q98	2Q98	3Q98	Quota	3Q98-Quota
Algeria	0.87	0.82	0.79	0.788	0.002
Indonesia	1.31	1.27	1.29	1.280	0.010
Iran	3.58	3.75	3.44	3.293	0.147
Iraq	1.58	2.05	2.41	1.650	0.760
Kuwait <sup>a</sup>	1.94	1.81	1.74	1.980	-0.240
Libya	1.46	1.42	1.34	1.323	0.017
Neutral Zone	0.52	0.58	0.55		
Nigeria	2.26	2.19	2.02	2.033	-0.013
Qatar	0.71	0.68	0.63	0.650	-0.020
Saudi Arabia <sup>a</sup>	8.43	8.17	7.82	8.023	-0.203
UAE	2.45	2.31	2.20	2.157	0.043
Venezuela	3.36	3.18	2.97	2.845	0.125
Total crude	28.47	28.23	27.20	26.022	1.178
Excluding Iraq	26.89	26.18	24.79	24.372	0.418
NGLs <sup>b</sup>	2.82	2.84	2.91		
Total OPEC	31.29	31.06	30.12		

a. Quota includes half share of Neutral Zone.

b. Natural gas liquids.

Source: International Energy Agency and OPECNA.

Offsetting these declines was a steady rise in production from Iraq. Production in the third quarter averaged 2.41 mb/d, which is 0.76 mb/d above its assessed February level of 1.65 mb/d. In September the country produced just shy of 2.5 mb/d, near its present capacity. Iraq's future production is again in question following its decision not to cooperate with United Nations weapons inspections.

Non-OPEC production fell 0.5 mb/d in the third quarter, with virtually all of the decline occurring in the OECD (table 7). Norway's output fell 0.3 mb/d due to summer maintenance programs, which were particularly heavy in

**TABLE 7. NON-OPEC OIL SUPPLY**

Millions of barrels per day

	1996	1997	2Q98	3Q98	Change 2Q98 to 3Q98
Unites States	8.59	8.66	8.48	8.26	-0.22
Mexico	3.28	3.41	3.54	3.48	-0.06
Canada	2.46	2.57	2.64	2.67	0.03
United Kingdom	2.81	2.74	2.74	2.76	0.02
Norway	3.23	3.28	3.19	2.89	-0.30
Other OECD	1.35	1.41	1.41	1.37	-0.04
Latin America	3.25	3.43	3.64	3.70	0.06
Africa	2.64	2.72	2.72	2.74	0.02
Middle East	1.93	1.89	1.89	1.86	-0.03
China	3.12	3.19	3.20	3.17	-0.03
Other Asia	2.11	2.11	2.11	2.14	0.03
FSU	7.07	7.20	7.21	7.21	0.00
Eastern Europe	0.21	0.21	0.20	0.20	0.00
Processing gain	1.52	1.57	1.64	1.64	0.00
Total non-OPEC	43.57	44.40	44.60	44.09	-0.51

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

TABLE 8. OIL CONSUMPTION

	Millions of barrels per day				Percentage change			
	OECD	FSU and Eastern Europe	Developing countries	Total	OECD	FSU and Eastern Europe	Developing countries	Total
1990	41.5	9.4	15.4	66.3	0.6	-3.4	3.0	0.6
1991	41.9	9.0	15.9	66.8	0.8	-4.6	3.5	0.7
1992	42.9	7.8	16.7	67.4	2.3	-13.6	5.4	0.9
1993	43.2	6.6	18.1	67.8	0.8	-15.7	7.9	0.7
1994	44.4	5.5	18.7	68.6	2.7	-15.5	3.6	1.2
1995	44.9	5.5	19.8	70.1	1.1	-1.6	5.6	2.1
1996	45.9	5.0	20.8	71.8	2.3	-7.5	5.5	2.4
1997	46.6	5.2	21.9	73.8	1.6	3.4	5.2	2.8
1Q97	46.9	5.1	21.6	73.6	-0.6	-5.6	5.9	0.8
2Q97	45.4	5.2	21.6	72.2	3.0	6.1	3.3	3.3
3Q97	46.3	5.2	22.0	73.5	2.7	6.1	5.6	3.8
4Q97	47.9	5.4	22.4	75.7	1.5	10.2	5.4	3.2
1Q98	47.1	5.5	22.3	74.9	0.3	7.8	3.3	1.8
2Q98	45.0	5.0	22.4	72.4	-0.9	-3.8	3.7	0.3
3Q98	46.6	4.9	22.4	73.9	0.6	-5.8	2.0	0.6

Source: International Energy Agency and World Bank.

August when production fell more than 0.7 mb/d. Norwegian production is likely to fall this year for the first time in 17 years because of extended maintenance shut-ins, technical problems, and delays in the start-up of new fields. In addition, the government has indicated that it will consider extending the time frame for its agreed 0.1 mb/d reduction in production in support of OPEC's efforts to reduce the surplus and raise prices. US production fell 0.2 mb/d, with half of the decline in natural gas liquids.

World oil demand rose 0.4 mb/d, or 0.6%, following growth of just 0.2 mb/d in the second quarter (table 8). OECD oil demand rose 0.7%, with moderate growth in North America and Europe partly offset by a decrease of 8%

in the Republic of Korea and more than 2% in Japan.

Non-OECD demand is estimated to have increased by only 0.1 mb/d or 0.6%. This compares with growth of 5% for all of 1997. Apparent demand in the countries of the former Soviet Union (FSU) is estimated to have declined by 6% because of the economic crisis that erupted during the quarter. There was moderate growth in all other regions, except in Asia where demand is estimated to have shown little or no increase. China is expected to experience little increase in the second half of the year, in part because of the large growth a year earlier, but also because of the economic slowdown and severe flooding in the third quarter. Elsewhere,

TABLE 9. WORLD PETROLEUM DEMAND AND SUPPLY

Millions of barrels per day

	1996	1997	1Q98	2Q98	3Q98	4Q98	1998	1Q99	2Q99	3Q99	4Q99	1999
<i>Demand</i>												
OECD	45.9	46.6	47.1	45.0	46.6	48.6	46.8	48.0	45.9	47.2	49.3	47.6
FSU	4.3	4.4	4.6	4.2	4.2	4.5	4.4	4.6	4.3	4.3	4.6	4.4
Other	21.6	22.8	23.2	23.2	23.1	23.8	23.3	24.0	23.7	23.7	24.5	24.0
Total	71.8	73.8	74.9	72.4	73.9	76.9	74.5	76.6	73.9	75.2	78.4	76.0
<i>Supply</i>												
OECD	21.7	22.1	22.5	22.0	21.4	22.4	22.1	22.8	22.5	22.5	23.3	22.8
FSU	7.1	7.2	7.3	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Other <sup>a</sup>	-28.8	-29.3	-29.8	-29.2	-28.6	-29.6	-29.3	-30.0	-29.7	-29.7	-30.5	-30.0
OPEC <sup>b</sup>	28.5	30.0	31.3	31.1	30.1	29.9	30.0	30.0	30.0	30.0	30.0	30.0
Total	72.0	74.4	76.5	75.7	74.2	29.9	30.0	30.0	30.0	30.0	30.0	30.0
<i>Stock change and miscellaneous</i>												
OECD	0.0	0.3	-0.2	1.7								
Floating/transit	-0.1	0.1	0.2	0.2								
Other/miscellaneous	0.3	0.2	1.6	1.4								
Total	0.2	0.6	1.6	3.3	0.3	-47.0	-44.5	-46.6	-43.9	-45.2	-48.4	-46.0

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.

higher demand in India is offsetting the declines in the East Asia crisis countries.

In the fourth quarter world demand is expected to reach its seasonal peak, assuming normal weather (table 9). However, growth will be less than 1% compared with a year earlier because of recession in Asia and a slowdown in economic activity in most other regions. Non-OPEC production is expected to rise by 1.2 mb/d from the third quarter, with much of the growth in the North Sea, where a rebound from summer maintenance and the start-up of new production is expected to lift output by 0.8 mb/d. Production is also expected to increase in the US Gulf of Mexico and in Latin America.

Assuming OPEC production of 29.9 mb/d, a stock draw of 1.7 mb/d would be expected in the fourth quarter. While not untypical, it is a sizable draw given the extraordinary build this year, particularly in the first half.

For 1999 the International Energy Agency (IEA) is projecting an increase in world oil demand of 1.5 mb/d, or 2%, with moderate growth in all regions. For Asia (including OECD countries) demand is projected to increase by 0.45 mb/d, or 2.3%. This is down significantly from previous growth of near 1.0 mb/d, which accounted for half of the growth in world oil demand, but it is up from the estimated decline of 0.2 mb/d for this year. Of the projected increase China accounts for 0.21 mb/d, India 0.09 mb/d, and the rest of Asia 0.15 mb/d (an increase of little more than 1%).

Non-OPEC supplies are projected to increase by 1.0 mb/d, up from a rather disappointing growth of less than 0.4 mb/d this year. However, production cutbacks in support of OPEC totaled some 0.2–0.3 mb/d this year, which otherwise would have resulted in non-OPEC supply growth of as much as 0.7 mb/d. Well over half the growth is expected in the North Sea from the start-up of new developments, some of which were to be on-stream this year but were delayed by technical problems. Supply is expected to rise 0.26 mb/d in Latin America, with increases mainly in Brazil and Colombia. Smaller increases are expected in the US, Kazakhstan, Azerbaijan, Vietnam, Papua New Guinea, and a number of

other countries. Output is expected to fall 0.15 mb/d in Russia, and smaller declines are expected in China and Egypt.

Assuming that OPEC continues to produce at its current level of near 30.0 mb/d in 1999, the stock draw in the first quarter should be normal, as should the build in the second quarter. This would do little to materially change the supply overhang in the market. In the second half of the year the implied stock changes tighten the market somewhat, but the annual draw is still only 0.2 mb/d. As such, prices might only rise modestly.

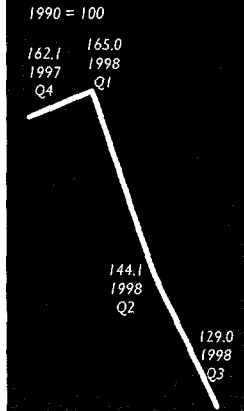
However, there are both upside and downside risks. On the downside, a worse than expected economic outlook could result in lower demand. Mild seasonal weather would further reduce demand and add to the problems for oil producers. Fewer technical problems in the non-OPEC supply arena and overproduction by OPEC producers would also prevent prices from recovering.

On the upside, OPEC meets in November and may decide to cut production further, which would give prices a boost if the cutbacks were significant. On the demand side, a less severe than expected global slowdown and faster than expected recovery in Asian demand would also give added support to prices. And extreme weather in the winter and summer would further fortify demand. Given the poor performance of non-OPEC supplies during the past couple of years, 1999 could also be a disappointing year, especially if prices remain low. Political and economic problems in countries such as Nigeria and Russia could also result in a shortfall in production.

Finally, there is heightened risk of supplies being curtailed from Iraq because of its refusal to cooperate with UN weapons inspections. Failure to resolve this dispute may provoke military strikes. In addition, the oil-for-food program comes up for renewal at the end of November.

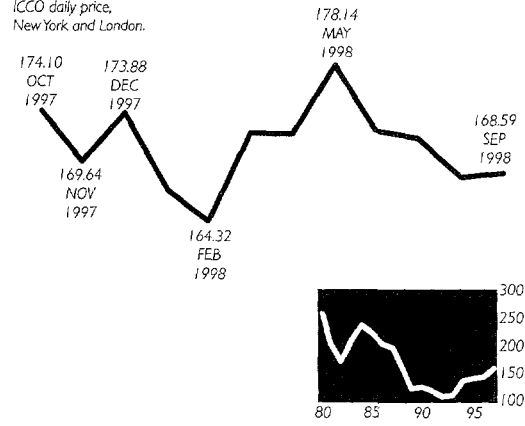
Aside from the global economic uncertainty, there are a number of upside risks, which should allow prices to increase moderately next year.

**Beverage prices decline more than 10% due to large coffee production in Brazil and large tea production in Kenya and Sri Lanka.**



**COCOA**

(US cents/kg)  
ICCO daily price,  
New York and London.



**MARKET LIBERALIZATION IS WELL UNDER WAY IN CÔTE D'IVOIRE**

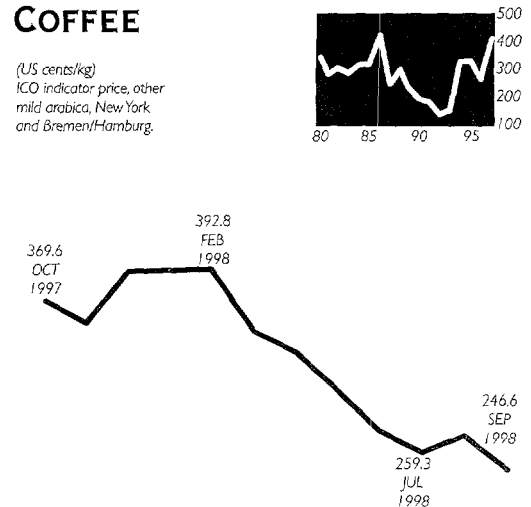
Cocoa prices averaged 170¢/kg this quarter, down 2.7% from last quarter's 174¢/kg and almost unchanged from the same quarter in 1997. Both New York and London futures markets experienced small but noticeable price declines as well. The fall in cocoa prices has been modest compared with declines in other commodity prices, however.

Preliminary estimates for the 1998/99 (October–September) season suggest that net output may reach 2.77 million tons, up from 2.64 million tons in 1997/98. Côte d'Ivoire, the world's dominant producer, is expected to produce 1.15 million tons, followed by Ghana with 0.41 million tons. Asian production is also set to increase from 0.44 million tons to 0.49 million tons, and Latin American from 0.38 million tons to 0.46 million tons. Ending stocks are expected to decline by almost 10% (from 1.07 to 0.97 million tons).

Côte d'Ivoire's cocoa market liberalization is well under way, and if all proceeds as expected, the sector will be fully liberalized by the 1999/00 season. In addition to higher farmgate prices, which should translate into higher farm profits, the entire market may go through a transformation as the state marketing system is replaced by a large number of new private traders and exporters. Market analysts are convinced that the competitive pricing mechanism will result in further expansion of cocoa.

**COFFEE**

(US cents/kg)  
ICO indicator price, other  
mild arabica, New York  
and Bremen/Hamburg.



**BRAZILIAN BUMPER CROP PULLS DOWN ARABICA PRICES**

The arabica price indicator for July–September averaged 259¢/kg, down from 304¢/kg in the second quarter and about 40% lower than last year's third quarter average. Robusta prices followed a similar pattern, with a 10% drop from last quarter, though remaining 3% higher than during the same quarter of last year. The recent plunge in arabica prices reflects Brazil's bumper crop as well as increased concerns about the deterioration of the economy on the part of Brazilian coffee exporters, prompting them to convert their coffee stocks into foreign exchange.

Global arabica production is expected to exceed 78 million bags in 1997/98 (October–September), up 11% over the previous 12 months. Production in Brazil will reach almost 34 million bags, well above last season's 25 million bags. Costa Rica's arabica output will also increase by an estimated 11% (from 2.24 to 2.09 million bags). Although Mexico's crop was initially estimated to be 10% lower than last season, the recent drought has resulted in a downward revision of losses, putting them as high as one third of the crop. Together with the recent low prices, the result may be a \$100 million loss in export revenues. Guatemala's coffee crop is expected to take a big 14% hit. Kenya, too, is expected to take a big hit, with expected losses of 26%.

Robusta production is expected to decline by an estimated 4–5% (from 27 million bags in 1996/97 to 25.8 million bags in 1997/98), a result of big losses in Uganda (estimated at about 30%) and small but noticeable reductions in Côte d'Ivoire. Asian robusta production is almost unchanged, with current estimates at almost 15 million bags.

Consumption in the major importing countries is expected to remain the same, at around 75 million bags. Europe consumed 41 million bags in 1997/98, followed by the US at 18 million bags, Central and Eastern Europe at 6.1 bags, and Japan at 5.4 million bags, according to recent LMC International estimates.

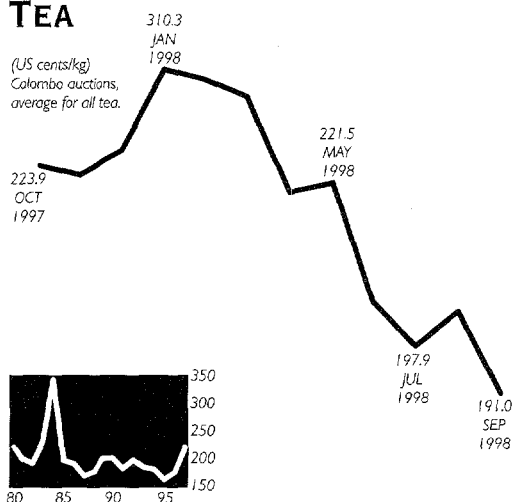
India's coffee futures exchange began trading coffee contracts on June 19. The coffee futures contract was launched to provide hedging facilities for exporters who handle 70% of India's coffee production. With an average daily trading volume of 2,000 contracts of 600 kg each, the exchange is expected to generate a turnaround of \$2.4 million a day. India is the fourth country to offer coffee futures trading—the others are the US (New York), the UK (London), and Japan (Tokyo).

Following the proposal to allow Brazilian coffee to be delivered against the "C" contract at the New York Coffee, Sugar, and Cocoa Exchange, Central American producers have threatened to leave the exchange. Under the proposal, Brazilian washed arabica would be delivered at 4¢ cents below the basis contract. Currently, arabica from Colombia is deliverable at 2¢ above basis. Central American coffee producers fear that high volumes of Brazilian washed will undermine the "C" contract's role as a hedging instrument for Central American traders.

Following liberalization moves in Côte d'Ivoire, Tanzania, and Uganda, the Coffee Board of Kenya is considering liberalization as well, through warning that the move will be gradual and controlled. The board expressed concerns that full liberalization at this time might even work against farmers.

## TEA

(US cents/kg)  
Colombo auctions,  
average for all tea.



### PRICES COME UNDER INCREASING PRESSURE

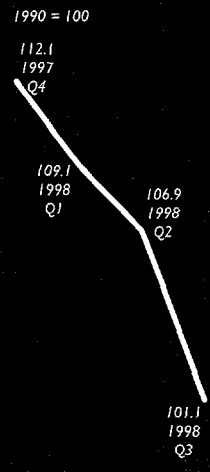
Increased production and weak import demand in Russia sent prices lower. The auction price (3) averaged 194.5¢/kg during the quarter, down from 221.4¢/kg for the same quarter of last year. Prices were down in all three major auctions over the same quarter of 1997: 13% in Calcutta, 5% in Colombo, and 19% in Mombassa.

World tea production increased in response to favorable weather. Abundant rain enabled Kenya to boost production 59% in the first seven months of the year over the same period of 1997, when production suffered from El Niño-related effects. Kenyan production for the year is estimated at 290 million kg, about 27% higher than last year.

India's output is up by 11% and Sri Lanka's is up 1.5% for the first seven months. India, the world's largest producer, is likely to harvest 835 million kg of tea this year, up 3% from 1997. Weakened demand from Russia, which accounts for 65% of India's tea exports and 40% of Sri Lanka's, led to a decline in Calcutta and Colombo prices. Russia's import demand fell with the devaluation of the ruble, which lost 61% of its value against the dollar between June and September.

Mombassa prices were supported by firm demand from its main buyers, Pakistan, Egypt, the UK, and Middle Eastern countries. However, despite strong demand, increased output led to a decline in Mombassa prices from last year's 14-year high.

**Food prices drop more than 5% on weak grain, soybean, sugar prices.**



## FATS AND OILS

### DESPITE THE EAST ASIAN CRISIS PRICES REMAIN FIRM

Despite the East Asian crisis, which has hurt many commodity prices, most oils have held up relatively well. For example, while the non-energy commodity price index fell almost 18% in 1997/98 (October–September), soybean and coconut oil prices rose 11–12% and palm oil prices were up a whopping 34%. The three oils account for more than 40% of world oil production and almost two-thirds of world trade.

World production of the 17 major fats and oils is expected to reach a record 104.68 million tons in 1998/99, up from 101.34 million tons in 1997/98 (table 10). Soybean and sunflower oil alone account for half the increase. Record soybean production is expected in both the US and South America.

Trade is expected to reach 33.28 million tons next season, up from 32.48 million tons in 1997/98. The bulk of exports is expected to go to China and India, where domestic oil production was severely damaged by recent floods. Both countries have consistently increased their oil consumption in recent years because of population and income growth. Ending stocks will be about 11.10 million tons, bringing the stock-to-use ratio to 10.6%, or 39

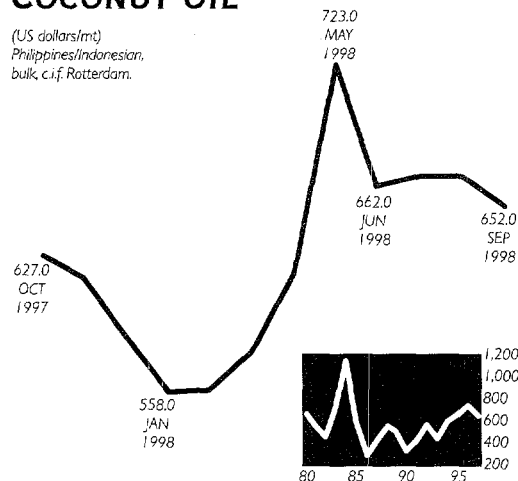
**TABLE 10. PRODUCTION, EXPORTS, AND STOCKS OF MAJOR FATS AND OILS (MILLION TONS) 1998/99**

Oil	Exports	Production	Stocks	Stock to use ratio (percent)
Soybean	23.70	7.73	2.46	10
Palm	17.65	12.06	2.46	14
Rapeseed	12.62	2.24	1.02	8
Sunflower	9.81	3.22	0.83	8
Tallow and grease	7.66	2.10	0.52	7
Lard	6.58	0.17	0.40	6
Butter (as fat)	5.85	0.63	0.69	12
Groundnut	4.27	0.25	0.44	10
Cotton	3.92	0.20	0.26	7
Coconut	2.83	1.33	0.34	12
Olive	2.42	0.49	0.97	40
Palm kernel	2.27	1.12	0.20	9
Corn	2.01	0.72	0.14	7
Fish	1.15	0.60	0.19	17
Sesame	0.73	0.02	0.05	7
Linseed	0.71	0.15	0.09	13
Castor	0.50	0.63	0.04	8
Total	104.68	33.28	11.10	11

Source: *Oil World*, July 17, 1998. (Prices of olive oil, butter, and sesame oil are from *The Public Ledger*).

## COCONUT OIL

(US dollars/mt)  
Philippines/Indonesian,  
bulk, c.i.f. Rotterdam.



### PRICES INCREASE SHARPLY

Prices averaged \$662/ton in the third quarter, down slightly from last quarter's \$664/ton but up 12% from last year's third quarter. Coconut oil accounts for about 3.5% of world production of the 17 major fats and oils. More than half is internationally traded (representing 6% of global fats and oils trade). Palm kernel oil, a close substitute for coconut oil, averaged \$694/ton in the third quarter, about \$50/ton lower than last quarter but still \$100/ton above the 1997 average.

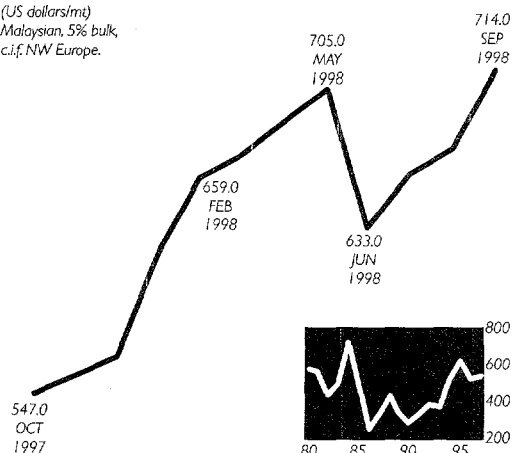
World production of coconut oil is expected to be about 2.83 million tons in the 1998/89 season (October–September), down from last season's 3.42 million tons; the reduction is due to the El Niño weather phenomenon. The Philippines, the world's dominant coconut oil producer, is expected to produce 959,000 tons, down from 1.47 million tons in 1997/98. Indonesia's output is expected to drop to 629,000 tons, from 727,000 tons. India, the third largest producer, will see production of about 420,000 tons, the same as in 1997/98. Palm kernel production, however, is expected to reach 2.27 million tons in 1998/99, up from 2.16 million tons in 1997/98.

Coconut oil exports are also set to decline to 1.33 million tons, down from 1.93 million tons last season. World ending stocks are set to decline by an estimated 110,000 tons, to 311,000 tons, the lowest level in the past five years.



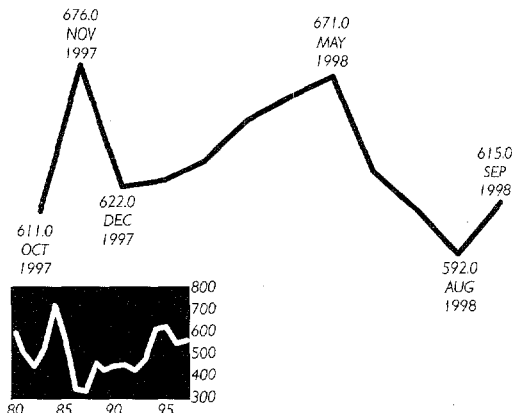
## PALM OIL

(US dollars/mt)  
Malaysian, 5% bulk,  
c.i.f. NW Europe.



## SOYBEAN OIL

(US dollars/mt)  
Dutch, crude,  
f.o.b. ex-mill.



## LAGGED EL NIÑO EFFECTS LOWER PRODUCTION PROSPECTS

During July–September, palm oil prices averaged \$683/ton, just 1.1% more than the second quarter, but 34.2% higher than in the third quarter of 1997. Palm oil accounts for about 18% of world production of the 17 major fats and oils, and 70% of it is internationally traded, making it the most highly traded oil. Palm oil is a close substitute for soybean oil, which accounts for 21% of global fats and oils production.

Global palm oil production in 1998/99 (October–September) is projected at 17.65 million tons, some 650,000 tons more than a year ago. Production in Malaysia, the world's dominant producer, is expected to reach 8.54 million tons (up from 8.48 million tons last season), while Indonesia, the world's second largest producer, is expected to produce about 5.63 million tons, up from 5.27 million tons last year.

*Oil World* reports that Indonesian palm oil yields may decline even further to 2.85 tons per hectare from 3.19 last year, as the lagged effects of El Niño take their toll. However, the decline in yields will be offset by the continued sharp increase in mature area, so production for the next two seasons will be similar to the current season's.

Palm oil exports reached a record 12.06 million tons in 1997/98, up from 11.80 in 1996/97, mainly due to strong demand from India and Pakistan. Combined, their imports rose to 2.79 from 2.41 million tons last season.

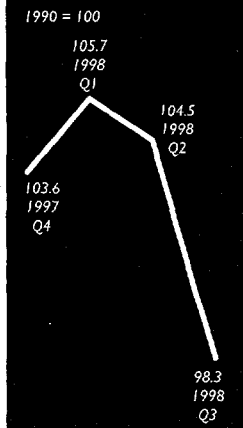
## CHINESE IMPORTS SURGE TO REPLACE FLOOD-DAMAGED DOMESTIC PRODUCTION

Third quarter soybean prices averaged \$606/ton, 7.3% lower than in the second quarter, but 11.3% higher than in the same quarter of 1997. Soybean oil accounts for more than 20% of world production of fats and oils. About one-third of soybean oil is internationally traded, with the US and Brazil accounting for 85% of exports and the EU accounting for 42% of imports.

Global soybean oil production in 1998/99 (October–September) is expected to reach 24.11 million tons, up 5.5% from the 22.85 million tons produced in 1997/98. US soybean production is expected to reach a record 75.4 million tons, according to the US Department of Agriculture. Exceptionally high yields due to favorable weather in Argentina (production up 20%) and Brazil (up 7%) will also contribute to this increase.

Exports are expected to reach 7.93 million tons in 1998/99, up from 7.37 million tons last season. Much of the increase comes from Argentina (33%), the US (17%), and Brazil (16%). China is expected to import 2.50 million tons (up from 2.23 million tons last season), accounting for almost one-third of world exports. The higher imports are needed to fill the gap from reduced domestic production, a result of the worst floods in at least four decades; increased income, which has boosted purchasing power, has also contributed.

## Grain prices are due for a rally.



## GRAINS

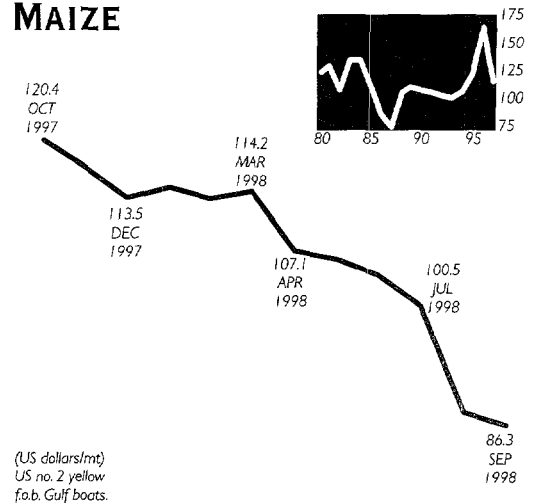
### HIGHER PRICES LIKELY AS WORLD BALANCE TIGHTENS

World grain prices have declined sharply during the past two years, depressed by growing stock levels, stagnant import demand, and reduced expectations following the financial crisis in Asia. These concerns now appear to be exaggerated, however, and expectations could change quickly. The global grain demand-supply balance is tighter than previously expected, due to downward revisions in estimated production. This could lead to higher grain prices despite the economic slowdown that has spread through Asia.

Price increases appear most likely for rice, whose demand-supply balance is very tight. Wheat and maize prices are also expected to rise from their current depressed levels. World grain stocks appear adequate to meet likely trade levels and final demand, and this should moderate price increases. The disparity in the demand-supply balance between rice and other grains could lead to wide price differentials and encourage the substitution of wheat for rice in food use and maize and other coarse grains for wheat in livestock and poultry feed.

The global grain stocks to use ratio is expected to fall to 16.3% by the end of the current crop year (mid-1999) compared to 17.4% in the previous year and the 17.6% average for the 1990s. The major exporting countries hold 44% of world grain stocks, which is greater than in recent years and should moderate price increases. These stocks are readily available for export and are a good indicator of the potential for price increases. The sharp grain price increases of 1995 occurred when the share of stocks held by the major grain exporting countries had fallen to 25%. The US, the largest grain exporter, is expected to hold 74 million tons of grain (24% of world stocks) by the end of the current crop year, well above last year's 59 million tons. World grain trade should decline slightly from last year's levels but should remain near the decade average of 210 million tons.

## MAIZE



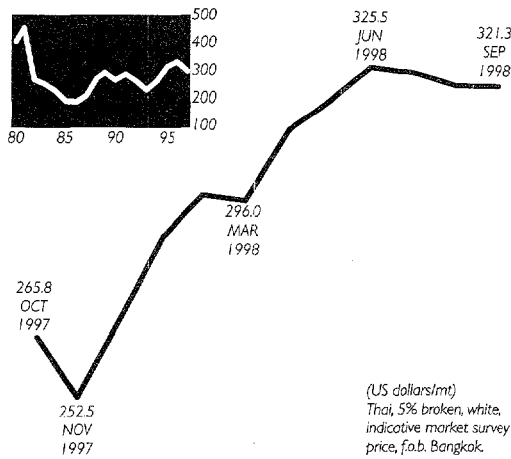
### COARSE GRAIN STOCKS APPEAR ADEQUATE

Maize prices fell to \$86/ton in September—levels not seen since 1993. The sharp decline was due to a large US crop, weak import demand, and the general gloom pervading commodity markets following the Asian financial crisis. The fundamentals of demand and supply do not appear to justify the current low prices. Prices rose in October and are expected to rise further as the market begins to focus again on fundamentals.

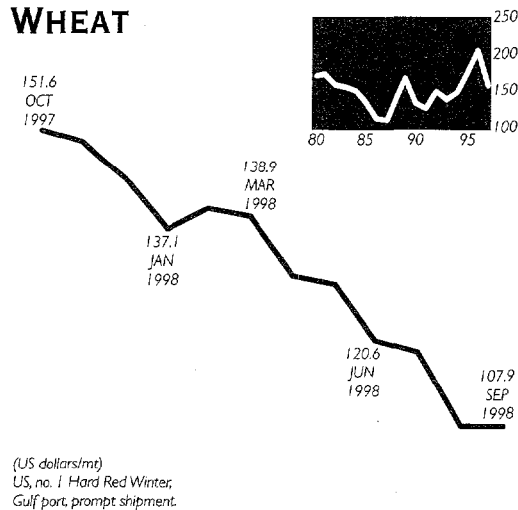
World coarse grain production benefited from above-trend yields to build stocks for the fourth consecutive year, but production fell short of the record of two years ago. Maize production (which accounts for two-thirds of total coarse grains production) rose to a record level, paced by large crops in China and the US. Stocks are expected to rise to 15.6% of use, well above the recent low of 11.6% in 1995/96.

Trade remains stagnant, in part a reflection of the Asian financial crisis, so significant price recovery is unlikely. A smaller price increase is still expected, however, to correct the sharp declines of the past two years. The tight demand-supply balances in wheat and rice could also strengthen the maize market. The US accounted for about half of world coarse grain exports in 1997/98, followed by Argentina with 15%. US coarse grain stocks are expected to rise from 38 million tons last year to 48 million tons in the current crop year.

**RICE**



**WHEAT**



**CONCERNS RISE AS STOCKS FALL TO 25-YEAR LOW**

World rice stocks are projected to fall to a 25-year low in the 1998/99 crop year on a stocks to use basis, according to recent USDA estimates. The traditionally thin world rice market, with low carryover stocks and small shares of production traded, could see sharply higher prices this year. Prices for high-quality long-grain rice remained steady at \$320/ton during the summer, while the lower-quality grades saw sharp increases, a likely harbinger of future increases. Prices fell in October, but the declines are expected to be transitory.

Major producers China and India (which account for 56% of world production) have lower production than last year and are expected to draw down domestic stocks. The two countries accounted for 25% of world exports in calendar year 1998 but are expected to contribute just 15% to world exports in 1999. If either China or India were to halt rice exports because of a domestic shortfall, prices could rise sharply.

Production of the largest rice exporters, Thailand and Vietnam (with a combined 40% of exports in 1998), is reported to be about the same as last year. However, both countries are expected to have lower exports than last year, and this leaves little margin for error. Reports of drought damage in Thailand add to the concern. Other rice exporters, such as Australia and the US, are also expected to have lower exports in 1999 because of reduced 1998 production.

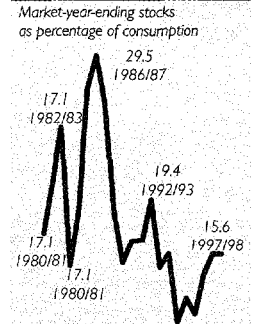
**PRICES EXPECTED TO REBOUND**

Prices have fallen 60% from their 1995 level and are approaching a new low, although some rebound is expected over the next few months. Market sentiment still seems dominated by the slowdown in Asia. Estimates of demand and supply in the wheat market indicate that total use will exceed production and lead to a reduction in world stocks. Prices are not expected to remain at current levels but should increase to reflect these revised estimates of production and the relatively tight stock situation.

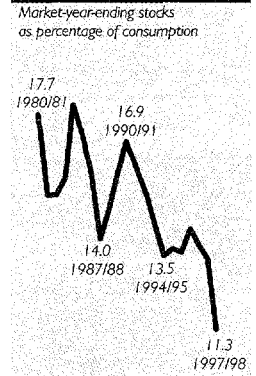
Stocks are down from 23.0% of use at the end of the 1997/98 crop year (July 1998) to an estimated 20.6% at the end of the 1998/99 crop year. While the estimate will likely change during the year, most major producers now have a good notion of the size of the current crop. The most recent low in the stocks to use ratio was 19.2% in 1995/96, which led to sharp price increases. If next year's harvest is below trend, that will likely lead to higher prices and even lower world stocks.

World trade is expected to remain stagnant, with exports falling to around 98-100 million tons. The Asian financial crisis is not expected to cause a reduction in exports. Exports from Argentina and Canada are likely to decline due to lower production, but exports from the EU and US should increase following record crops.

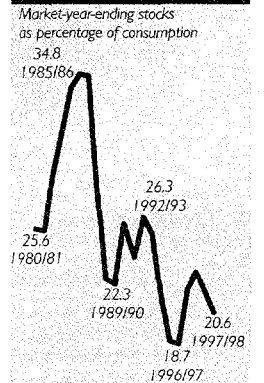
**COARSE GRAIN STOCKS (WORLD)**



**RICE STOCKS (WORLD)**

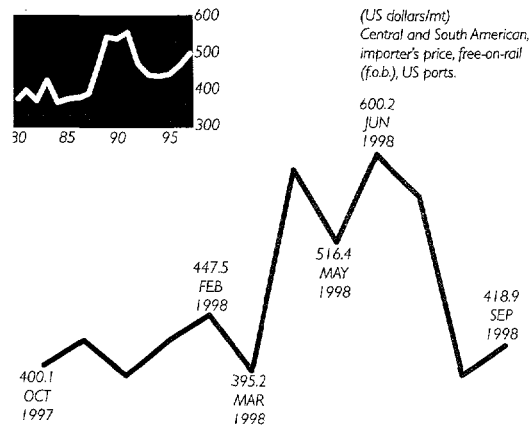


**WHEAT STOCKS (WORLD)**



Note: Data for 1994/95 and 1995/96 are estimated. Source: USDA, FAS.

## BANANAS



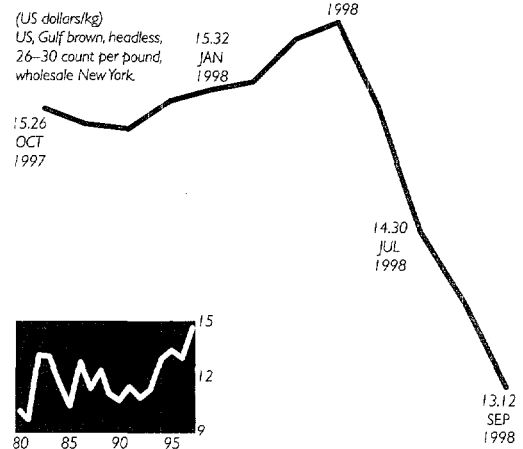
## DISPUTE OVER EU BANANA QUOTA CONTINUES

Banana prices (f.o.b. US ports) averaged \$419/ton in July–September, down 20% from last quarter, but almost 8% higher than in July–September 1997. Weak worldwide demand is largely to blame. Banana exports have fallen accordingly. For example, banana exports from Ecuador, the world's largest exporter, were down an estimated 18.5% over last year, according to *Sopisco News*.

Although the EU agricultural ministers agreed to raise banana import quotas from Latin America by 353,000 tons following the World Trade Organization's (WTO) ruling, the dispute is far from over. The US, along with Ecuador, Guatemala, Honduras, Mexico, and Panama, charges that the EU's move falls far short of compliance with the WTO ruling. The US has threatened to take retaliatory measures if the EU does not revise its quota regime. US interests are backed by the three dominant trading fruit companies, Chiquita, Dole, and Del Monte, which control about two-thirds of world banana trade.

Not surprisingly, the African, Caribbean, and Pacific Rim countries, mainly former colonies of EU states, support the EU's decision regarding preferential treatment of their bananas, and they recently lobbied US policymakers to change the US position on this issue. Even within the EU, however, there is no unanimity regarding the revised quota regime.

## SHRIMP



## PRICES WEAKEN ON ASIAN FINANCIAL CRISIS

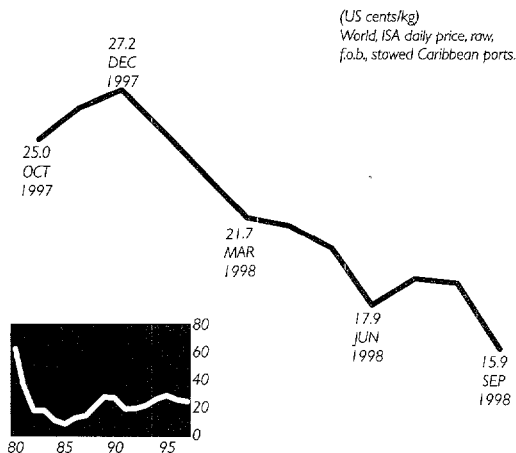
Despite continued strong demand in the US and recovering demand in Japan, prices fell because of increased production in Ecuador and the US. Prices for gulf brown 26/30 count averaged 1373.3¢/kg, 12% lower than last quarter.

The recovery in shrimp demand in Japan reflected the seasonal upsurge for holiday festivals in August. Appreciation of the yen against the US dollar in September also lowered shrimp prices and improved demand, particularly for 16/20 count black tiger. Exports to Japan increased during the quarter, although for the first seven months of the year they were 13.7% below their 1997 level. Exports to Japan from major exporting countries dropped significantly over this period—11.6% for Indonesia, 16% for India, 21.5% for Vietnam, 36.5% for Thailand, and 14% for China.

Demand remained strong in the US during the quarter, but prices weakened with the start of the shrimp season in August in Louisiana and Texas. Exports from Ecuador and Mexico increased, and exports from other countries remained high. Exports to the US for the first half of the year were 21% higher than during the same period last year. Although US demand is expected to increase toward the year-end holiday season, increased supplies from Ecuador may weaken prices.

With the exception of fresh water shrimp, demand in European countries was low during the quarter.

**SUGAR**

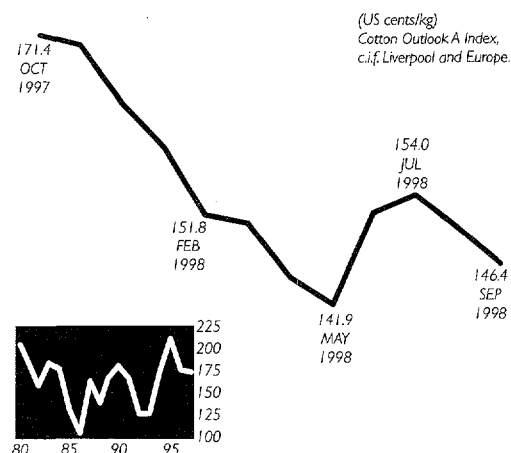


**PRICES FALL TO 10-YEAR LOW**

World prices fell during September to a 10-year low—below 7¢/per pound on the New York futures market—before rallying in October. Experts caution that prices could go lower still, and hopes for a price recovery are slim. World production will likely exceed consumption for the fourth consecutive year, leading to stock-building that will have ending-year stocks some 2.0 million tons higher. The history of the sugar market suggests that the price decline will not correct soon because producers are slow to respond and market demand is very inelastic. Current stocks will likely hang around for several years, and prices could go lower.

Sugar for prompt delivery is plentiful, and more supplies are heading for the market as Australia, Brazil, and South Africa all begin to market this year's crop. Traditionally large importers are unlikely to bail out the sugar market because they are all sitting on adequate-to-large crops of their own. China and India, two of the largest importers have had good crops and are likely to export sugar. The Russian Federation, normally a significant importer, has economic problems that will reduce imports from last year's level and lower consumption. Major East Asian importers such as Japan, the Republic of Korea, and Malaysia, are expected to cut back on imports because of the poor economic conditions in the region. Even the US, a major importer, will need less sugar this year following an increase in domestic beet production.

**COTTON**



**PRICES CONTINUE TO FALL ON WEAK DEMAND**

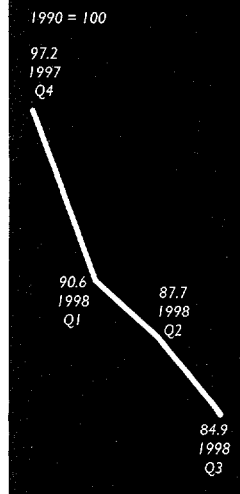
Following a mild recovery in July, the medium staple cotton price indicator (Cotlook A Index) continued its slide during last quarter, reaching a low of 146.4¢/kg, close to the five year record low reached in May. Although the third quarter's average is 2.7% above the second quarter's, it is 15.6% lower than a year ago. The New York futures contract, however, moved on a stronger tone, reflecting mainly low production prospects in the US.

The International Cotton Advisory Committee (ICAC) estimates that production in 1998/99 will be 18.65 million tons, down from 19.97 million tons last season, while consumption is expected to be around 19 million tons. Despite the downturn in production, cotton will be ample this season given China's move to substantially reduce its stocks. In 1998/99 China is expected to be a net exporter of 300,000 tons—in 1996/97 it imported 800,000 tons.

While production is estimated at 4.10 in China and 2.89 million tons in the US, down from last season's 4.60 and 4.09 million tons, production in the Southern hemisphere is expected to rise 10%, continuing the upward trend for the fifth consecutive season. Australia's production is at a record high, and production in Brazil, Paraguay, and Peru is also set to increase. East African production should remain steady despite El Niño.

On the consumption side, East Asia is expected to take the biggest hit, with an esti-

**Timber prices increase due to currency changes.**



mated decline of 200,000 tons this season, dropping the total to 1.9 million tons. In 1988/89 consumption in East Asia reached a record high of 2.56 million tons.

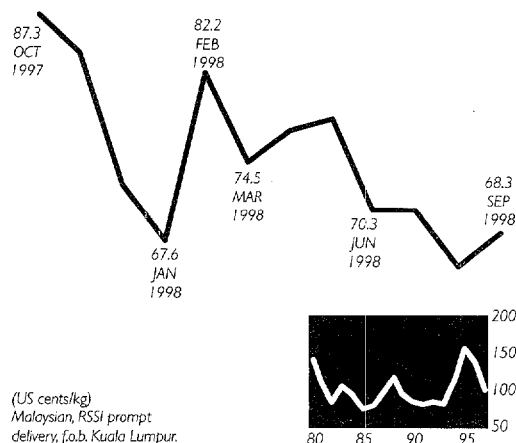
The short-term price prospects do not appear very promising, a reflection mainly of the slowdown in the world economy. World GDP, which grew at 3.2% in 1996/97 is expected to slow to an estimated 1.7%. The Cotlook A Index should average 151¢/kg in 1998, and a mild recovery is expected in 1999, assuming that the OECD countries do not move into recession.

At ICAC's 57th plenary meeting in Santa Cruz, Bolivia, on October 12–16, many countries expressed concerns about the world cotton market. Analysts reported that cotton might be losing market share to chemical fibers. The primary reasons cited were the absence of promotional efforts, especially in developing countries, and the exceptionally low prices of chemical fibers. A second concern was the stagnation in cotton yields since the early 1990s, with no sign of recovery in the near term.

In an unexpected move, Turkey imposed a 25 ¢/kg tax in August on both imported and exported cotton. Following protests by the domestic textile industry, however, the tax was replaced a month later by a 5.2% tax applicable only to imported cotton for domestic end use (cotton for use in exported products was exempted). Turkey is expected to import 400,000 tons of cotton in 1997/98. Observers at the ICAC plenary meeting believe that Turkey's imposition and subsequent removal of the tax will severely impede the liquidity of the soon-to-be-launched futures contract of the Izmir Cotton Exchange.

Following intensive discussions in Brussels at the end of September, the EU decided not to confirm the antidumping duties on unbleached cotton cloth imposed against the five major Asian suppliers beyond the soon-to-expire six-month provisional period. Absent this decision, the antidumping duties would have been converted to permanent measures. The concerned countries were China, Egypt, India, Indonesia, Pakistan, and Turkey.

## RUBBER



### MALAYSIA AND THAILAND WITHDRAW FROM INRO

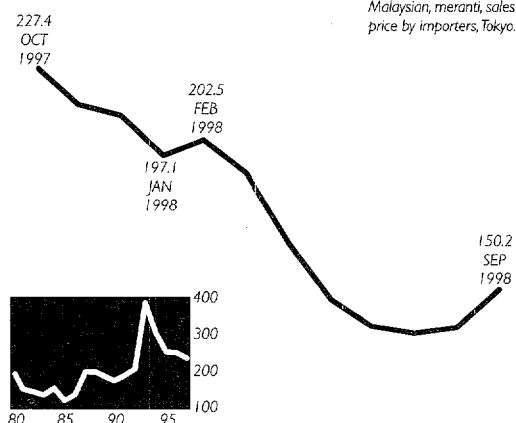
The July–September Kuala Lumpur rubber price average continued to fall, reaching a new low of 68¢/kg, down 10% from the previous quarter. New York and Singapore prices followed suit. All three prices are about 15% lower than a year ago.

According to the *Rubber Statistical Bulletin*, production of natural rubber was 6.41 million tons in 1997, 70,000 tons lower than in 1996. Thailand accounted for 2.03 million tons, Indonesia for 1.58 million tons, and Malaysia for 0.71 million tons. Production of synthetic rubber reached 10.06 million tons in 1997, up from 9.79 million tons in 1996. Consumption of natural rubber was up in North America and the EU, the world's dominant natural rubber consuming regions; it rose from 3.78 million tons in 1996 to 4.02 million tons in 1997 in North America and 2.90 million tons to 3.03 million tons in the EU.

The International Natural Rubber Organization (INRO)—the world's last commodity body with a price intervention mandate—appears on the verge of collapse, following Malaysia's and Thailand's decision to withdraw their contributions and effectively end their membership. The two countries account for over half of the world's natural rubber production. INRO, which represents the interests of 18 importing and exporting countries, manages the third United Nations–backed International Rubber Agreement.

TIMBER

LOGS



BEARISH FUNDAMENTALS PERSIST

Malaysian export prices of meranti logs fell to \$135/m<sup>3</sup> in July, their lowest level in 13 years. By September the price was back to \$150/m<sup>3</sup>, due mostly to the revaluation of the ringgit. Many seasonal log producers in Malaysia have abandoned operations in the face of low prices and escalating expenses.

Similarly, the low prices and heavy rain have reduced logging in Indonesia. The processing industry was only operating at 30–40% of capacity in September. As a result, the available logs were being shifted to the export markets. By mid-September some 40 Indonesian timber companies had applied for licenses to export 1.6 million m<sup>3</sup> of logs. Most importers regard Indonesia's move to export logs as a temporary measure.

Plywood prices in Japan rose marginally in September. Although inventories have shrunk for domestic and import production, demand has remained soft. In July 81 timber companies filed for bankruptcy, the second highest number since December of last year. The near-term outlook for the construction sector is not encouraging, offering little expectation of strengthening demand.

Some African hardwood export trade has been seriously affected by the Asian crisis. Gabon exports 96% of its logs (primarily of the okoume species). In 1997, 60% of those exports went to Asia. That amount has been halved so far this year.

FERTILIZERS

DEMAND WEAKENS, BUT MOST PRICES REMAIN FIRM

Prices for most fertilizers remained steady despite seasonally weak and generally low grain prices. Only urea prices fell significantly in recent months as lower grain prices took their toll. But phosphate and potash prices continue firm to unchanged, at least in part because of production cutbacks by major producers to keep prices from falling. Signs of building inventories and softening prices are beginning to appear, however, for phosphate and potash fertilizers.

Fertilizer demand depends primarily on the world grain situation, which does not look good for fertilizer producers. World grain prices have fallen more than 50% since their May 1996 high of \$241.6/ton (trade weighted). The September low of \$113.5 matched the June 1993 low for the decade. Some upturn in grain prices occurred in October, and prospects are for further increases. However, prices may still remain well off their highs and demand for fertilizers weak.

Total grain area worldwide was down an estimated 27 million hectares in 1998/99 off the recent 1996 high and was equal to the 1993 level. Comparisons with the first 10 months of 1993 are telling. Grain prices averaged \$126.4/ton in the first 10 months of 1993 and \$128.8/ton this year. Urea prices averaged \$105/ton in 1993 and \$124/ton in 1998. TSP prices \$110.8/ton in 1993 and \$174.2 in 1998, and potassium chloride prices \$107.9/ton in 1993 and \$116.6/ton this year. Both urea and potassium chloride prices have fallen to roughly their 1993 levels, whereas TSP stands out. Whether the industry has changed or today's prices are too high for the current market remains to be seen.

Fertilizer prices are mixed, with urea lower while other fertilizer prices remain steady.

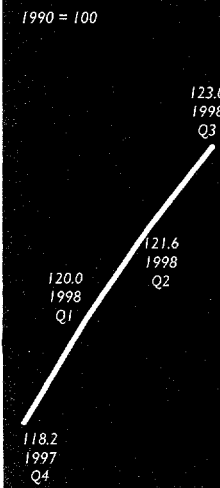
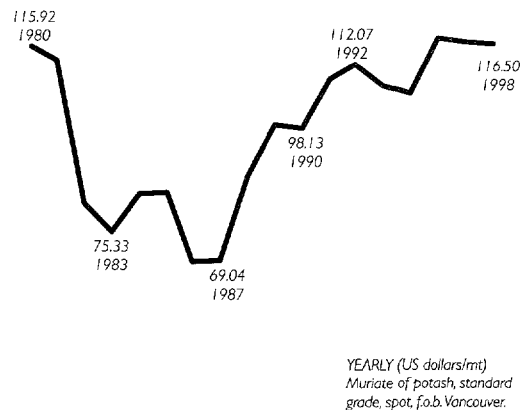


TABLE 11. FERTILIZER APPLICATION SHARES, 1995

Country	Nitrogen	Phosphates	Potash
China	66.4	24.8	8.7
India	70.8	20.9	8.3
Indonesia	73.4	14.8	11.8
World	60.2	23.7	16.1

Source: Food and Agriculture Organization.

## POTASSIUM CHLORIDE



### PRICES CHANGE LITTLE

Contract negotiations for the second half of the year left prices unchanged at about \$117/ton f.o.b. Vancouver. Despite this price stability, demand has weakened and supplies are building. Potash Corporation of Saskatchewan has announced plant closings to keep inventories from building. Hopes for higher prices seem to rest with the major importers—Brazil, China, and India.

Chinese buyers are still negotiating with Canpotex, the Canadian potash export association, on second half pricing of muriate of potash. Demand is expected to be boosted by the massive flooding this past spring and summer, which could lead to higher demand for fertilizer on areas that remain in production.

Economic problems in Brazil have prompted new import restrictions, and this is expected to dampen demand for fertilizers. Additional restrictions on credit terms are also expected. Weakened prices for major crops have further reduced demand for fertilizers.

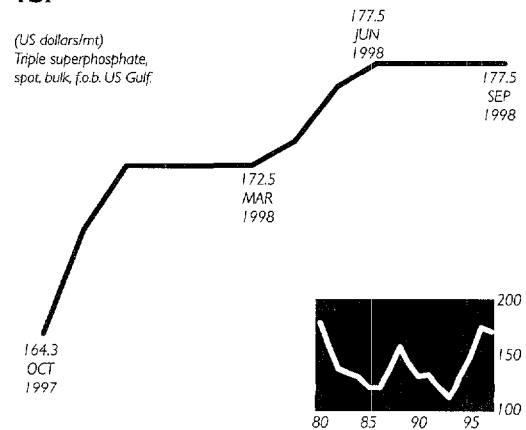
Indian government officials have backed away from their earlier plans to deregulate potash and phosphate prices. Prices will remain regulated, and domestic producers will be forced to sell at fixed prices despite the devaluation of the rupee.

The European Fertilizer Manufacturers Association forecasts EU fertilizer demand to decline 7–9% over the next decade.

## PHOSPHATES

### TSP

(US dollars/mt)  
Triple superphosphate,  
spot, bulk, f.o.b. US Gulf



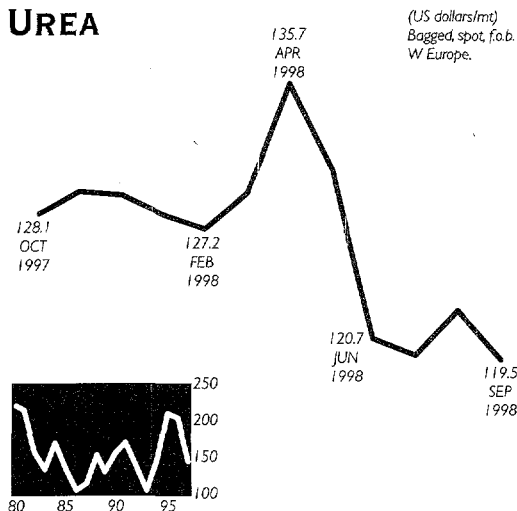
### PRICES WEAKEN SLIGHTLY

Several factors have dampened demand for phosphate fertilizers, from the normal seasonal slowdown to low grain prices and recession in Asia. DAP prices averaged \$207/ton in October for US bulk exports, f.o.b. the Gulf, but sales were being reported at \$2–5/ton less. Some price cutting seems likely as demand remains weak in Europe and the US, and producers are reluctant to cut production. High inventories are also reported by many producers. Some production cutbacks are occurring, and a major US producer announced plant closings in October. Triodinium phosphate prices declined throughout the quarter, and by October US bulk f.o.b. export prices averaged \$171.6/ton.

Hopes for a recovery in phosphate fertilizer demand rest largely with China, which typically accounts for 20–25% of world imports. Flooding this year has affected about 21 million hectares of cropland, according to Chinese officials, and as much as 13 million hectares may not return to production this year. This has created concern about the production potential of the remaining cropland and government officials have called for higher fertilizer inputs on the croplands that can be planted. Much of the demand will be for nitrogen fertilizers, but the government's focus on balanced fertilizer use will likely lead to higher demands for phosphate fertilizers as well. The grain situation in China appears adequate for the balance of the crop year, but stocks are expected to decline by about 10%.



**UREA**



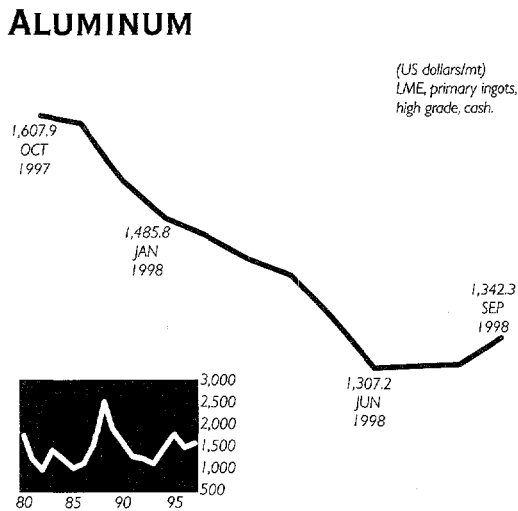
**PRICES STILL FALLING**

Urea prices continued to freefall, reaching a nine-year low in October. Prices have dropped more than 50% during the past two years. By October the urea price had fallen to \$110.2/ton f.o.b. Western Europe from its high of \$233.5/ton at the end of 1996. Granular urea for prompt delivery was on offer at \$92/short ton (\$101/metric ton) in the US Gulf. Black Sea prices for bulk shipments were \$70/ton, f.o.b., and prices are still falling. The Ukrainian official minimum indicative price for November has been set at \$70-73/ton f.o.b. Ukrainian production continues at full capacity despite the building level of stocks. A substantial surplus of product now exits, and demand is unlikely to increase enough to absorb production or to reduce the surplus. Russian producers are also operating at near capacity, adding further to the surplus in the region.

Inventories are also increasing in the US. Domestic production rose 11% during the third quarter over the same period of 1997, and September inventories are reported to be 28% higher than in 1997. In Canada urea production was 19% higher for July-September than in 1997, and September inventories were up 75% from 1997.

Demand may get a boost from Chinese imports, which are needed to offset losses resulting from the recent flooding. Floods damaged croplands, and higher fertilizer applications are required to return the land to production.

**ALUMINUM**



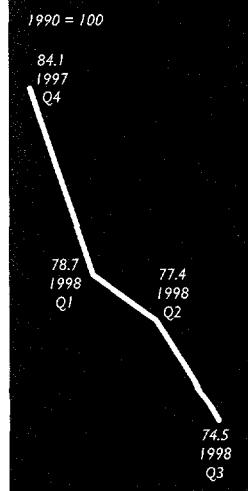
**PRICES DECLINE ON GROWING SURPLUS**

Average aluminum prices fell 3% in the third quarter on sagging demand and a growing surplus. Prices dropped to \$1,260/mt in July, but shrinking stocks and nervousness about supplies out of Russia led to a brief rally in September, with prices peaking near \$1,400/mt. The rally was short-lived, however, as rising stocks, concerns about a broader economic slowdown, and heavy producer selling caused prices to recede, ending the month at \$1,315/mt.

Stocks with the London Metal Exchange (LME) fell 15%, or 80,000 mt, during July and August, mainly in the UK. Part of the drawdown was due to strong demand, but some consumers reported that it was cheaper to buy and ship Russian-origin material from LME stocks in the UK than to purchase and ship the same material from St. Petersburg. Stocks climbed in September, recovering much of the drawdown of the two previous months. IPAI stocks of unwrought aluminum rose a hefty 68,000 mt in August, with Europe accounting for the bulk of the gain. Stocks are estimated to have risen further in September.

Demand continues to post moderately strong gains of 2.0-2.5% in Europe and North America, but this has been offset by large declines in Asia. European demand continues to be buoyed by the transportation sector, with strong auto sales in France, Germany, and Spain, as well as the UK and

**Metals and minerals prices continue to slide as inventories build.**



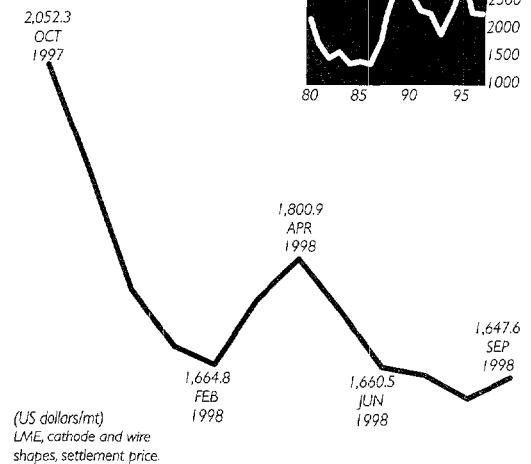
Italy, although Italian sales have fallen off since the incentive scheme ended in July. In North America demand remains strong in the auto sector. Production, which slumped a bit during the General Motors (GM) strike, has since recovered. The construction sector also remains strong on both sides of the Atlantic.

In Asia aluminum consumption continues to record large declines because of the severe recession in a number of countries. Demand in Japan is still feeling the effects of falling production and sales in the auto sector and a protracted slump in the construction sector. Aluminum demand is expected to shrink some 10% this year. In the Republic of Korea demand fell hard in the first half of the year but the large declines appear to have moderated in the third quarter. Korean mills significantly raised their exports and are looking for markets outside of Asia, where demand remains weak.

Concerns are mounting that a widespread economic slowdown will push the market into greater surplus and depress prices. After recording only marginal growth this year, global demand is projected to grow some 2% next year, despite an expected slowdown in North America. This projection assumes some recovery in consumption in many of the affected Asian countries.

Production has outpaced demand this year, reflecting the commissioning of new smelting capacity, the reactivation of idle capacity, and various plant upgrades and refurbishments. A surplus of some 400,000 tons is expected, despite production curtailments in several countries, including Ghana, India, Indonesia, and Venezuela. Production is set to rise more than 3% in 1999, with major new expansions and upgrades. This could result in a large surplus next year if demand turns out to be weaker than expected. If so, that suggests that significant cutbacks may be necessary to prevent prices from falling further. It is not known where the cutbacks may occur, but they are unlikely to be among the new expansions with low production costs.

## COPPER



### PRICES FALL ON RISING STOCKS

Copper prices fell 5% in the third quarter on rising stocks and weak demand in Asia. Demand remains strong in the US and Europe, but surplus production and higher exports from Asia led to soaring inventories and pushed prices lower.

LME stocks rose 66% in the quarter to 414,075 mt, with September's increase of 107,000 mt the largest monthly gain in more than a year. Stocks in Singapore rose as the continued demand slump in Asia induced shipments from Japan, the Republic of Korea, and the Philippines. Chinese stocks have also risen significantly because of a slowdown in demand.

In the early summer months little copper was arriving in European warehouses. Rather, inventories were building steadily in the US, resulting in a complete dislocation in the normal regional pattern of stock holding. The LME announced in early September that it was imposing capacity constraints on the quantity of copper stored in its warehouses in Los Angeles and Long Beach, California, to prevent a concentration of copper in these west coast facilities. Stocks held in these two locations as of noon on December 2 1998, were declared to be the maximum level permitted for storage on warrant from that date forward.

The west coast warehouses are in an area of net copper production, not consumption.

Earlier movements of metal out of these locations to Southeast Asia seemed to justify the appropriateness of these delivery points, even though the LME's mandate is to authorize warehouses in areas of net consumption, not production. The collapse in Asian demand halted these flows, however, leading to growing complaints that physical premiums in Europe were being kept high because metal was piling up in warehouses on the west coast of the US.

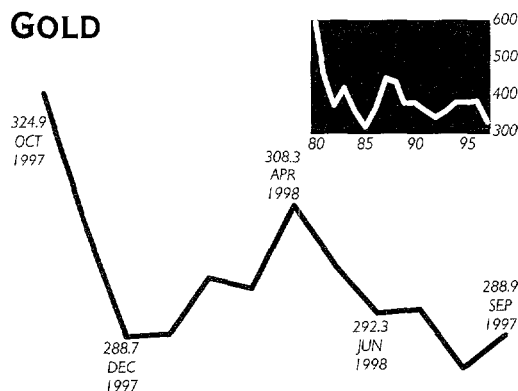
World demand is up more than 1% this year, with strong growth in Europe and North America partly offset by large recession-induced declines in Asia. US consumption has risen nearly 6%, fueled by strong demand in the housing sector. Consumption growth stumbled briefly during the GM strike but has picked up since. In Europe copper consumption is up more than 6%, mainly on strong auto sector demand in a number of countries. Latin American demand also remains strong, led by good growth in Mexico.

Asian demand remains extremely weak in construction and automobiles, the main copper consuming industries. The Republic of Korea led double-digit declines in many of the crisis countries this year with a drop of 20%. Demand fell 10% in Japan, with all sectors registering declines.

There are growing concerns that an economic slowdown in the US and Europe and sagging demand in developing economies will continue to exert downward pressure on copper prices well into next year. While US and European demand will most likely weaken, the large declines in Asia are not expected to continue.

In the face of weak demand and expected new production start-ups next year, some production cuts will be necessary to prop up prices. To date low prices have induced little cutback in output. However, if the tight supply of concentrates deepens the one bullish factor in the market, smelters may have to scale back production because of a shortage of feed.

## GOLD



(US dollars/troy ounce)  
UK, 99.5% fine.

### PRICES REMAIN DEPRESSED AND RANGEBOUND

Gold prices averaged \$289 a troy oz (toz) during the third quarter, down nearly 4% from \$300 in the second quarter. Prices traded within the narrow range of \$285 to \$295 for most of the quarter, but dipped briefly to a 19-year low of less than \$271 at the end of August. Concerns over the global economy—and over Russia in particular—along with heavy selling from funds and producers, drove the price down sharply. It quickly rebounded, however, in part because of short covering.

With world stock markets volatile and rapidly losing value and nervousness about state of the world economy intensifying, investors fled to the safety of cash and bonds rather than gold. However, weak fundamentals in the gold market are also contributing to the strategy of avoiding gold in troubled times.

Demand in the main countries monitored by the World Gold Council fell 28% in the first half of the year, pulled down mainly by the 55% Asian-led drop in the first quarter. Demand rebounded by 50% in the second quarter but was still 9% lower than a year earlier. Demand remains weak in Asia due to recession and the high domestic prices resulting from currency devaluations. Distress selling by consumers has continued, especially in Indonesia, the Republic of Korea, and Thailand, although at dramatically lower levels than earlier in the year. Partly offsetting

these declines in consumption, was continuing strong growth in demand in India—the world's largest consumer—which rose more than 15%.

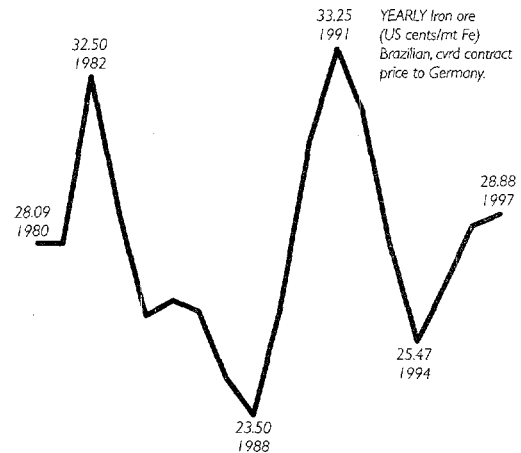
On the supply side, gold production was up 3% in the first half of the year. Currency depreciation in a number of producing countries enhanced profitability and induced higher output. Despite low prices and announcements of closures and cancellations of projects over the past year, producers have managed to reduce costs markedly. While the decline, in US dollar terms, has been due partly to producing countries' currency depreciation, producers have reduced actual costs by improving efficiency, closing marginal operations, focusing on higher-quality assets, and improving management, including corporate restructuring.

There were further sales by a number of central banks in the third quarter, those in Canada, the Czech Republic, and Luxembourg among them. This follows on net sales of 88 tons by central banks in the first half of the year. There was also a 160% increase in scrap during the first half, from distress sales in East Asia.

A number of central banks have entered the gold lending business, including those in Venezuela, Russia, and a few countries in Europe. This active management of gold reserves has increased liquidity in the gold market and has driven down gold lease rates to record lows of 0.33% for the one-month rate. However, in late September the rate jumped to well over 1% in the wake of problems at Long Term Capital Management, as central banks became more cautious about the quality of their immediate counterparties.

Prices are apt to remain rangebound. Any rise above \$300 is likely to be met with heavy producer selling to maintain profitability. In addition, there is the possibility of further sales by central banks to improve the financial return on their assets. Any significant drop below \$300 may impinge on the volume of supplies, but with ongoing cost reductions the perceived floor continues to fall.

## IRON ORE AND STEEL



### STEEL PRICES DECLINE ON SLOWING DEMAND AND SURPLUS PRODUCTION

The index of steel prices continued to decline during the third quarter, falling 7% amid weakening demand, rising stocks, and surplus production. Demand has been strong in North America and Europe this year, but weak demand in Asia, the Commonwealth of Independent States (CIS), Eastern Europe, and more recently Latin America has sent a flood of low-priced steel to US and EU markets. The surge has prompted unfair trade complaints by domestic producers against a number of exporting countries.

On September 30 a dozen US integrated and mini-mill steel companies and the United Steelworkers Union filed trade cases against hot rolled sheet and coiled plate imports from Russia, Brazil, and Japan. The mills claim hot rolled coil dumping margins ranging from 107% to 199% for Russian mills, 30% to 86% for Brazilian mills, and 27% to 66% for Japanese mills. Brazilian mills were additionally charged with receiving illegal government subsidies, and US mills are seeking countervailing duties ranging from 31% to 33%.

Complaints have also been filed in Canada, while Mexico, the EU, and other countries are preparing complaints against many producing countries in addition to the three mentioned in the latest US filing.

Steel imports for the first eight months were up 24% in the US, with shipments from Japan

up 141%, Korea 96%, and Russia 29%. The higher imports, combined with slowing demand and domestic capacity expansions, have led to the oversupply of US markets.

The same pattern has affected European markets, where slowing demand, rising production, and high stocks have resulted in an oversupplied market and lower prices. EU producers fear that if US antidumping cases are successful, even more steel exports will be diverted to Europe. The devaluation of the Russian ruble has exacerbated the market imbalance, and EU export opportunities in Asia and Latin America are limited, as evidenced by the supplies being channeled into Europe.

In Asia, Korean domestic demand for long and sheet products has fallen by more than a third this year, as both private and public projects are being scaled back and the transportation sector remains in a slump. Large declines have also occurred in the other crisis-affected Asian countries, which are feeling the effects of recession and currency devaluations. Japanese demand for long and

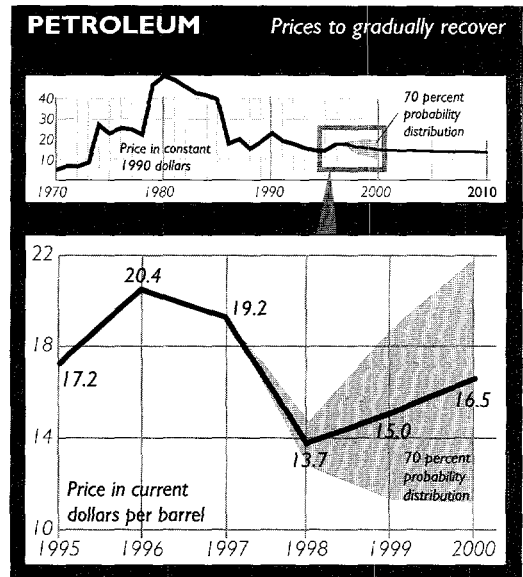
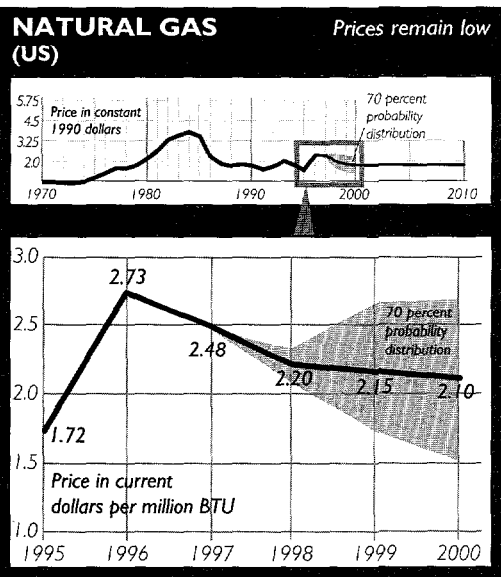
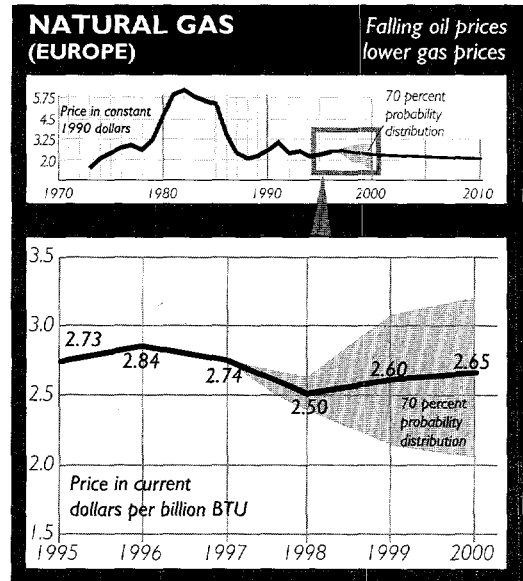
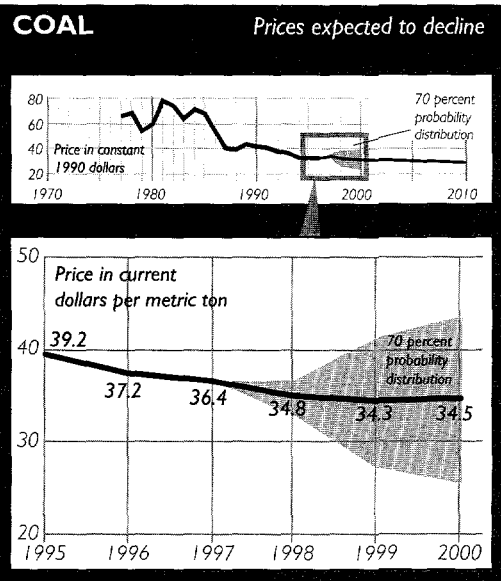
sheet products is down 15%, and Chinese demand is slowing noticeably.

The fear is that a broader economic slump will further depress steel prices. Because of weakening demand and the proliferation of trade complaints, producers are likely to cut back on production. Japanese producers have already cut output, and further reductions in Japan and elsewhere are probable. This should help alleviate the pressure on prices. However, many countries being targeted in trade complaints to reduce exports, especially those in Asia and the CIS, are already in crisis or on the verge of crisis and can ill afford to lose export business. Rather than curb output there will be financial pressures in these countries to redirect exports, which would add to the downward pressure on prices.

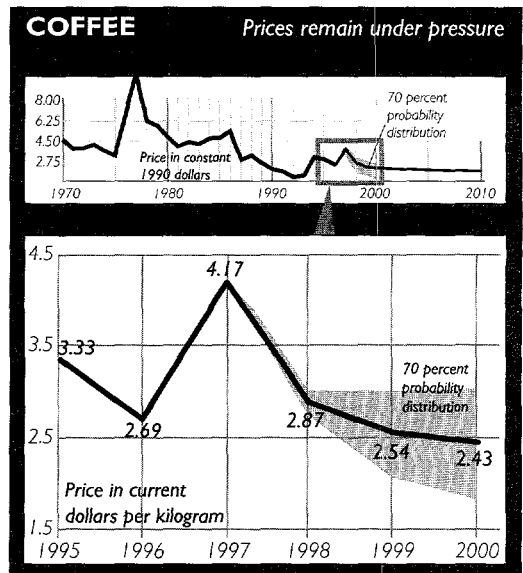
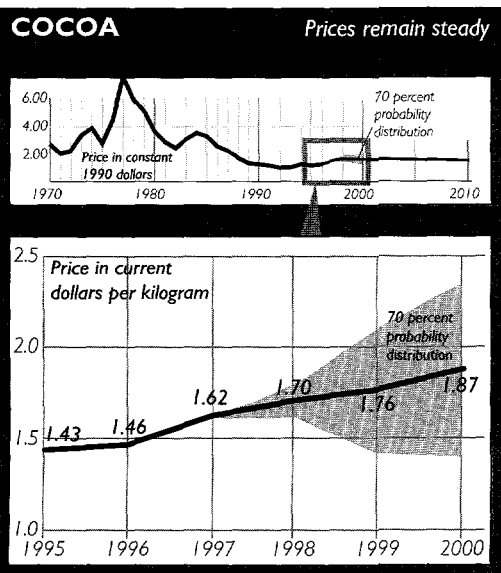
On the positive side, low prices and limited markets will cancel or delay some capacity expansion plans and will accelerate the rationalization of uncompetitive production capacity. But it will be some time before the market feels any meaningful impact from these shifts.

# COMMODITY PRICE OUTLOOK

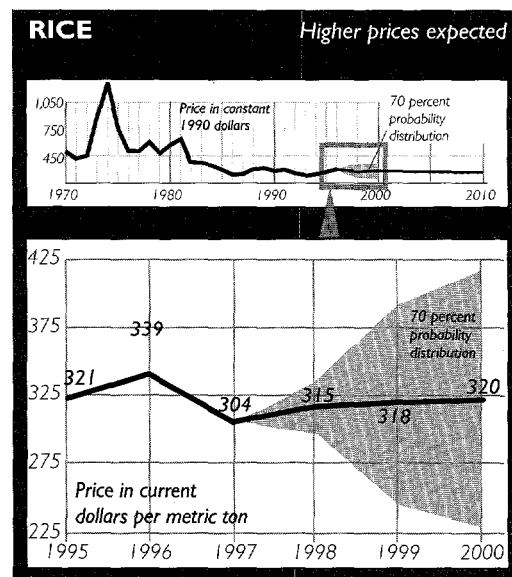
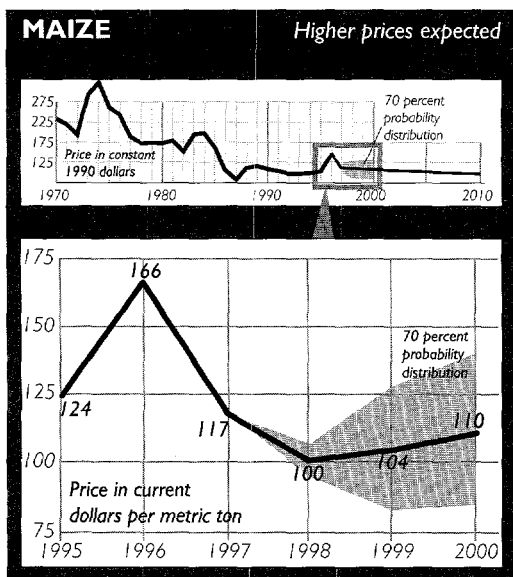
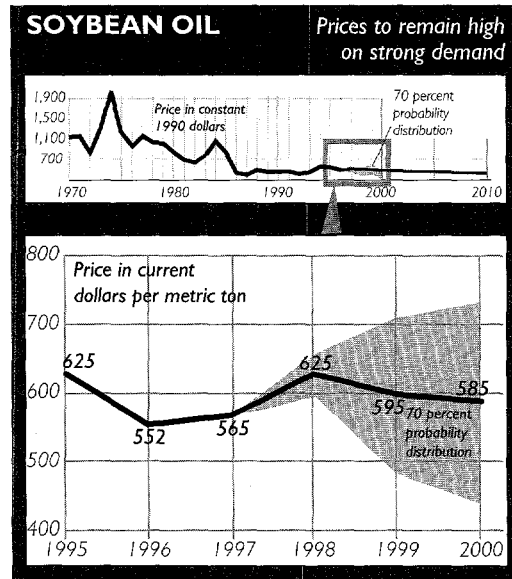
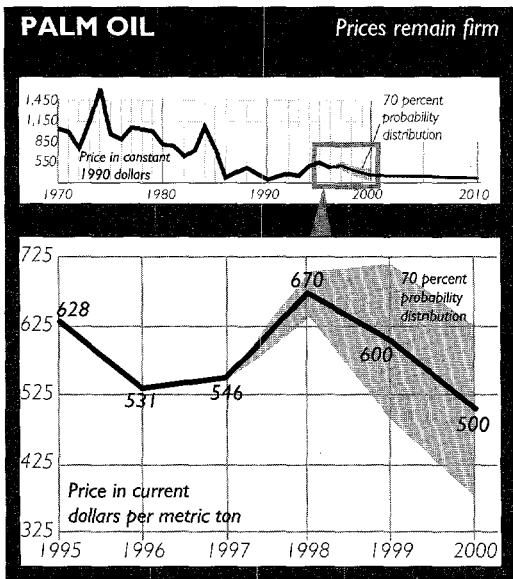
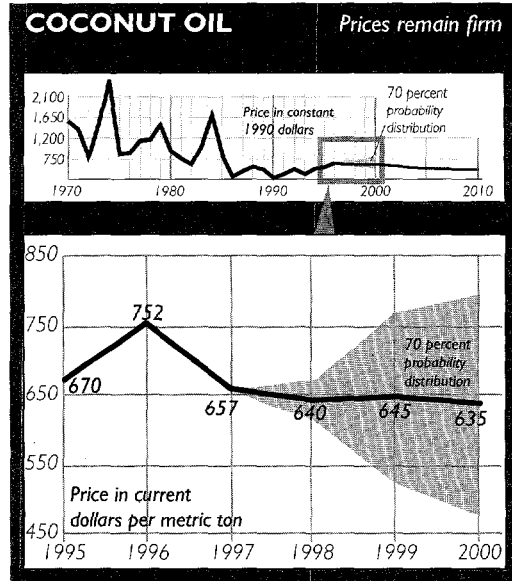
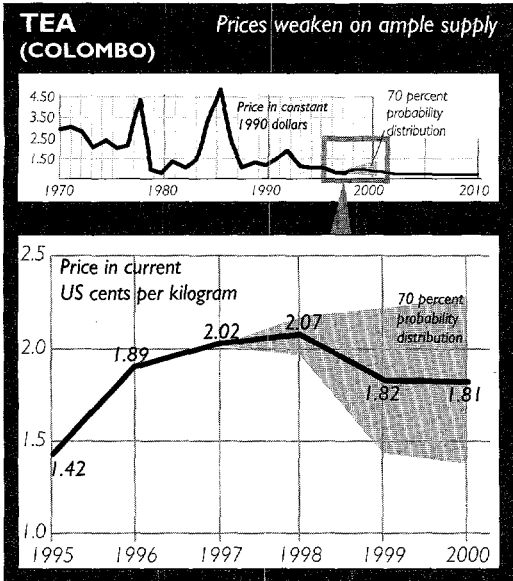
## ENERGY



## BEVERAGES

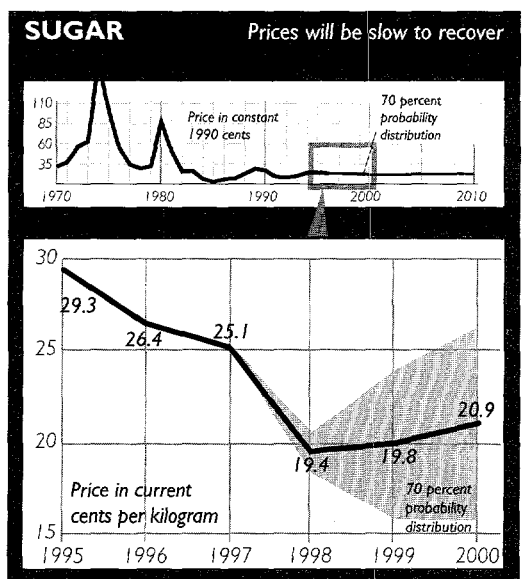
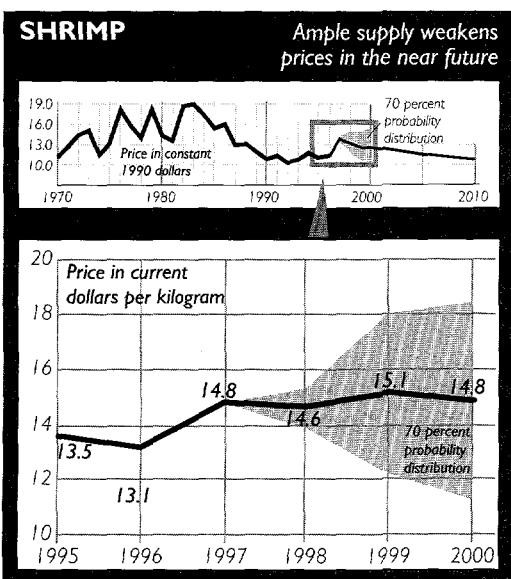
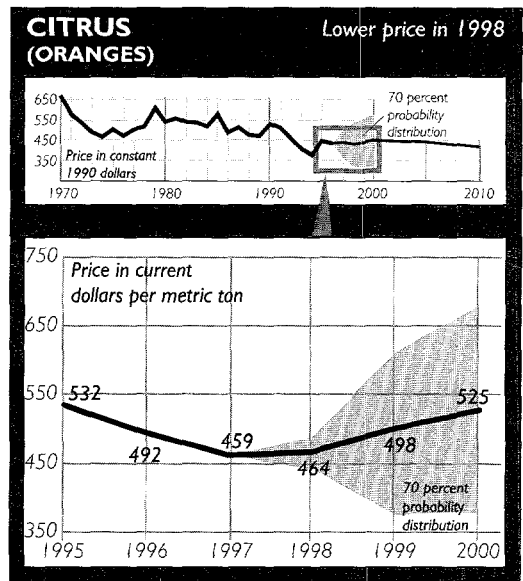
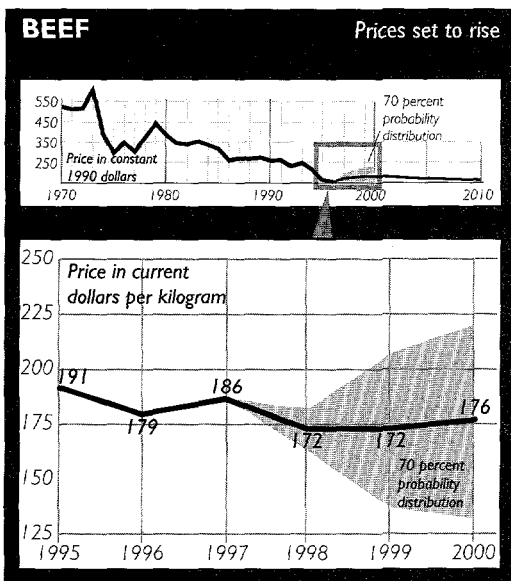
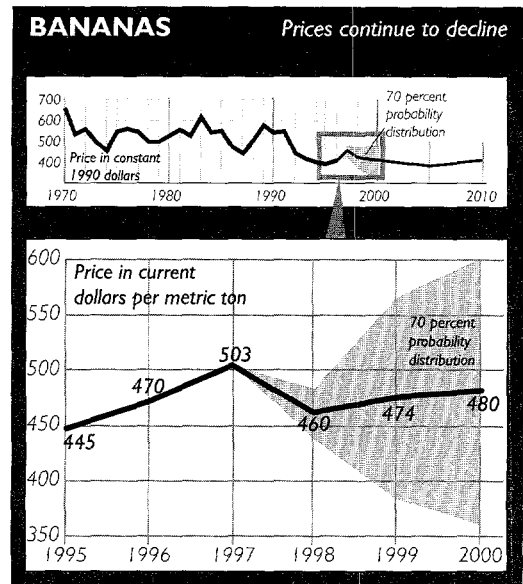
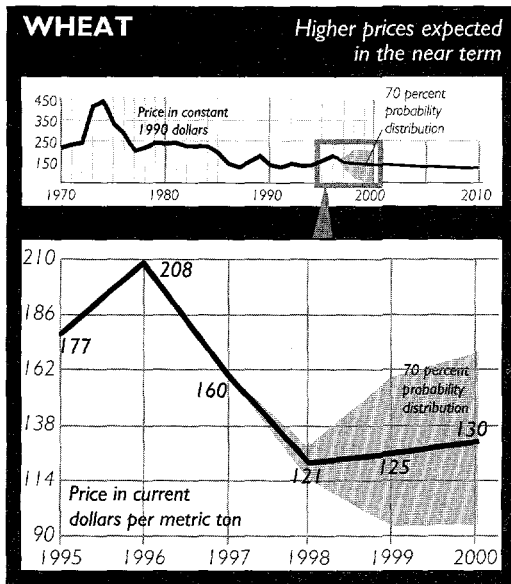


**FOOD  
FATS AND OILS**



**GRAINS**

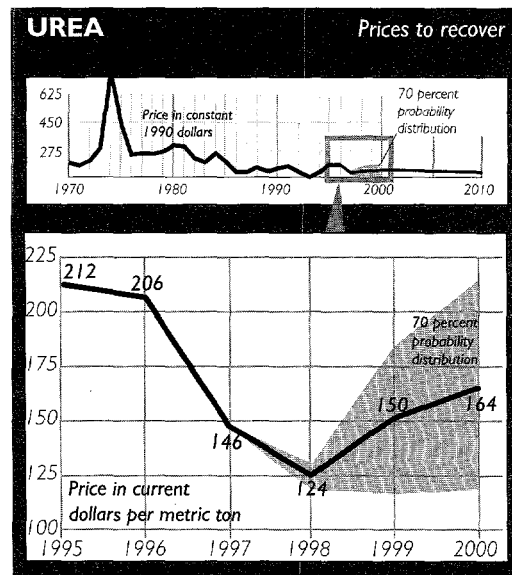
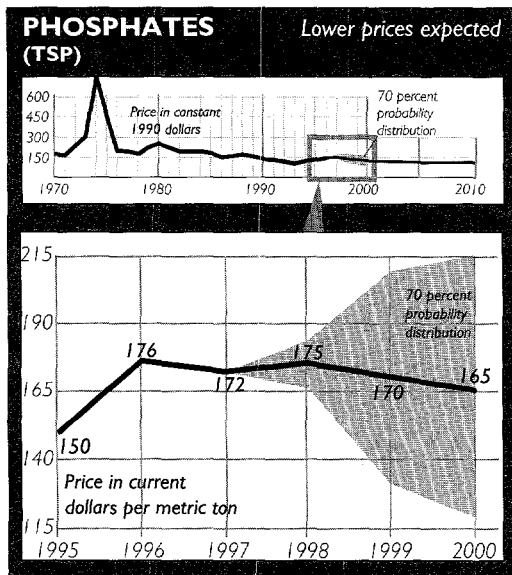
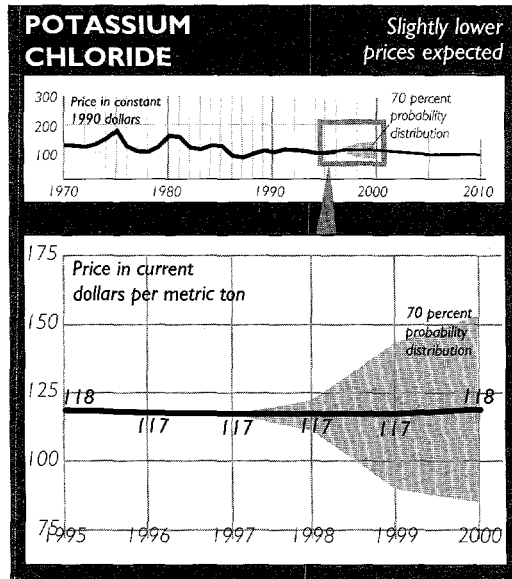
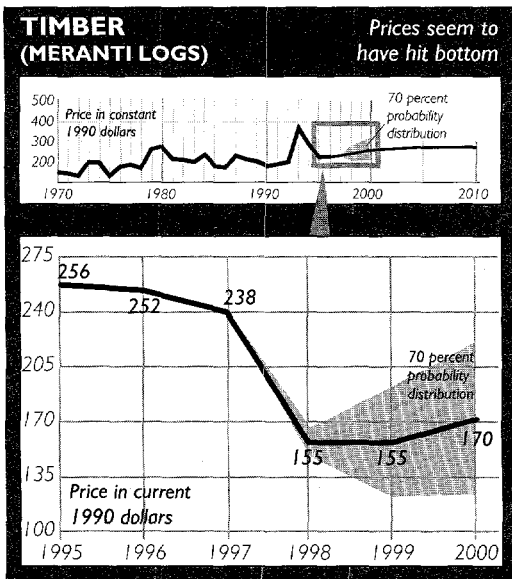
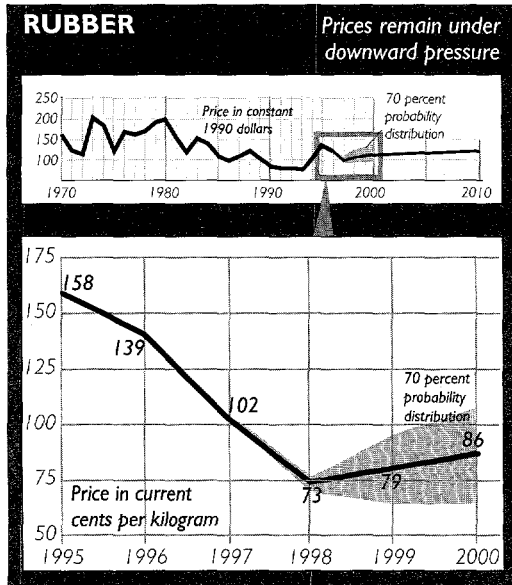
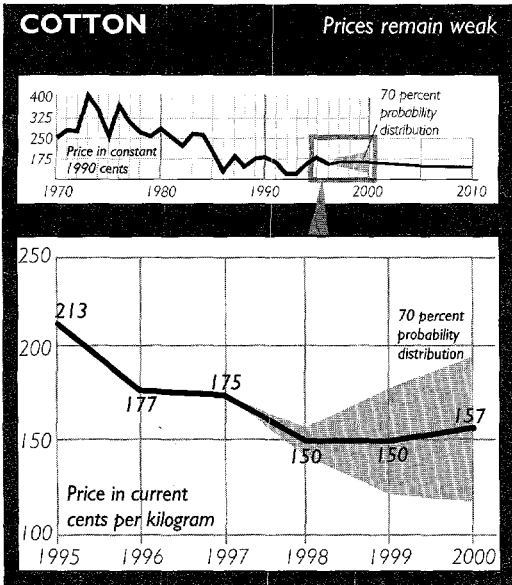
OTHER FOOD





**AGRICUL-  
TURAL  
RAW  
MATERIALS**

**FERTILIZERS**



# METALS AND MINERALS

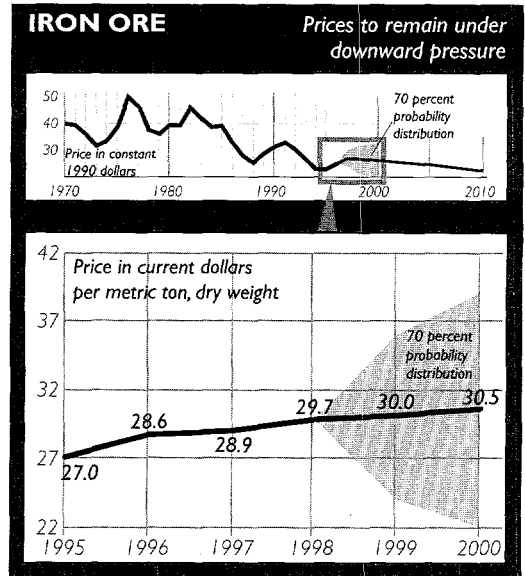
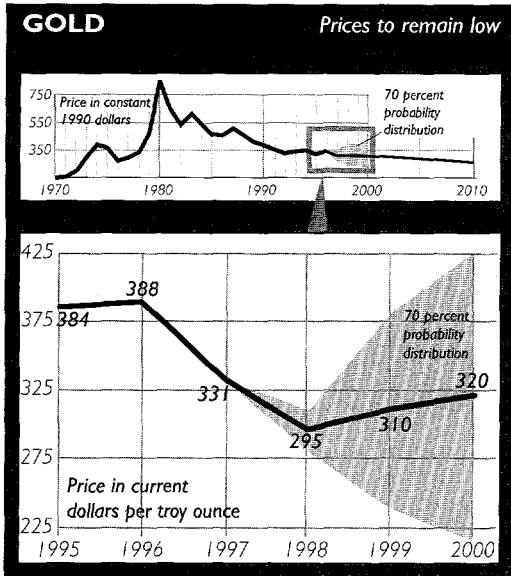
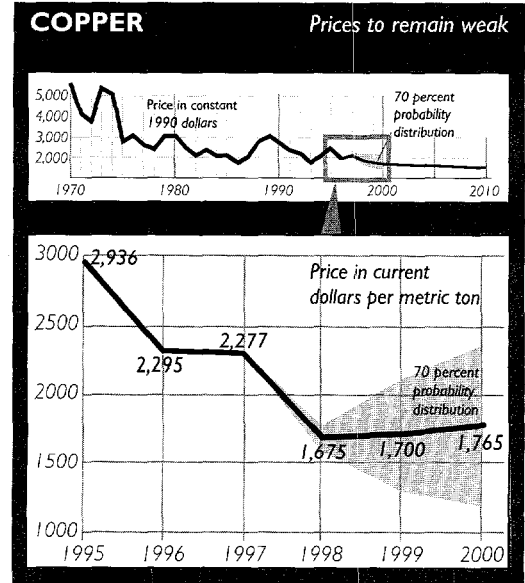
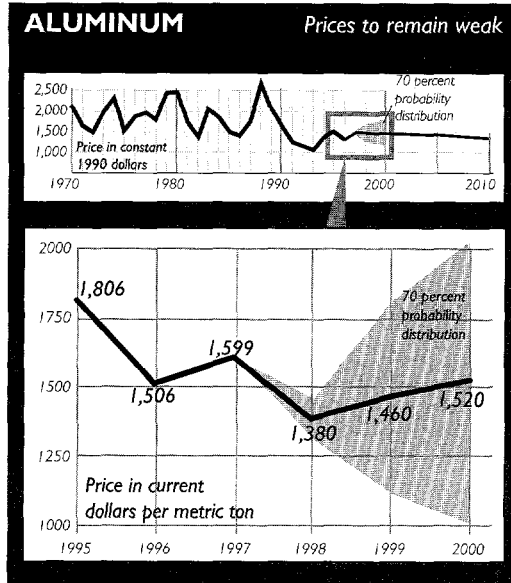


TABLE A1. COMMODITY PRICES AND PRICE PROJECTIONS IN CONSTANT 1990 DOLLARS

Commodity	Unit	Actual								Short-term projections			Long-term projections	
		1970	1980	1985	1990	1994	1995	1996	1997	1998	1999	2000	2005	2010
<b>Energy</b>														
Coal, US	\$/mt	—	59.88	67.96	41.75	33.10	32.87	32.65	33.64	33.41	32.50	31.92	29.77	28.12
Crude oil, avg. spot	\$/bbl	4.82	51.22	39.62	22.88	14.41	14.41	17.91	17.72	13.17	14.23	15.27	15.50	15.14
Natural gas, Europe	\$/mmbtu	—	4.72	5.39	2.55	2.22	2.29	2.50	2.53	2.40	2.47	2.45	2.24	2.16
Natural gas, US	\$/mmbtu	0.68	2.15	3.57	1.70	1.74	1.44	2.40	2.29	2.12	2.04	1.94	1.92	1.87
<b>Beverages</b>														
Cocoa	c/kg	269.1	361.7	328.6	126.7	126.7	120.2	127.7	149.6	163.5	167.0	173.0	165.6	157.9
Coffee, other milds	c/kg	457.2	481.6	470.9	197.2	300.1	279.5	236.4	385.2	275.9	241.0	224.8	207.1	191.1
Coffee, robusta	c/kg	362.8	450.6	386.0	118.2	237.7	232.4	158.4	160.5	177.9	167.0	163.8	151.7	138.5
Tea, auctions (3), avg. <sup>a</sup>	c/kg	332.9	230.5	255.0	205.8	135.4	124.9	145.7	190.4	194.2	169.9	163.8	167.2	152.9
Tea, Colombo auctions	c/kg	249.9	154.4	212.3	187.7	120.8	119.3	165.7	186.7	199.0	172.7	167.5	170.5	158.7
<b>Food</b>														
<b>Fats and oils</b>														
Coconut oil	\$/mt	1,584	936.1	860.2	336.5	551.2	561.7	659.3	607.1	615.3	612.0	587.5	543.1	514.9
Copra	\$/mt	896.5	629.0	562.6	230.7	378.7	367.8	428.9	400.9	394.2	408.0	384.0	375.1	348.3
Groundnut meal	\$/mt	407.4	333.9	211.7	184.8	152.7	141.4	186.6	204.3	112.5	194.5	197.1	187.6	186.1
Groundnut oil	\$/mt	1,509	1,193	1,319	963.7	928.0	831.2	787.1	933.9	865.3	759.1	712.4	630.4	591.3
Palm oil	\$/mt	1,037	810.9	729.6	289.8	479.5	527.0	465.8	504.5	644.2	569.3	462.6	379.2	341.1
Soybean meal	\$/mt	409.0	364.6	229.1	200.2	174.6	165.2	234.7	254.9	158.6	156.6	166.5	206.3	196.9
Soybean oil	\$/mt	1,142	830.2	833.7	447.3	558.6	524.4	483.8	522.0	600.9	564.6	541.3	491.8	446.4
Soybeans	\$/mt	466.2	411.5	327.1	246.8	228.5	217.5	267.4	273.1	230.8	214.4	222.1	255.3	246.6
<b>Grains</b>														
Maize	\$/mt	232.9	174.0	163.6	109.3	97.6	103.6	145.5	108.2	96.1	98.7	101.8	107.4	99.9
Rice, Thai, 5%	\$/mt	503.6	570.6	287.0	270.9	242.8	269.2	297.3	280.5	302.9	301.7	296.1	277.1	267.0
Sorghum	\$/mt	206.5	179.0	150.1	103.9	94.3	99.8	131.6	101.3	93.3	96.7	98.7	104.1	96.9
Wheat, US, HRW	\$/mt	218.9	240.0	198.0	135.5	135.9	148.5	182.1	147.4	116.3	118.6	120.3	140.1	128.3
<b>Other food</b>														
Bananas	\$/mt	662.2	524.1	551.0	540.9	399.1	373.4	412.0	464.6	442.3	449.8	444.1	415.9	382.9
Beef, US	c/kg	520.1	383.4	314.0	256.3	211.7	160.0	156.6	171.5	165.4	163.2	162.8	180.4	172.8
Oranges	\$/mt	670.0	556.0	580.7	531.1	373.2	445.8	431.3	424.2	446.1	472.5	485.8	461.7	437.0
Shrimp	c/kg	1,108	1,421	1,529	1,079	1,186	1,136	1,151	1,365	1,404	1,433	1,369	1,280	1,204
Sugar, world	c/kg	32.79	87.75	13.04	27.67	24.22	24.56	23.12	23.17	18.65	18.83	19.37	22.02	21.63
<b>Agricultural raw materials</b>														
<b>Timber</b>														
Logs, Malaysia	\$/m <sup>3</sup>	172.0	271.6	177.4	177.2	279.1	214.4	221.2	220.2	149.0	147.1	157.3	187.6	209.1
Logs, Cameroon	\$/m <sup>3</sup>	171.5	349.7	253.4	343.5	299.7	284.8	238.3	237.9	240.4	223.0	235.9	281.4	310.1
Sawnwood, Malaysia	\$/m <sup>3</sup>	697.8	550.2	447.5	533.0	745.0	620.7	650.4	614.2	450.0	455.5	499.6	587.2	656.2
<b>Other raw materials</b>														
Cotton	c/kg	269.7	286.5	192.1	181.9	160.0	178.5	155.6	161.5	144.2	142.3	145.3	159.8	149.3
Rubber, RSS I, Malaysia	c/kg	162.4	197.9	110.6	86.5	102.2	132.5	122.3	94.1	70.0	75.3	79.6	88.5	85.7
Tobacco	\$/mt	4,290	3,162	3,807	3,392	2,395	2,214	2,676	3,261	3,077	2,799	2,776	2,650	2,380
<b>Fertilizers</b>														
DAP	\$/mt	215.3	308.7	246.3	171.4	156.8	181.7	187.0	184.8	197.1	189.8	183.2	164.5	145.7
Phosphate rock	\$/mt	43.9	64.9	49.4	40.5	29.9	29.4	34.2	37.9	41.3	40.8	39.8	35.9	33.2
Potassium chloride	\$/mt	127.6	160.8	122.4	98.1	95.9	98.8	102.6	107.7	112.0	110.5	109.2	104.4	95.0
TSP	\$/mt	171.5	250.4	176.9	131.8	119.9	125.5	154.3	158.9	168.3	161.3	152.7	130.5	112.4
Urea	\$/mt	191.4	308.6	198.7	157.0	134.2	177.4	180.3	135.0	119.2	142.3	151.7	145.3	138.7
<b>Metals and minerals</b>														
Aluminum	\$/mt	2,217	2,023	1,517	1,639	1,340	1,515	1,321	1,478	1,327	1,385	1,406	1,448	1,424
Copper	\$/mt	5,645	3,032	2,066	2,661	2,094	2,463	2,013	2,104	1,610	1,613	1,633	1,656	1,623
Gold	\$/toz	143.5	844.7	463.4	383.5	348.4	322.3	340.1	306.0	283.6	294.2	296.1	281.4	266.8
Iron ore	c/dmtu	39.23	39.02	38.71	30.80	23.11	22.61	25.06	26.69	28.55	28.47	28.22	25.77	23.58
Lead	c/kg	120.8	125.8	57.0	81.1	49.7	52.9	67.9	57.7	51.0	52.2	53.7	50.6	46.5
Nickel	\$/mt	11,348	9,056	7,140	8,864	5,752	6,902	6,580	6,403	4,423	4,270	4,626	5,403	5,156
Silver	c/toz	705.7	2866.9	895.2	482.0	479.5	435.5	454.7	452.2	528.8	483.9	481.1	448.5	418.3
Tin	c/kg	1,465	2,330	1,682	608.5	495.8	521.3	540.8	521.9	528.8	521.9	527.4	481.2	439.9
Zinc	c/kg	118.0	105.8	114.2	151.4	90.5	86.5	89.9	121.7	98.6	104.4	106.4	99.9	90.1

— Not available.

Note: Computed from unrounded data and deflated by MUV (1990=100). Forecast as of October 30, 1998.

a. London tea auctions were discontinued on June 29, 1998. For details, see series description.

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

**COMMODITY PRICE OUTLOOK**
**TABLE A2. COMMODITY PRICES AND PRICE PROJECTIONS IN CURRENT DOLLARS**

Commodity	Unit	Actual								Short-term projections			Long-term projections	
		1970	1980	1985	1990	1994	1995	1996	1997	1998	1999	2000	2005	2010
<b>Energy</b>														
Coal, US	\$/mt	—	43.10	46.63	41.75	36.48	39.19	37.21	36.39	34.75	34.25	34.50	36.50	39.00
Crude oil, avg. spot	\$/bbl	1.21	36.87	27.18	22.88	15.89	17.17	20.42	19.17	13.70	15.00	16.50	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
<b>Beverages</b>														
Cocoa	c/kg	67.5	260.4	225.4	126.7	139.6	143.2	145.6	161.9	170.0	176.0	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	287.0	254.0	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>	c/kg	83.5	165.9	175.0	205.8	149.2	148.9	166.1	206.0	202.0	179.0	177.0	205.0	212.0
Tea, Colombo auctions	c/kg	62.7	111.1	145.7	187.7	133.1	142.2	188.9	202.0	207.0	182.0	181.0	209.0	220.0
<b>Food</b>														
<i>Fats and oils</i>														
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	117.0	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	800.0	770.0	773.0	820.0
Palm oil	\$/mt	260.1	583.7	500.6	289.8	528.4	628.3	530.9	545.8	670.0	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	165.0	165.0	180.0	253.0	273.0
Soybean oil	\$/mt	286.3	597.6	572.0	447.3	615.6	625.1	551.5	564.8	625.0	595.0	585.0	603.0	619.0
Soybeans	\$/mt	116.9	296.2	224.4	246.8	251.8	259.3	304.8	295.4	240.0	226.0	240.0	313.0	342.0
<i>Grains</i>														
Maize	\$/mt	58.4	125.3	112.2	109.3	107.6	123.5	165.8	117.1	100.0	104.0	110.0	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	318.0	320.0	339.8	370.3
Sorghum	\$/mt	51.8	128.9	103.0	103.9	103.9	119.0	150.0	109.6	97.0	101.9	106.7	127.7	134.3
Wheat, US, HRW	\$/mt	54.9	172.7	135.8	135.5	149.7	177.0	207.6	159.5	121.0	125.0	130.0	171.8	177.9
<i>Other food</i>														
Bananas	\$/mt	166.1	377.3	378.1	540.9	439.8	445.1	469.6	502.7	460.0	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	172.0	172.0	176.0	221.2	239.6
Oranges	\$/mt	168.0	400.2	398.4	531.1	411.3	531.5	491.7	459.0	464.0	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	1,460	1,510	1,480	1,570	1,670
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
<b>Agricultural raw materials</b>														
<i>Timber</i>														
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	\$/m <sup>3</sup>	43.0	251.7	173.9	343.5	330.3	339.5	271.6	257.4	250.0	235.0	255.0	345.0	430.0
Sawnwood, Malaysia	\$/m <sup>3</sup>	175.0	396.0	307.0	533.0	821.0	740.0	741.4	664.5	468.0	480.0	540.0	720.0	910.0
<i>Other raw materials</i>														
Cotton	c/kg	67.6	206.2	131.8	181.9	176.3	212.8	177.3	174.8	150.0	150.0	157.0	196.0	207.0
Rubber, RSS1, Malaysia	c/kg	40.7	142.5	75.9	86.5	112.6	158.0	139.4	101.8	72.8	79.4	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
<b>Fertilizers</b>														
DAP	\$/mt	54.0	222.2	169.0	171.4	172.8	216.6	213.2	199.9	205.0	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	116.5	118.0	128.0	131.8
TSP	\$/mt	43.0	180.3	121.4	131.8	132.1	149.6	175.8	171.9	175.0	170.0	165.0	160.0	155.8
Urea	\$/mt	48.0	222.1	136.3	157.0	147.9	211.5	205.5	146.1	124.0	150.0	164.0	178.2	192.4
<b>Metals and minerals</b>														
Aluminum	\$/mt	556	1,456	1,041	1,639	1,477	1,806	1,506	1,599	1,380	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	1,675	1,700	1,765	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	53.0	55.0	58.0	62.0	64.5
Nickel	\$/mt	2,846	6,519	4,899	8,864	6,340	8,228	7,501	6,927	4,600	4,500	5,000	6,625	7,150
Silver	c/toz	177.0	2,064	614.2	482.0	528.4	519.1	518.3	489.2	550.0	510.0	520.0	550.0	580.0
Tin	c/kg	367.3	1,677	1,154	608.5	546.4	621.4	616.5	564.7	550.0	550.0	570.0	590.0	610.0
Zinc	c/kg	29.6	76.1	78.3	151.4	99.8	103.1	102.5	131.6	102.5	110.0	115.0	122.5	125.0

— Not available.

Note: Computed from unrounded data and deflated by MUV (1990=100). Forecast as of October 30, 1998.

a. London tea auctions were discontinued on June 29, 1998. For details, see series description.

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

Year	Agriculture												
	Energy (100)	Nonenergy commod- ities (100) <sup>a</sup>	Total				Food			Raw materials			Metals and minerals (28.2) <sup>a</sup>
			agriculture (69.1) <sup>a</sup>	Beverages (16.9) <sup>a</sup>	Total food (29.4) <sup>a</sup>	Fats and oils (10.1) <sup>a</sup>	Grains (6.9) <sup>a</sup>	Other foods (12.4) <sup>a</sup>	Total raw materials (22.8) <sup>a</sup>	Timber (9.3) <sup>a</sup>	Fertilizers (2.7) <sup>a</sup>		
Current dollars													
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	100.0	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	75.1	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	59.9	99.1	107.5	141.1	104.6	131.0	101.4	84.8	86.3	87.3	123.0	76.3	
1999	65.6	96.9	103.5	124.6	103.5	123.8	103.8	86.6	88.0	89.7	120.6	78.3	
2000	72.1	99.0	105.4	122.0	103.8	119.7	106.8	89.0	95.2	100.6	118.2	81.3	
2005	83.0	112.0	120.2	121.3	118.9	138.6	124.5	99.7	120.8	134.4	116.7	91.6	
2010	91.8	120.2	129.0	122.6	124.5	147.0	132.4	101.6	139.5	169.8	116.5	99.2	
Constant 1990 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	133.3	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	100.0	100.0	100.0	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	101.0	82.9	113.4	117.1	86.9	85.2	
1996	78.3	101.0	110.1	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	57.6	95.3	103.3	135.7	100.6	126.0	97.5	81.5	83.0	83.9	118.3	73.3	
1999	62.2	91.9	98.2	118.2	98.2	117.4	98.5	82.2	83.5	85.1	114.4	74.3	
2000	66.7	91.6	97.5	112.9	96.0	110.8	98.8	82.4	88.1	93.1	109.4	75.2	
2005	67.7	91.4	98.0	98.9	97.0	113.1	101.5	81.3	98.5	109.6	95.2	74.7	
2010	66.2	86.7	93.0	88.4	89.8	106.0	95.4	73.3	100.6	122.4	84.0	71.5	

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 October 30, 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

Year	G-5 MUV index <sup>a</sup>		US GDP deflator	
	1990=100	% change	1990=100	% change
1980	71.98		64.53	
1985	68.61	-0.95	83.76	5.36
1990	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	117.75	2.27
1997	108.19	-5.09	120.09	1.99
1998	104.01	-3.87	122.01	1.60
1999	105.39	1.32	124.32	1.90
2000	108.08	2.56	127.43	2.50
2005	122.62	2.56	141.80	2.16
2010	138.67	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 September 30, 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.

TABLE A5. COMMODITY PRICE PROBABILITY DISTRIBUTIONS IN CONSTANT 1990 DOLLARS

Commodity	Unit	70% probability distribution			
		1998	1999	2000	2005
<b>Energy</b>					
Coal, US	\$/mt	31.74-35.08	25.88-39.11	23.71-40.13	18.65-40.88
Crude oil, avg. spot	\$/bbl	12.23-14.11	10.74-17.72	10.33-20.21	8.97-22.02
Natural gas, Europe	\$/mmbtu	2.28-2.52	2.02-2.92	1.90-2.96	1.47-3.02
Natural gas, US	\$/mmbtu	2.00-2.24	1.63-2.54	1.39-2.50	1.14-2.69
<b>Beverages</b>					
Cocoa	\$/kg	155-172	135-199	130-217	116-215
Coffee, other milds	\$/kg	262-290	195-286	168-280	145-270
Coffee, robusta	\$/kg	169-187	135-199	123-205	106-197
Tea, auctions (3), avg.	\$/kg	185-204	138-202	123-205	117-217
Tea, Colombo auctions, all	\$/kg	189-209	137-210	127-211	112-241
<b>Food</b>					
<i>Fats and oil</i>					
Coconut oil	\$/mt	585-646	496-728	440-735	380-706
Copra	\$/mt	374-414	330-486	288-480	263-488
Groundnut meal	\$/mt	107-118	158-231	148-246	131-244
Groundnut oil	\$/mt	822-909	615-903	535-891	441-820
Palm oil	\$/mt	612-676	461-677	347-578	266-493
Soybean meal	\$/mt	151-167	127-186	125-208	144-268
Soybean oil	\$/mt	571-631	457-672	406-677	344-639
Soybeans	\$/mt	219-242	174-255	167-278	179-332
<i>Grains</i>					
Maize	\$/mt	90-102	78-120	77-128	70-150
Rice, Thai, 5%	\$/mt	285-321	233-371	213-385	166-388
Sorghum	\$/mt	88-99	76-118	75-124	68-146
Wheat, US, HRW	\$/mt	109-123	89-150	87-156	87-196
<i>Other food</i>					
Bananas	\$/mt	420-464	364-535	333-554	291-542
Beef, US	\$/kg	155-175	130-197	122-204	121-240
Oranges	\$/mt	424-468	356-580	350-627	309-614
Shrimp	\$/kg	1,334-1,474	1,161-1,705	1,041-1,698	896-1,664
Sugar, world	\$/kg	17.53-19.77	14.98-22.67	14.53-24.22	14.75-29.29
<b>Agricultural raw materials</b>					
<i>Timber</i>					
Logs, Malaysia	\$/m <sup>3</sup>	140-158	114-181	113-201	113-263
Logs, Cameroon	\$/m <sup>3</sup>	226-255	168-278	165-307	163-400
Sawnwood, Malaysia	\$/m <sup>3</sup>	423-477	352-559	360-640	352-822
<i>Other raw materials</i>					
Cotton	\$/kg	137-151	115-169	109-182	112-208
Rubber, RSS1, Malaysia	\$/kg	66-73	61-90	59-99	62-115
Tobacco	\$/mt	2,923-3,230	2,227-3,371	2,082-3,470	1,776-3,525
<b>Fertilizers</b>					
DAP	\$/mt	187-207	147-233	132-238	107-222
Phosphate rock	\$/mt	39-44	31-50	29-52	23-48
Potassium chloride <sup>a</sup>	\$/mt	106-118	85-136	79-142	63-146
TSP	\$/mt	160-177	125-198	110-198	78-183
Urea	\$/mt	113-125	110-175	109-197	87-203
<b>Metals and minerals</b>					
Aluminum	\$/mt	1,256-1,398	1,056-1,714	934-1,878	869-2,027
Copper	\$/mt	1,526-1,695	1,231-1,995	1,101-2,165	979-2,324
Gold	\$/toz	269-298	227-362	199-393	171-391
Iron ore	\$/dmtu	28.19-28.90	23.06-33.87	20.36-36.08	17.13-34.25
Lead	\$/kg	48-54	40-64	36-71	30-71
Nickel	\$/mt	4,179-4,666	3,236-5,304	3,099-6,154	3,242-7,564
Silver	\$/toz	502-556	368-600	321-642	269-628
Tin	\$/kg	500-558	396-648	352-703	285-677
Zinc	\$/kg	93-104	79-130	71-142	60-140

Note: Forecast as of October 30, 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

Commodity	Unit	70% probability distribution			
		1998	1999	2000	2005
<b>Energy</b>					
Coal, US	\$/mt	33.01-36.49	27.28-41.22	25.63-43.37	22.87-50.13
Crude oil, avg. spot	\$/bbl	12.72-14.68	11.32-18.68	11.16-21.84	11.00-27.00
Natural gas, Europe	\$/mmbtu	2.38-2.63	2.13-3.08	2.05-3.20	1.80-3.70
Natural gas, US	\$/mmbtu	2.08-2.33	1.72-2.67	1.50-2.70	1.40-3.30
<b>Beverages</b>					
Cocoa	\$/kg	162-179	142-210	140-234	142-264
Coffee, other milds	\$/kg	273-301	206-301	182-303	178-331
Coffee, robusta	\$/kg	176-194	143-210	133-222	130-242
Tea, auctions (3), avg.	\$/kg	192-212	145-213	133-221	144-266
Tea, Colombo auctions, all	\$/kg	197-217	144-222	138-228	137-295
<b>Food</b>					
<i>Fats and oil</i>					
Coconut oil	\$/mt	608-672	522-768	476-794	466-866
Copra	\$/mt	390-431	348-512	311-519	322-598
Groundnut meal	\$/mt	111-123	166-244	160-266	161-299
Groundnut oil	\$/mt	855-945	648-952	578-963	541-1,005
Palm oil	\$/mt	637-704	486-714	375-625	326-605
Soybean meal	\$/mt	157-173	134-196	135-225	177-329
Soybean oil	\$/mt	594-656	482-708	439-731	422-784
Soybeans	\$/mt	228-252	183-269	180-300	219-407
<i>Grains</i>					
Maize	\$/mt	94-106	82-127	84-139	86-184
Rice, Thai, 5%	\$/mt	296-334	245-391	230-416	204-476
Sorghum	\$/mt	91-103	81-124	81-134	83-179
Wheat, US, HRW	\$/mt	114-128	94-158	94-169	107-241
<i>Other food</i>					
Bananas	\$/mt	437-483	384-564	360-599	357-664
Beef, US	\$/kg	162-182	137-207	132-220	148-294
Oranges	\$/mt	441-487	375-612	378-677	379-753
Shrimp	\$/kg	1,387-1,533	1,223-1,797	1,125-1,835	1,099-2,041
Sugar, world	\$/kg	18.24-20.56	15.79-23.89	15.71-26.18	18.09-35.91
<b>Agricultural raw materials</b>					
<i>Timber</i>					
Logs, Malaysia	\$/m <sup>3</sup>	146-164	120-190	122-218	138-322
Logs, Cameroon	\$/m <sup>3</sup>	235-265	177-293	179-332	200-490
Sawnwood, Malaysia	\$/m <sup>3</sup>	440-496	371-589	389-691	432-1,008
<i>Other raw materials</i>					
Cotton	\$/kg	143-158	122-179	118-196	137-255
Rubber, RSS1, Malaysia	\$/kg	69-76	64-95	64-107	76-141
Tobacco	\$/mt	3,040-3,360	2,347-3,553	2,250-3,750	2,178-4,323
<b>Fertilizers</b>					
DAP	\$/mt	195-215	154-246	143-257	131-272
Phosphate rock	\$/mt	40-46	33-53	31-56	29-59
Potassium chloride <sup>a</sup>	\$/mt	111-122	90-143	85-153	77-179
TSP	\$/mt	166-184	131-209	119-215	96-224
Urea	\$/mt	118-130	116-184	118-213	107-249
<b>Metals and minerals</b>					
Aluminum	\$/mt	1,306-1,454	1,113-1,807	1,010-2,030	1,065-2,485
Copper	\$/mt	1,587-1,763	1,297-2,103	1,190-2,340	1,200-2,850
Gold	\$/toz	280-310	239-381	215-425	210-480
Iron ore	\$/dmtu	29.32-30.06	24.30-35.70	22.00-39.00	21.00-42.00
Lead	\$/kg	50.11-55.89	42.17-67.83	39.00-77.00	37.20-86.80
Nickel	\$/mt	4,347-4,853	3,410-5,590	3,349-6,651	3,975-9,275
Silver	\$/toz	522-578	388-632	347-693	330-770
Tin	\$/kg	520-580	417-683	380-760	350-830
Zinc	\$/kg	97-108	83-137	77-153	74-172

Note: Forecast as of October 30, 1998.

a. Also known as muriate of potash.

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

**COMMODITY PRICE OUTLOOK**
**TABLE A7. RECENT COMMODITY PRICES**

Commodity	Unit	Annual averages			Quarterly averages					Monthly averages		
		Jan-Dec 1996	Jan-Dec 1997	Jan-Sep 1998	Jul-Sep 1997	Oct-Dec 1997	Jan-Mar 1998	Apr-Jun 1998	Jul-Sep 1998	Jul 1998	Aug 1998	Sep 1998
<b>Energy</b>												
Coal, Australia	\$/mt	38.07	35.10	30.16	36.36	34.05	32.24	30.49	27.76	30.00	26.20	27.09
Coal, US	\$/mt	37.21	36.39	34.68	35.26	35.66	35.24	34.76	34.04	34.63	34.00	33.50
Crude oil, average spot <sup>a</sup>	\$/bbl	20.42	19.17	13.48	18.56	18.74	14.07	13.36	13.01	12.70	12.49	13.83
Brent <sup>a</sup>	\$/bbl	20.65	19.09	13.26	18.52	18.62	14.08	13.29	12.42	12.01	11.88	13.36
Dubai <sup>a</sup>	\$/bbl	18.54	18.10	12.31	17.67	17.87	12.44	12.08	12.41	11.98	12.18	13.07
West Texas Int. <sup>a</sup>	\$/bbl	22.07	20.33	14.83	19.50	19.73	15.69	14.64	14.16	14.11	13.40	14.98
Natural gas, Europe	\$/mmbtu	2.84	2.74	2.50	2.68	2.65	2.63	2.52	2.37	2.40	2.37	2.33
Natural gas, US	\$/mmbtu	2.73	2.48	2.15	2.50	2.80	2.18	2.24	2.01	2.17	1.85	2.01
<b>Beverages</b>												
Cocoa <sup>b</sup>	c/kg	145.6	161.9	170.5	169.9	172.5	167.8	174.2	169.5	171.7	168.3	168.6
Coffee												
Other Milds <sup>b</sup>	c/kg	269.4	416.8	313.4	419.7	371.4	377.5	303.5	259.2	259.3	271.6	246.6
Robusta <sup>b</sup>	c/kg	180.6	173.6	183.1	168.5	171.3	183.0	192.9	173.5	169.8	174.8	175.9
Tea												
Auctions (3), average <sup>b</sup>	c/kg	168.9	210.2	215.9	222.5	235.5	250.8	202.5	194.5	198.1	196.3	188.9
Colombo auctions <sup>b</sup>	c/kg	188.9	202.0	216.5	207.6	224.2	236.0	215.3	198.2	197.9	206.1	190.7
Mombasa auctions <sup>b</sup>	c/kg	142.3	201.5	197.9	209.9	233.5	254.8	169.0	170.0	168.3	170.2	171.5
<b>Food</b>												
<b>Fats and Oils</b>												
Coconut oil <sup>b</sup>	\$/mt	751.6	656.8	630.4	593.0	609.7	565.0	664.3	662.0	667.0	667.0	652.0
Copra	\$/mt	488.9	433.8	395.0	395.7	406.0	375.7	404.7	404.7	402.0	403.0	409.0
Groundnut meal	\$/mt	212.8	221.0	119.9	220.7	175.7	137.3	114.3	108.0	110.0	107.0	107.0
Groundnut oil <sup>b</sup>	\$/mt	897.3	1010.4	926.7	1090.7	1077.0	1011.0	906.3	862.7	874.0	862.0	852.0
Palm oil <sup>b</sup>	\$/mt	530.9	545.8	669.6	509.0	556.3	650.3	675.3	683.0	661.0	674.0	714.0
Soybean meal <sup>b</sup>	\$/mt	267.5	275.8	173.6	257.3	266.7	209.7	162.0	149.0	157.0	145.0	150.0
Soybean oil <sup>b</sup>	\$/mt	551.5	564.8	632.4	544.7	636.3	637.0	654.0	606.3	612.0	592.0	615.0
Soybeans <sup>b</sup>	\$/mt	304.8	295.4	247.4	280.0	283.3	270.3	247.7	224.3	238.0	219.0	216.0
<b>Grains</b>												
Maize <sup>b</sup>	\$/mt	165.8	117.1	103.8	110.4	117.0	114.1	105.8	91.6	100.5	87.9	86.3
Rice												
Thai, 5% <sup>b</sup>	\$/mt	338.9	303.5	311.5	291.9	262.6	293.8	318.4	322.3	324.3	321.4	321.3
Thai, 35%	\$/mt	275.8	246.8	249.1	241.3	222.9	235.3	249.7	262.5	254.5	264.4	268.5
Thai, A1 Special	\$/mt	232.7	210.4	204.9	209.3	189.5	188.2	199.8	226.7	211.0	228.8	240.3
Sorghum <sup>b</sup>	\$/mt	150.0	109.6	100.7	102.4	111.8	111.2	100.4	90.5	95.4	91.0	85.0
Wheat												
Canada	\$/mt	230.8	181.4	162.3	178.6	172.7	168.7	165.3	153.0	158.5	151.4	149.1
US, HRW <sup>b</sup>	\$/mt	207.6	159.5	125.6	146.2	148.7	138.7	126.6	111.6	118.9	108.0	107.9
US, SRW	\$/mt	187.4	143.7	112.4	137.3	139.2	129.1	112.6	95.3	96.8	92.9	96.3
<b>Other food</b>												
Bananas <sup>b</sup>	\$/mt	469.6	502.7	482.1	423.9	404.8	422.2	567.5	456.5	560.0	390.5	418.9
Beef <sup>b</sup>	c/kg	178.5	185.5	174.7	180.0	181.7	181.3	176.1	166.7	166.7	168.0	165.5
Fishmeal	\$/mt	586.0	606.3	682.1	613.0	698.3	694.7	681.3	670.3	660.0	670.0	681.0
Lamb	c/kg	329.5	339.3	278.6	326.0	333.0	312.5	272.3	251.1	242.5	245.2	265.6
Oranges <sup>b</sup>	\$/mt	491.7	459.0	451.8	544.7	420.5	388.2	450.1	517.1	542.9	508.0	500.3
Shrimp	c/kg	1311.9	1476.3	1492.9	1531.6	1516.5	1539.3	1566.2	1373.3	1430.3	1377.9	1311.8
Sugar												
EU, domestic <sup>b</sup>	c/kg	68.31	62.72	59.37	60.49	60.50	59.94	59.59	58.59	58.35	57.83	59.59
US, domestic <sup>b</sup>	c/kg	49.29	48.36	48.77	48.93	48.52	48.05	49.15	49.10	49.98	48.98	48.35
World <sup>b</sup>	c/kg	26.36	25.06	20.45	25.17	26.27	23.57	19.85	17.92	19.01	18.82	15.94
<b>Agricultural Raw Materials</b>												
<b>Timber</b>												
Logs												
Malaysia <sup>b</sup>	\$/m <sup>3</sup>	252.1	238.3	162.6	243.8	217.8	196.9	150.2	140.7	135.0	136.9	150.2
Cameroon	\$/m <sup>3</sup>	271.6	257.4	249.8	246.8	255.0	246.0	249.4	254.0	248.9	250.2	262.8
Plywood	c/sheet	529.5	485.0	370.5	497.3	439.5	403.6	361.1	346.8	348.5	335.3	356.6
Sawnwood												
Malaysia <sup>b</sup>	\$/m <sup>3</sup>	741.4	664.5	472.3	650.0	509.4	474.6	476.7	465.5	437.5	455.6	503.5
Ghana	\$/m <sup>3</sup>	540.8	567.5	536.4	566.4	578.3	561.6	529.3	518.2	516.7	512.7	525.2
Woodpulp	\$/mt	574.1	556.5	528.2	573.9	597.0	527.5	540.5	516.6	533.9	507.9	507.9



TABLE A7. RECENT COMMODITY PRICES

Commodity	Unit	Annual averages			Quarterly averages					Monthly averages		
		Jan-Dec 1996	Jan-Dec 1997	Jan-Sep 1998	Jul-Sep 1997	Oct-Dec 1997	Jan-Mar 1998	Apr-Jun 1998	Jul-Sep 1998	Jul 1998	Aug 1998	Sep 1998
<b>Other Raw Materials</b>												
Cotton <sup>b</sup>	c/kg	177.3	174.8	150.1	178.0	168.5	153.9	146.2	150.2	154.0	150.3	146.4
Jute	\$/mt	457.5	304.6	254.0	287.2	242.3	243.3	258.8	260.0	260.0	260.0	260.0
Rubber												
Malaysia <sup>b</sup>	c/kg	139.4	101.8	72.7	90.8	81.3	74.8	75.3	68.0	70.3	65.4	68.3
NY	c/kg	160.7	121.6	90.3	114.9	103.3	92.8	92.0	86.1	88.1	85.1	85.2
Singapore	c/kg	140.9	101.0	71.6	90.8	80.8	73.1	73.4	68.3	72.1	64.5	68.4
Sisal	\$/mt	868.3	776.6	811.1	767.5	760.0	778.3	805.0	850.0	850.0	850.0	850.0
Wool	c/kg	416.3	430.3	341.9	441.4	412.9	374.3	350.8	300.6	327.9	288.3	285.7
<b>Fertilizers</b>												
DAP	\$/mt	213.2	199.9	203.1	199.2	200.1	194.6	205.3	209.5	208.9	210.0	209.5
Phosphate rock <sup>b</sup>	\$/mt	39.0	41.0	43.0	41.0	41.0	43.0	43.0	43.0	43.0	43.0	43.0
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	175.3	165.1	168.7	172.5	175.9	177.5	177.5	177.5	177.5
Urea	\$/mt	205.5	146.1	126.0	131.2	128.9	128.5	129.0	120.5	119.7	122.3	119.5
<b>Metals and Minerals</b>												
Aluminum <sup>b</sup>	\$/mt	1505.7	1599.3	1382.4	1637.7	1579.1	1463.0	1363.4	1320.8	1309.2	1310.9	1342.3
Copper <sup>b</sup>	\$/mt	2294.9	2276.8	1690.5	2269.7	1910.7	1700.4	1731.3	1639.9	1651.0	1620.9	1647.6
Gold	\$/toz	387.7	331.1	294.2	323.6	306.6	294.2	299.9	288.7	292.9	284.1	289.0
Iron ore <sup>b</sup>	c/dmtu	28.57	28.88	29.69	28.88	28.88	29.69	29.69	29.69	29.69	29.69	29.69
Lead <sup>b</sup>	c/kg	77.4	62.4	54.0	62.6	56.3	53.6	54.8	53.4	54.6	53.7	52.0
Nickel <sup>b</sup>	\$/mt	7500.8	6927.4	4852.5	6700.2	6155.1	5424.8	4963.2	4169.4	4325.4	4080.6	4102.2
Silver	c/toz	518.3	489.2	572.7	453.3	526.2	624.8	571.2	522.0	546.8	516.5	502.7
Steel products (8) index <sup>c</sup>	1990=100	96.3	89.1	76.8	90.7	84.5	80.4	76.7	73.4	74.8	73.7	71.7
Steel												
Cold rolled coil sheet	\$/mt	483.9	448.2	387.8	459.3	443.3	416.7	386.7	360.0	370.0	360.0	350.0
Hot rolled coil sheet	\$/mt	365.6	337.3	293.3	347.3	330.0	316.7	293.3	270.0	280.0	270.0	260.0
Rebar	\$/mt	360.2	325.2	263.3	324.0	306.7	296.7	260.0	233.3	240.0	230.0	230.0
Wire rod	\$/mt	438.5	382.7	333.9	397.3	346.7	328.3	336.7	336.7	330.0	340.0	340.0
Tin <sup>b</sup>	c/kg	616.5	564.7	559.1	545.6	557.8	530.9	585.3	561.0	565.4	569.2	548.6
Zinc <sup>b</sup>	c/kg	102.5	131.6	104.7	160.4	118.5	106.3	105.6	102.3	104.0	103.0	100.0
<b>World Bank commodity price indices for low and middle income countries (1990 = 100)</b>												
Petroleum		89.3	83.8	59.8	81.1	81.9	61.5	58.4	56.9	55.5	54.6	60.5
Nonenergy Commodities		115.1	117.6	99.9	115.9	109.4	106.0	101.0	95.3	96.3	94.9	94.8
Agriculture		125.5	128.7	108.4	125.9	119.3	116.5	109.7	102.7	103.9	102.2	101.8
Beverages		126.5	171.0	142.4	173.6	162.1	164.9	144.1	129.0	129.3	132.4	125.4
Food		123.6	116.1	105.1	110.2	112.0	109.1	106.9	101.2	104.8	99.4	99.6
Fats and Oils		147.0	147.7	131.5	138.4	146.3	140.0	132.5	127.5	128.8	125.4	128.4
Grains		140.6	112.1	103.4	105.7	103.6	105.7	104.5	98.3	102.4	96.6	95.9
Other food		95.0	92.4	84.4	89.7	88.7	85.8	87.3	81.4	86.5	79.7	78.0
Raw materials		127.1	113.7	87.5	111.0	97.1	90.3	87.7	85.0	84.1	83.6	87.3
Timber		139.5	125.8	88.0	124.0	98.7	91.9	88.8	86.3	81.3	84.4	93.2
Other raw materials		118.7	105.5	87.2	102.1	96.1	89.2	87.0	84.2	86.0	83.1	83.4
Fertilizers		119.8	119.7	123.7	116.4	118.2	121.8	123.4	124.2	124.2	124.2	124.2
Metals and Minerals		89.1	90.2	77.0	91.3	84.1	78.7	77.4	74.5	74.7	74.1	74.7

Note: Prices as of October 6, 1998. Monthly updates of commodity prices are available on the World Wide Web at <http://www.worldbank.org/prospects>

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 (US)*, spot price at Henry Hub, Louisiana

**Beverages**

*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 (Colombo auctions)*, all tea; arithmetic averages of weekly quotes  
*Tea (Mombasa/Nairobi auctions)*, African origin, all tea; arithmetic averages of weekly quotes

**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 milo 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, London  
*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 ports  
*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 volumes  
*Logs (West African)*, sapelli, high quality (loyal and marchand), f.o.b. Cameroon  
*Plywood (Southeast Asian)*, Lauan, 3-ply, extra, 91 m<sup>2</sup> x 182 m<sup>2</sup> x 4 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 Lumpur  
*Rubber (any origin)*, RSS no. 1, in bales, Rubber Traders Association (RTA), spot, New York  
*Rubber (Asian)*, RSS no. 1, 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

# GLOBAL COMMODITY MARKETS

The World Bank is proud to announce the launch of  
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# COMMODITY MARKETS

AND THE DEVELOPING COUNTRIES

A World Bank Business Quarterly

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