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Research Report

World Commodity Prices 2001 - 2002

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REPORT

World Commodity Prices 2001 - 2002

Klaus Matthies

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World Commodity Prices 2001 - 2002

Klaus Matthies

Report of the AIECE Working Group on Commodity Prices
presented at the AIECE Spring Meeting,
Paris, May 10 - 11, 2001

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HWWA REPORT

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Members of the group:

BIPE	Bureau d'Information et de Prévisions Économiques, Boulogne
COE	Chambre de Commerce et d'Industrie de Paris, Paris
CPB	Netherlands Bureau for Economic Policy Analysis, The Hague
ETLA	Research Institute of the Finnish Economy, Helsinki
HWWA	Hamburg Institute of International Economics, Hamburg
IfW	Institut für Weltwirtschaft, Kiel
IKCHZ	Foreign Trade Research Institute, Warsaw
INSEE	Institut National de la Statistique et des Études Économiques, Paris
SKEP	Chamber of Commerce and Industry of Slovenia, Ljubljana

This report is based on discussions and raw material prices forecasts made by the member institutes' representatives in the Commodity Group.

We would like to thank the ETLA institute for providing the graphs. All remaining omissions and errors are the responsibility of the reporter.

Summary

The rise of world commodity prices in US dollar terms by more than 30 per cent from 1999 to 2000 – the Euro denominated index rose by 51 per cent – was mainly the result of further increasing oil prices. The steep rise from 10 to 25 dollars per barrel for Brent oil during 1999 was resumed last year and ended at about 33 dollars in November 2000. Afterwards, oil prices dropped, reaching 25 dollars in early April. The all-commodities index is forecast to decrease by 9 per cent this year and hardly change next year. The crude oil price that increased by 56 per cent last year is projected to fall by 12 per cent in 2001 – largely as a result of the drop that already took place after November 2000 – and recede again slightly next year.

The prices of non-energy raw materials increased last year by 2 per cent. Price rises are projected to rise only slightly during the remainder of this year and slightly accelerate next year. As several commodity prices declined in the first quarter and especially – above all with some metals – during March, the non-energy average for 2001 is expected to be 4 per cent lower than for 2000. In 2002 there will be a 5 percent increase. The price development within the non-energy group of commodities was quite different. Whereas industrial commodities, especially non-ferrous metals, were more expensive in 2000, food and beverages became cheaper. In the projection period price developments are expected to be more uniform.

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1 Price developments in the past six months

World commodity prices, as measured by the HWWA index in dollar terms, descended by 8 per cent in the first quarter of this year after stabilising in the last quarter of 2000. The forecast made in autumn saw a small increase in non-energy prices and continuing high energy prices during the winter months. Actually the modest rise of non-energy prices did not continue this year, and crude oil prices, after having reached a new peak in November, decreased strongly in December – by about 10 dollars per barrel –, thus anticipating a development projected by the group only for the second quarter when oil demand usually is low. The fall in crude oil prices came much earlier than anticipated, after OPEC production had been lifted again to the initial level before the first cut made in early 1998, and non-OPEC output grew strongly with an enhanced revenue outlook. This year, two production cuts by OPEC did stabilise oil prices within the OPEC target price band, in March the price for Brent oil stood at 25 dollars per barrel. In April oil prices were lifted as the possibility of a summer gasoline shortage in the United States unsettled the oil market.

With respect to non-energy raw materials, the forecast did not foresee the unexpectedly strong downturn of the US economy and its impact on other regions that dampened the demand for many commodity prices. With only a few exceptions (iron ore, cereals), actual price changes were negative in the last six months.

Table 1 Autumn 2000 forecasts and realisations

	2000Q4		2001Q1	
	Forecast	Actual	Forecast	Actual
	Quarterly percentage changes			
HWWA, total	3.0	0.0	0.0	-8.0
HWWA, non-energy	2.0	-1.0	1.0	1.0
Industrial materials and food	2.0	-2.0	1.0	0.0
Food and tropical beverages	2.0	-2.0	2.0	-1.0
Cereals	3.0	10.0	5.0	3.0
Beverages, tobacco, sugar	1.0	-7.0	1.0	-1.0
Oil seeds and veg. Oils	5.0	1.0	1.0	-5.0
Industrial materials	1.0	-2.0	1.0	1.0
Agricultural raw materials	0.0	-1.0	0.0	1.0
Non-ferrous metals	4.0	-4.0	1.0	-1.0
Iron ore, scrap	1.0	-1.0	5.0	4.0
Energy raw materials	4.0	0.0	0.0	-12.0

2 Price forecasts until the end of 2002

2.1 General economic assumptions

The state of the world economy, after a longer period of dynamic growth, deteriorated in the latter half of last year, as a result of the increase in oil prices that dampened economic activities, and of a tighter monetary policy trying to keep inflation rates low. The downturn was most pronounced in the United States, but growth in Europe as well turned out lower than expected. In Japan the slowly beginning recovery last year did not continue.

This year, world economic growth will be significantly slower. But the downturn of the US economy is expected to be only temporary, as lower oil prices and a turnaround in the monetary policy that lowered interest rates brightened the prospects for a balancing economy and a stronger growth in the second half of 2001 and in 2002. In Europe consumer and investor confidence is supported by cuts in individual and corporate income taxes which came into force in several countries in the beginning of this year. World GDP is expected to recover strongly next year. The risk for this projection is a negative effect on consumer spending in the US of a continuing strong fall in stock prices. A delayed recovery in the US economy would weaken output growth in the emerging economies further.

The euro two years after its introduction obviously still has problems with building a reputation in comparison to the long established US dollar. The handling of policy reforms within the EU in preparation for the admission of new member countries as well as enlargement fears contribute to the low exchange rate. The group expects that the euro appreciates slowly against the US dollar in the projection period.

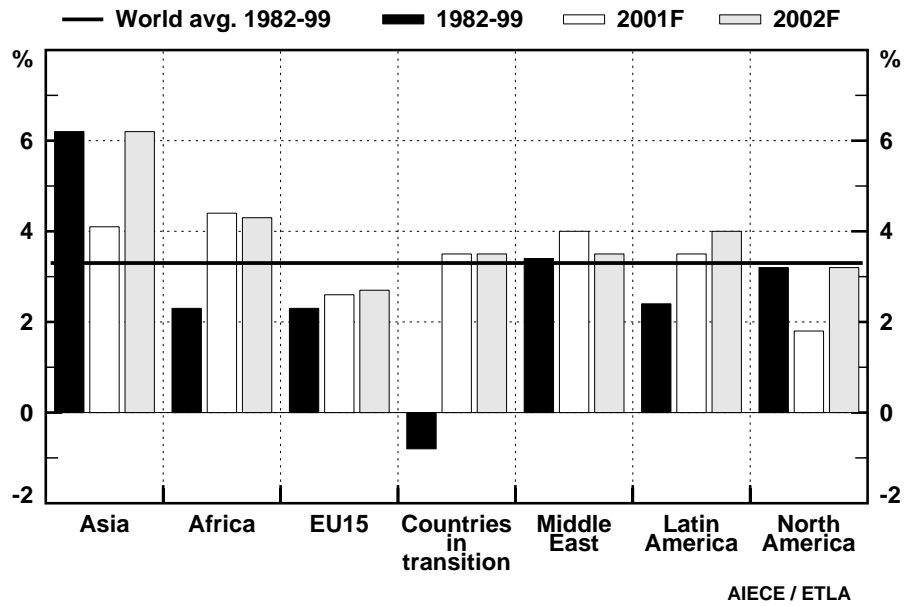
Tables 2a and 2b summarize the main assumptions on the general economic environment.

Table 2a Framework assumptions 2000 - 2002

	2000	2001	2002
World GDP, volume	4.8	3.1	4.2
Advanced economies GDP, volume	4.1	2.2	3.2
OECD, industrial production	4.7	1.0	3.0
World trade, volume	13.0	7.0	8.0
Export price of manufactures, in US\$	-5.0	2.0	2.5
Exchange rate (US\$/Euro)	0.92	0.95	1.00

Source: IMF, AIECE Commodity Group

World GDP growth by regions



Growth of GDP in OECD Countries and World Trade, volumes, %

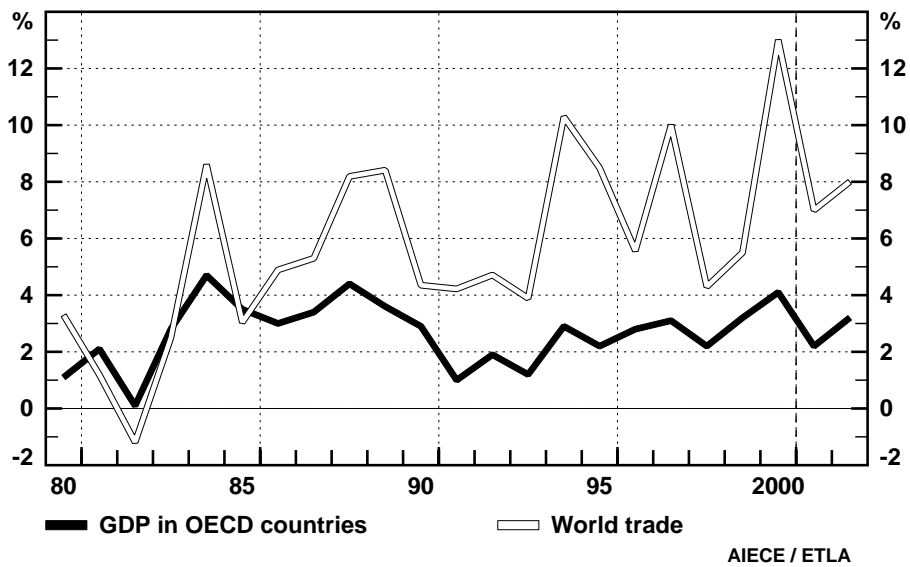


Table 2b World GDP growth by regions

	Weight*	1982-2000	1999	2000	2001f	2002f
Asia	32.1	6.1	4.7	5.6	4.1	6.2
- Japan	7.6	2.7	0.2	1.8	1.0	2.7
- China	11.2	9.9	7.1	8.0	7.0	7.0
- Nic's	3.3	7.0	7.8	7.3	5.0	7.0
Africa	3.2	2.3	2.2	3.6	4.4	4.3
EU15	20.3	2.4	2.4	3.3	2.6	2.7
Countries in transition	5.8	-0.4	2.4	6.5	3.5	3.5
- Russia	2.4	..	3.2	7.7	4.0	3.0
Middle East	4.0	3.5	0.8	4.7	4.0	3.5
Latin America	8.4	2.5	0.3	4.3	3.5	4.0
North America	23.9	3.3	4.2	5.0	1.8	3.2
- United States	21.9	3.3	4.2	5.0	1.7	3.2
World	100.0	3.3	3.4	4.8	3.1	4.2

*) 1999 GDP at Purchasing Power Parity by IMF

2.2 Aggregate price developments

Price movements of the commodities examined, based on the HWWA index in US dollar terms, have been varying widely since the beginning of last year. Energy prices, in particular, continued to rise until late last year before dropping strongly in the first months of this year, falling slightly below the level of early 2000. Non-energy prices as a whole moved far less last year and fell slightly. The largest decrease was with food and beverages, whereas the descent of industrial raw materials was relatively limited.

With respect to future developments, dollar prices this year in comparison to the year 2000 are expected to be lower by 9 per cent for the total index, including energy. For 2002 the group expects a minor decrease. Energy prices will be 11 per cent lower despite an increase in coal prices, mostly due to the fall in oil prices that has already taken place. The crude oil price that increased by 56 per cent last year is projected to fall by 12 per cent in 2001 – largely as a result of the drop that started last December – and recede again slightly next year with continuing high oil supplies.

Price increases for non-energy commodities are projected to be only modest this year and slightly accelerate next year. As several commodity prices declined in the first quarter and especially – above all with some metals – during March, the non-energy average for 2001 is expected to be 4 per cent lower than in 2000. Next year a continued slow recovery of non-energy prices is projected, lifting the index by 5 per cent in 2002

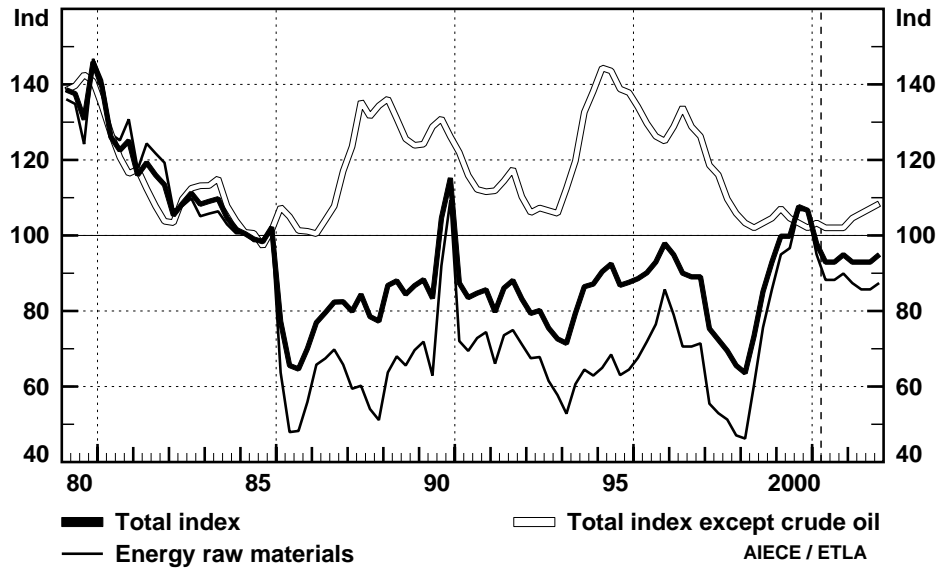
The price development within the non-energy group of commodities was quite different. Whereas industrial commodities, especially non-ferrous metals, were more expensive in 2000, food and beverages became cheaper. In the projection period price developments are expected to be more uniform.

Table 3 Aggregate development 1999-2002

HWWA INDEXES	1999	2000	2001	2002
Indexes and percent change				
HWWA TOTAL	81	106	97	96
	<i>12</i>	<i>32</i>	<i>-9</i>	<i>-1</i>
TOTAL EXCEPT	81	82	80	83
CRUDE OIL	-8	1	-2	4
INDUSTR. MATERIALS	81	83	80	84
AND FOOD	-8	2	-4	5
FOOD AND TROPICAL	94	84	80	84
BEVERAGES	-19	-11	-5	5
INDUSTRIAL RAW	77	83	80	84
MATERIALS	-2	8	-4	5
AGRICULTURAL RAW	79	82	79	83
MATERIALS	-1	4	-3	5
NON-FERROUS	72	83	77	82
METALS	1	16	-7	6
IRON ORE, SCRAP	83	88	89	91
	<i>-14</i>	<i>6</i>	<i>2</i>	<i>1</i>
ENERGY RAW	80	121	107	103
MATERIALS	30	51	-11	-4
CRUDE OIL	80	125	110	105
	<i>36</i>	<i>56</i>	<i>-12</i>	<i>-4</i>
Memorandum				
INDEXES IN EURO TERMS				
HWWA TOTAL	96	146	129	122
	25	51	-11	-6
TOTAL EXCEPT	96	113	108	107
CRUDE OIL	2	17	-5	-1
INDUSTR. MATERIALS	97	115	107	107
AND FOOD	3	18	-6	0
FOOD AND TROPICAL	112	116	108	107
BEVERAGES	-9	3	-7	0
INDUSTRIAL RAW	92	114	107	107
MATERIALS	9	24	-6	0
ENERGY RAW	95	166	144	132
MATERIALS	45	74	-13	-8
CRUDE OIL	96	172	147	135
	<i>51</i>	<i>79</i>	<i>-14</i>	<i>-8</i>

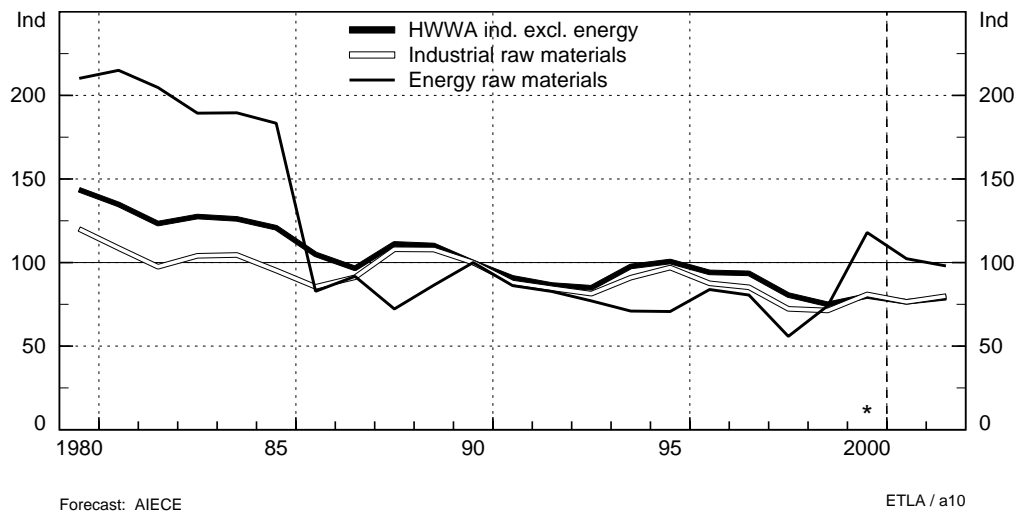
Raw material prices

HWWA index, re-scaled 1985=100



Real Prices of Raw Materials

HWWA index 1990 = 100



2.3 Energy raw materials

The descent of **crude oil** prices from their record level last year came earlier than expected with a weakening world economic growth and ample oil supplies. From November till the end of last year the price for Brent oil decreased by about 10 dollars per barrel, although Iraq reduced its oil deliveries significantly in December. Production cuts by the 10 participating OPEC countries this February of about 1 million barrels a day compared to January and the continuing export reductions for Iraqi oil lifted the price temporarily in the first quarter, but in March the Brent price fell again to around 25 dollars, translating into a price for the OPEC basket in the lower range of the target price band of 22 to 28 dollars. The agreement by OPEC to reduce total production quotas by another 1 million barrels a day starting April – both agreed cuts this year amount to 9.4 per cent – came as no surprise to the oil market and did not change oil quotations much. In April crude oil prices started to rise as the possibility of a gasoline shortage during the summer driving season in the US unsettled the oil market.

World oil demand rose by less than 1 per cent in 2000, i.e. half as much as in 1999, because of the exceptional high oil price level. Demand in the industrialised countries was more or less stagnating, whereas consumption continued to rise in developing countries, above all in China. Oil supplies from outside OPEC, especially exports from the former Soviet Union, widened as revenue expectations were enhanced by soaring prices, and OPEC lifted production targets and production several times, thus correcting the cuts made in 1999. Oil demand this year will be stimulated by lowered prices, but the slower economic growth in the US and other regions will have a dampening effect on oil consumption. The IEA expects world consumption to rise by about 1.3 million barrels a day this year, or 1.8 per cent. The rise next year will even be higher, taking into account the probable rebound of world economic growth. Oil production outside OPEC will increase again strongly in the projection period. The OPEC countries therefore will have to constrain output levels in order to keep oil prices from falling.

The OPEC countries stressed in recent months that they are strongly determined to stabilise the oil price around 25 dollars for the OPEC basket, by adapting their production levels accordingly. But even in February output levels of the OPEC 10 were about 0.5 million barrels a day above agreed limits. Since Iraq still produced less than expected then, the difference may be explained by compensating measures of other OPEC members. Now that Iraq has returned to last year's output levels it remains to be seen whether compliance remains high. It is expected here that the OPEC countries for now succeed to adjust supplies and thus keep the price within the target band – assuming that there is no escalation of violence in the Middle East –, but volatility will remain strong with stock levels remaining rather low. Regarding the current high level of crude oil prices in relation to production costs in many producing regions the share of non-OPEC oil in total output is bound to rise making it more difficult for OPEC in the medium term to distribute production quotas among its members.

The recovery on the world **coal** markets has got momentum since the autumn group meeting. The markets have not looked so bullish since mid-1990s. A strong demand revival coupled with various supply disruptions (resulting from mine closures, strikes and operational accidents) have been reflected in sharply rising price quotations in spot deliveries, which in turn have already fuelled major increases in contract prices for the 2001/02 fiscal year. The coal markets should remain tight in 2001-2002, though a turnaround can be expected later in that period.

Table 4 Energy raw material prices

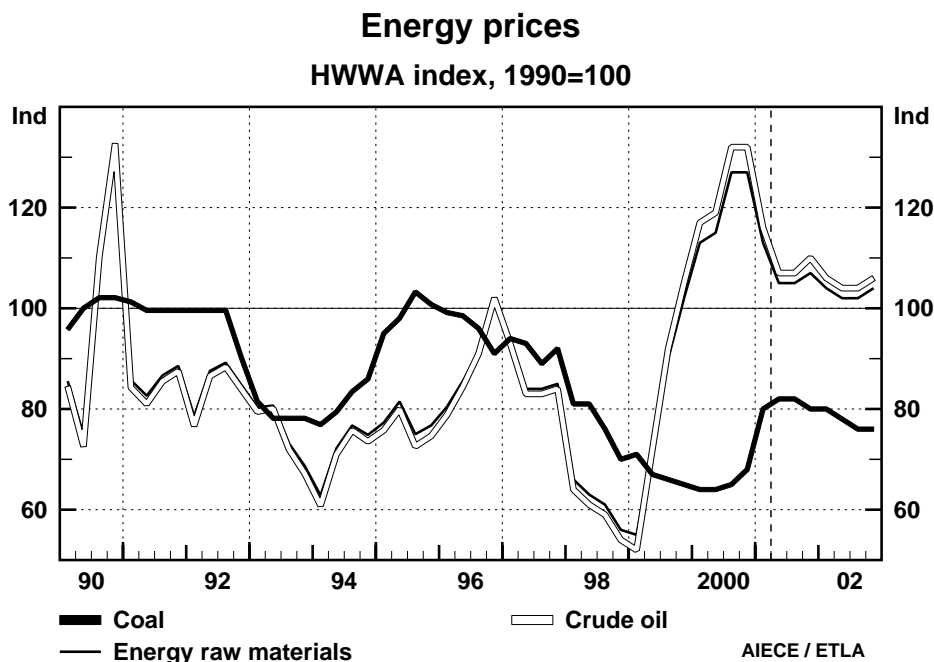
COMMODITY	00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
ENERGY RAW MATERIALS	113 <i>11</i>	115 <i>1</i>	127 <i>11</i>	127 <i>0</i>	113 <i>-12</i>	105 <i>-7</i>	105 <i>0</i>	107 <i>3</i>	104 <i>-3</i>	102 <i>-2</i>	102 <i>0</i>	104 <i>2</i>	80 <i>30</i>	121 <i>51</i>	107 <i>-11</i>	103 <i>-4</i>
COAL IND	71 <i>-1</i>	71 <i>0</i>	71 <i>1</i>	74 <i>3</i>	79 <i>7</i>	83 <i>5</i>	83 <i>0</i>	82 <i>-1</i>	82 <i>0</i>	80 <i>-4</i>	78 <i>-1</i>	78 <i>0</i>	76 <i>-12</i>	72 <i>-6</i>	82 <i>15</i>	80 <i>-3</i>
CRUDE OIL	117 <i>11</i>	119 <i>1</i>	132 <i>12</i>	132 <i>0</i>	116 <i>-12</i>	107 <i>-8</i>	107 <i>0</i>	110 <i>3</i>	106 <i>-3</i>	104 <i>-2</i>	104 <i>0</i>	106 <i>2</i>	80 <i>36</i>	125 <i>56</i>	110 <i>-12</i>	105 <i>-4</i>

World seaborne coal trade in the year 2000 is estimated to have risen by 7.2 per cent, a rate roughly two times as high as the average rate in the 1990s. The main growth came from **steam coal**, imports were robust in Asia, while the growth rate proved quite modest in Europe. Regional price profiles, however, differed from demand patterns. Under the impact of tight supplies in the Atlantic market, the NW Europe marker spot price rose to over US\$ 41/mt in 4Q00-1Q01. In the Pacific market, rising import demand was initially covered by abundant Australian supplies and a hike in Chinese exports; hence the corresponding Asian marker price remained below US\$ 30/mt till mid-2000. The outlook changed in the 2nd half of last year as Japanese utilities focused on exercising their long-term contracts with Australian exporters, and Chinese exports slowed down because of a stronger domestic demand. Both factors reduced the availability of steam coal in spot deliveries and, with a rise to a US\$ 37/mt at the end of 2000, Asian prices finally followed European prices.

In the course of last months, steam coal spot quotations have become generally higher compared to contract prices, a clear indicator of a tight market. The exporters are determined to close the gap in the coming financial year, which would mean a considerable rise in contract prices. The demand expectations strengthen their negotiating position. According to recent forecasts, the world seaborne steam coal trade is to increase by 4.5-6 per cent in 2001. The growth will still be concentrated in Asia, though the major European importers have also announced a rise in their purchases. In view of the slowdown of the US economy and the weak Japanese economy, however, there is a large downward risk. On the supply side, with current price levels and a still strong US dollar, the producers have high incentives to raise output. Consequently, a gradual shift in the market balance can be expected, with prices peaking in the first half of 2001 and decreasing afterwards. The average 2001 price is expected to be 25 per cent higher than last year and to fall by 4 per cent in 2002.

The **coking coal** market has been also resurgent, due to the recovery in the world steel industry. In 2000 the blast furnace iron production in coking coal importing countries reached 264.8 Mt and was 13.5 Mt (5.4 percent) higher as compared with the previous year. The world seaborne coking coal turnover expanded almost in line with pig iron output: from 172.5 Mt in 1999 to 180.5 Mt in 2000, i.e. by 8 Mt (4.6 percent). Import demand forecasts for 2001 range from a 2 percent drop to a 1 percent rise, depending on predicted steel market prospects. In particular, Korea, Taiwan and India are expected to increase their imports, with a possible contraction in Japan. Despite a demand slowdown, the coking coal market balance will probably remain tight this year because of supply constraints, resulting from mine closures in Canada, Germany and Poland, as well as strong domestic demand for any type of coal in the USA.

Rising demand together with limited availability of coking coal on the spot market have pushed up tender prices in recent quarters. In contract negotiations for the 2001/02 fiscal year with



Australian exporters, Japanese steel mills agreed to a 7.8 per cent benchmark price rise, after three consecutive years with price cuts. However, the new contract price (US\$ 42.95/mt fob) is still substantially lower than in 1997/98. In contract settlements for deliveries to Europe, the suppliers seemed to be targeting US\$ 45/mt fob. According to the group's forecast, coking coal price will increase on average by 6 per cent in 2001 and slightly decrease in 2002.

2.4 Metals and minerals

In the year 2000 **aluminium** prices reached relatively high levels. LME reported aluminium stocks have been reduced continuously, so the market ended the year with a substantial deficit. Prices were mostly driven by relatively high world demand and by the strength of the US dollar. In euro terms prices have reached the peaks seen in 1990 and 1995.

For 2001 the market looks somewhat more balanced, promising a slightly smaller deficit. A supply growth of 3 per cent is expected to come from increases in capacity especially of the two smelters Alma (Canada) and Mozal (Mozambique). They should be outweighing cutbacks in the US Pacific Northwest caused by high power costs. Western demand is expected to be flat, with reduced demand in USA and a further increase in Europe. Growth in the Far East is forecast to progress, especially in China, where aluminium demand could rise by 7 per cent in 2001. Total world demand growth is expected to rise by 2.6 per cent in 2001, although it could be dampened by a delayed upturn of the US economy and a slow pace of the Japanese recovery.

Aluminium prices in 2001 will be affected by the slowdown of the US economy and a reduced US aluminium production. However, aluminium production will rise in other parts of the world,

Table 5 Metals and minerals

COMMODITY		00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
NON-FERROUS METALS		86	81	84	81	80	76	76	77	79	81	83	84	72	83	77	82
		7	-6	4	-4	-1	-6	0	2	3	2	3	1	1	16	-7	6
ALUMIN	GB	100	90	95	92	96	90	90	92	96	98	100	100	83	94	92	98
		9	-10	6	-3	4	-6	0	2	4	2	2	0	0	14	-2	7
COPPER	GB	67	65	70	69	66	64	64	66	68	69	72	74	59	68	65	71
		3	-3	8	-1	-4	-4	1	2	3	2	4	3	-5	15	-5	8
LEAD	GB	56	52	58	58	61	59	59	60	60	61	61	62	62	56	60	61
		-6	-8	13	0	5	-3	0	2	0	1	0	2	-5	-10	7	2
NICKEL	GB	104	104	91	82	72	65	63	62	62	64	66	68	66	95	66	65
		21	0	-12	-10	-12	-10	-3	-1	0	3	3	3	30	44	-31	-1
TIN	GB	91	88	87	85	83	79	79	79	81	81	81	82	87	88	80	81
		0	-4	-1	-2	-3	-4	0	0	2	0	0	2	-3	1	-9	1
ZINC	GB	75	75	78	71	68	65	64	64	65	67	69	70	71	75	65	68
		-3	0	4	-9	-5	-4	-2	0	2	3	4	1	5	5	-13	4
IRON ORE, SCRAP		89	89	87	86	89	89	89	90	90	90	91	91	83	88	89	91
		6	1	-2	-1	4	0	0	1	1	0	1	0	-14	6	2	1
IRON ORE	BRA	92	92	92	92	95	95	95	95	95	95	95	95	88	92	95	95
		4	0	0	0	4	0	0	0	0	0	0	0	-9	4	4	0
STEEL SCRAP	USA	88	98	90	79	78	77	77	80	84	84	89	89	73	89	78	86
		15	11	-8	-11	-1	-2	0	5	5	0	5	0	-34	22	-12	11

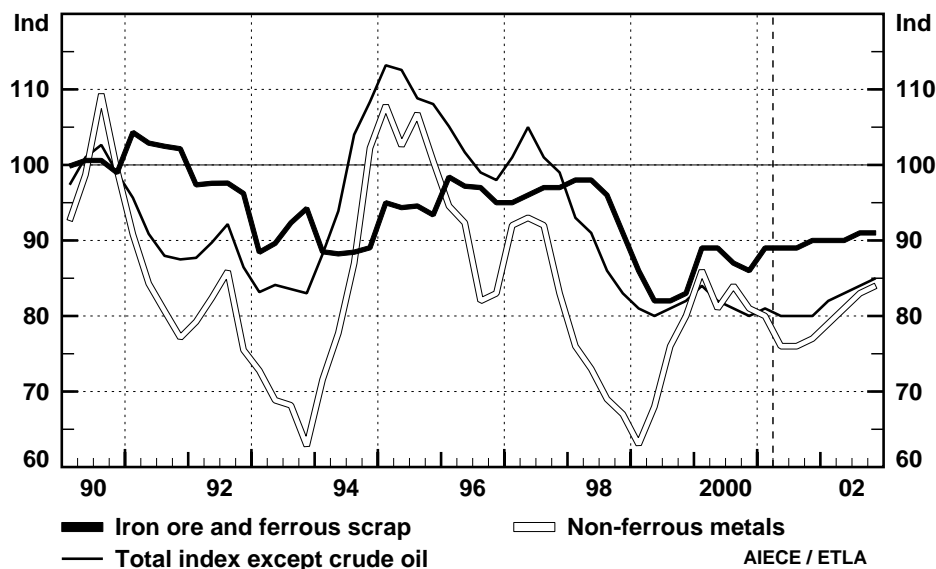
and there still are positive trends in European and Asian growth lifting demand there. Because of the importance of US market, though, aluminium prices will rise only moderately from their low current level and are assumed to remain below US\$ 1600 this year, with the average price in 2001 about 2 per cent below the 2000 price. For next year a continuation of the price rise in a volatile aluminium market can be expected, lifting the yearly average by 7 per cent.

Copper prices recovered since mid-1999 until last September from a low 1400 US dollars to 2000 dollars as a result of production cuts by North American producers and a strong demand in Western countries as well as in China, but since then they fell back below 1700 dollars with growing evidence of a slowdown of the US economy. Total commercial copper stocks were sharply reduced last year and reached the lowest level since the end of 1997. Stocks in Metal Exchange warehouses were decreasing, too, last year, but the fall there that began in early 2000 came to an end in the beginning of March 2001. Since then stocks started to rise again.

The rise in global copper demand accelerated last year to 7 to 8 per cent – from 4 per cent in 1999 –, according to figures from the International Copper Study Group. Demand was especially strong in European and Asian countries, above all in China, whereas consumption in the US hardly changed. World copper production growth is calculated by the ICSG at 3.1 per cent in 2000. About 13 per cent of total copper output was secondary production. The global supply-demand surplus of past years finally turned into a deficit.

Metal and mineral prices

HWWA index, 1990=100



World copper demand increases will be smaller this year due to the weaker growth of the US economy and other economies that will be negatively affected. About a third of the world's copper is used in Asian countries, and last year's growth was due mostly to US-bound exports from Asia of copper-containing electronic goods. But copper demand is expected to accelerate again next year with growth rates recovering. The tight supply situation as a result of reduced mining capacities will continue for some time. There were announcements recently of more production cuts planned in the near future at US mines due to strongly increased electricity costs. When realised, the reduction will keep prices from falling further for now. A stronger recovery of copper prices by 8 per cent is expected in 2002.

The rise in **lead** prices that had started in May 2000 from a 4-year low was for some time interrupted in the latter part of the year but resumed this year, apparently helped by the expectation of production cutbacks in the US. In March lead prices were back to their 1999 levels. Commercial lead stocks and registered warehouse stocks had been falling in 2000, but at the LME stocks began to build up this year.

World demand for lead rose by 3.4 per cent in 2000, somewhat less than in 1999, according to the International Lead and Zinc Study Group. Western world consumption was 2.8 per cent higher in 2000, after an increase of more than 4 per cent in 1999. The strongest rise in demand last year came again from Asian countries; it was mainly a result of increases in China, South Korea, Malaysia and Thailand and a reversal in the decline of Japanese demand. Global lead output apparently grew by 4.5 per cent last year, the second strong increase in a row. In the West the production expansion last year amounted to 2.2 per cent. Capacity expansions at a number of smaller plants contributed to a continued rapid expansion in lead output in China. Chinese net exports to the West more than doubled in 2000 and accounted for three quarters of total shipments to the West from the former Eastern countries. Deliveries from Russia and Kazakhstan were on the rise as well. Thus a negative Western supply/demand balance was turned into a rising global supply surplus.

Lead demand this year and next will be dampened, primarily by slowing auto sales. Continuing mining and smelting expansions in less-developed regions keep adding to lead supplies, but production cuts in the US will counteract and thus keep lead prices from receding further. The price for lead is expected to rise only moderately in the projection period.

The fall in **tin** prices from 6000 dollars that began in January 2000 brought the price level in March back to 5000 dollars, the starting point of the preceding price rise. Tin stocks have increased in 2000, and LME stocks continued to rise this year. World demand for tin rose apparently slightly stronger last year, by 2.2 per cent according to preliminary figures compared to 1.8 per cent the year before. Tin use increased primarily in Asian countries. European countries also used somewhat more tin, whereas consumption in the US decreased. Global tin production estimates show an expansion by 1.8 per cent, mainly due to a higher output in China as well as in Peru. Continued metal sales from US strategic reserves resulted again in a global tin surplus.

A large Chinese tin production and a slower demand increase to be expected in the projection period leave not much room for a stronger recovery of tin prices. Since world capacity is high, supply – including further releases from US strategic tin stocks – will again be larger than demand. Some upward pressure on tin prices could result from an expected reduction of Chinese exports, though. China has reduced the export quota for tin for 2001 by a third in a move to tighten government control on exports. Traders doubt, though, that the lower quota will be effectively enforced and predict that deliveries will reach their foreign customers. We assume that the reduction will be at least partly enforced.

Consumption increases to be expected from changing habits in developing regions – increased use of canned beverages and foods, induced by the shift away from rural to urban areas and rising standards of living – will not lead to a surge in global demand, at least not in the shorter term. New uses for tin reported time and again by the International Tin Council – like tin and zinc coatings to replace cadmium as an anticorrosion coating for steel, or tin foil capsules to replace lead foil capsules on wine bottles – do not offer much growth in demand for the metal. Tin prices are expected to hardly rise in the projection period.

The price of **nickel** has been consistently falling since April 2000, reaching in December a level 9.3 per cent below the same period in 1999. The decline accelerated in the first quarter of 2001, and the price fell below US\$6000 per tonne at the end of March. In April it recovered somewhat.

The consumption of nickel has risen significantly over the past 4 years – up 8.1 per cent in 1999 and 2.7 per cent in 2000 for refined nickel – while production growth has remained subdued. Total commercial inventories have accordingly fallen: they were at the end of 2000 about 30 per cent below the end-1999 level. But consumption growth appears to have decelerated significantly in the course of last year, as a consequence of more subdued market conditions in the United States. In the meantime, supply on the US market has remained abundant, putting some pressure on nickel prices there. The metal is more particularly feeling the pinch from subdued demand on the part of stainless steel producers. As a result, cash settlement prices on the LME have fallen by more than a third since April 2000.

Current conditions do not allow for optimism: demand in 2001 is unlikely to grow at rates enjoyed last year and supply is expected to rise further, as new production capacities come on stream and Australian exports (especially from laterite projects) remains buoyant. We project a 10 per cent rise in nickel production this year, while demand is expected to drop quite substantially. As a result, after having fallen by 12 per cent in the first quarter of 2001, nickel prices should continue to fall in the remainder of the year. The decline in nickel prices is expected to reach about 30 per cent for the year as a whole, in sharp contrast with the 44 percent rise enjoyed last year. Our projections for 2002 show a beginning recovery in prices.

Zinc prices appear to have fallen more rapidly than expected six months ago. The projected deceleration in consumption growth has eventually translated into negative growth: according to the International Metal Statistics Bureau, refined zinc consumption fell by 4.3 per cent last year, to 8 million tonnes, while production remained buoyant, up 1.7 per cent in 2000 at 8.5 million tonnes. The abrupt switch in the demand-supply balance – from a deficit of 20 thousand tonnes in 1999 to an excess of 480 thousand tonnes in 2000 – had a clear impact on zinc prices, which have been on a downward trend since October 2000. They declined to less than \$1000 at the end of March, a level about 10 per cent lower than a year ago. The first quarter of 2001 saw a 5 per cent decline in the cash settlement prices on the LME.

Despite unfavourable market conditions, prices are not at levels reached at the end of 1998 and the beginning of 1999, when prices tumbled to \$934 per tonne. The Asian crisis and the collapse in demand in that part of the world had then forced domestic manufacturers to re-route their production to more buoyant markets, such as Europe. That was particularly true of China. The country remains key to future price developments of zinc, and in this respect the cut in export quotas granted by the Chinese government to local producers augurs rather well for this year. On the other hand, a rise in production has been planned by Chinese authorities, which should prevent any substantial rise in Chinese imports this year.

On the whole, market conditions should therefore remain rather unfavourable to zinc producers: sharp deceleration in consumption, de-stocking and rise in production. We project a decline of 13 per cent in zinc cash settlement prices on the LME this year compared to 2000, followed by a recovery in 2002, should world demand recover.

World crude **steel** output rose to a record level of 828.5 million tons last year, a 7.4 percent increase over the 1999 level. This was the first time world production exceeded 800 million tons. China remained the world's largest producer last year, raising its output by only 1.7 percent to 125.8 million tons. In Japan and the U.S., the second and third largest producers, steel output increased by 13 and 5 per cent, respectively. Production was up by 4.9 per cent in the EU, with the region's biggest producer, Germany, experiencing an increase of more than twice that pace. Steelmaking was particularly strong in the CIS countries, where output rose by 16 per cent.

Steel demand in 2000 was very strong, particularly in the first half of the year, in response to robust growth in world economic activity. The prices of many steel products rose strongly in Europe above their previous peaks recorded prior to the Asian crisis. Even greater increases in production, however, led to excess supply around mid-year, and prices began to decline as stock levels were reduced. The reference price of reinforcing rounds remained stable, reflecting a balanced market situation between weakening demand and falling production.

The outlook for steel demand has deteriorated rapidly in recent months. In the U.S., manufacturing activity and housing investment will likely decline this year. Industrial prospects in Japan also appear very weak, as investment plans are being scaled back, which will have a negative impact on many East Asian countries. Nevertheless, Asian demand is expected to continue to grow strongly, and the IISI predict that apparent consumption will increase to record levels in China, Korea and Taiwan. The outlook for European industry is relatively good, although industrial sentiment has weakened in recent months. Industrial production in Europe will slow from last year's exceptional pace. Growth in European construction activity is also slowing, with German housing investment even contracting sharply. If economic policy initiatives are effective and confidence is restored, world economic activity could begin to pick up towards the end of this year, leading to a gradual strengthening in steel demand.

The reductions in steel production seen late last year are expected to continue during most of this year. World production in the first two months of this year was down 0.1 per cent from one year

earlier, with North American production declining by 14 per cent and EU production up only 0.1 per cent. In February, EU industry leaders described the steel market as having “too much capacity for the size of the market.” Hence, large European producers, such as Corus, have announced capacity cuts in recent weeks. Some sources point to the Arbed-Usinor merger as possibly leading to significant supply reductions.

In this environment of weaker demand and falling supply, there does not appear to be strong pressure for prices to move in either direction in the very near term. The dollar’s strength should constrain any rise in European export prices. All in all, we expect prices to remain stable in the second quarter and third quarters of this year. As world economic activity begins to strengthen in the final months of the year, and inventory levels fall from their currently high levels, there may be scope for a rise in steel prices in the fourth quarter. The rise in prices in the end of 2001 should be reinforced in 2002 as the world economy embarks on an upswing. The lagged effects of the world wide monetary easing will bolster construction activity, and thus also support increases in steel demand. However, global overcapacity and process efficiency improvements will keep price increases in check. According to a recently published survey by the European Commission, EU steel mills are planning new investments to raise their production capacity significantly by 2002. Moreover, greater competition, through China’s entry into the World Trade Organisation for example, may limit the magnitude of future price rises.

The price of **steel scrap** increased by 22 per cent last year, slightly more than our projection of 18 percent. However, the price fluctuated widely during the course of the year, rising sharply in the first half of the year and then declining just as rapidly in the second half. The surge in prices in the first half of the year was attributable to robust economic activity and demand for steel products and scrap, and the recovery of the Asian steel industry.

The renewed price weakness in the fourth quarter of 2000 stemmed from weakening demand in the U.S., with capacity utilisation rates at steel mills falling to low levels in November and December. Moreover, the strength of the dollar encouraged significant increases in scrap imports, and a surplus of pig iron and new supplies of scrap substitutes such as direct-reduced (DRI) and hot-briquetted iron (HBI) tended to put downward pressure on U.S. scrap prices. European scrap suppliers, notably in Germany, are also experiencing lower prices due to weaker external demand. Anecdotal evidence suggests that Italian mills were paying DM 5-10 per ton less in March. According to other sources, steel mills in France and Luxembourg are also expected to secure lower prices for March deliveries.

The relative stabilisation of U.S. scrap prices at a very low level suggests that supply and demand may have now reached balance. Scrap prices are not expected to rise significantly until the U.S. manufacturing recession comes to an end, and steel inventories are reduced significantly. Moreover, increased collection of scrap in response to higher prices last year will preclude any price gains in the near term. On the other hand, trade cases filed late in 2000 should dampen scrap imports to the U.S., as will the expected depreciation of the dollar, thereby also limiting the extent of price declines this year. All in all, we expect scrap prices to decline by around 12 percent this year and to rise by almost 9 per cent next year. Over the longer term, the move towards usage of electric arc furnaces (EAF) will support demand for scrap. Currently, about 50 per cent of U.S. steel is produced in EAF plants, and the share is rising. This trend is also clearly visible in Europe; a recently published survey by the European Commission shows that, while blast furnace iron capacity will be unchanged in the next few years, total EU capacity for EAF steel will increase significantly in 2002. The share of EU steel produced in EAF plants will rise to 41.4 per cent, according to the survey.

The annual benchmark contract price of Brazilian **iron ore** fines to Europe increased by 4.3 per cent this year, roughly in line with our forecast of a 5-percent rise. The first Australian producer to make a settlement was BHP, which settled an equivalent price increase with the Japanese steel maker Nippon Steel. The price premium for Australian lump ore was maintained at 9.05 US cents per dry long ton unit. The settlement fell short of what the Brazilian suppliers had originally hoped for, which was a return to the 1998 price “plus a little something.” BHP indicated it was hoping for a price increase, and the outcome appears to have been favourable to the Australian iron ore supplier. Other iron ore producers had been hoping for a greater price increase, in light of the strong price increases in coking coal which suppliers succeeded in negotiating. Moreover, demand for seaborne ore is estimated to have increased by about 30 million tons in 2000, in response to strong gains in steel production, which was viewed by many iron ore suppliers as grounds for a significant price increase. Steel mills, on the other hand, pointed to the sharp declines in the prices of some steel products as justification for lower iron ore prices.

Overall, it appears that the market situation for iron ore will loosen during most of this year. Steel production is forecast to decline in the first half of this year, with Thyssen Krupp’s Dortmund plant no longer requiring iron ore starting in April. At the same time, capacity in Brazil will increase as a result of CVRD’s construction of the Sao Luiz plant and the capacity expansion at its Tubarao complex. Steel production will strengthen again at the end of the year and into next year, however, which will lead to some tightening of market conditions. All in all, prices are expected to roll over in 2002. The industry continues to consolidate at a rapid pace, which will have a bearing on price developments over the longer term. Major recent events include Rio Tinto becoming the second largest iron ore producer after acquiring North Ltd, and in Brazil Companhia Vale do doce Rio (CVRD) acquiring SAMITRI mines.

2.5 Agricultural raw materials

Soft **wood** price declined last year by 7 per cent, even though the global economic growth was the strongest in ten years. The decline was due to weaker demand and increased supply. European demand was weakened by a decline in construction in Germany. Construction business was weak in some other European countries, too, but was vivid in France. The strong US demand started to deteriorate during the year.

This year the lagged effects of the higher interest rates will dampen demand. However, the change of the US monetary policy in the beginning of this year should support construction in the latter part of this year due to lower mortgage costs. The probable easing in Europe will support this turn in the trend.

An important factor behind the recent decline in the prices, however, was an increasing supply, especially in Europe. European supply grew strongly because of e.g. damaging storms around a year ago. Producers had to process the logs relatively quickly in order to avoid a deterioration in the quality of the wood. Price development is expected to turn around the middle of the year. Lower production due to lower prices and increasing demand will result in rising prices after the summer.

The **pulp** price reached last year over 700 US dollars per ton, a record-high after early 1996. Strong global economic growth boosted demand, and the NORSCAN (the US and Scandinavian

Table 6 Agricultural raw materials

COMMODITY		00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
AGRICULTURAL RAW MATERIALS		83 4	82 -2	81 0	81 -1	82 1	79 -3	78 -1	78 0	81 3	82 2	85 3	85 0	79 -1	82 4	79 -3	83 5
COTTON	USA	79 11	79 0	83 5	88 6	77 -12	77 0	79 3	81 2	83 2	83 0	84 2	84 0	76 -20	82 8	79 -4	83 6
WOOL	AUS	56 4	55 -1	59 7	55 -7	58 6	58 0	60 3	60 0	62 3	62 0	64 3	64 0	55 -12	56 2	59 5	63 6
WOOD	S/USA	89 4	85 -5	81 -5	79 -2	84 6	82 -2	82 0	82 0	84 3	87 3	90 3	90 0	88 3	83 -5	82 -1	88 6
RUBBER	GB	81 0	80 -2	80 0	78 -2	75 -5	73 -2	73 0	73 0	74 2	74 0	75 2	75 0	75 -8	80 6	73 -8	75 2
WOODPULP	FIN	78 7	83 6	87 5	87 0	83 -5	76 -9	71 -6	71 0	74 4	76 3	80 5	80 0	64 -1	84 31	75 -10	77 3

producers' inventories) declined near one million tons by mid-2000. However, inventories began to accumulate during the summer, and the increase in the price ceased. The cooling of global demand in the lead of the US economy started to give pressure on the price through increasing inventories. Inventories rose over the 1.5 million tons in October. This level normally triggers either the rise or the decline of the price.

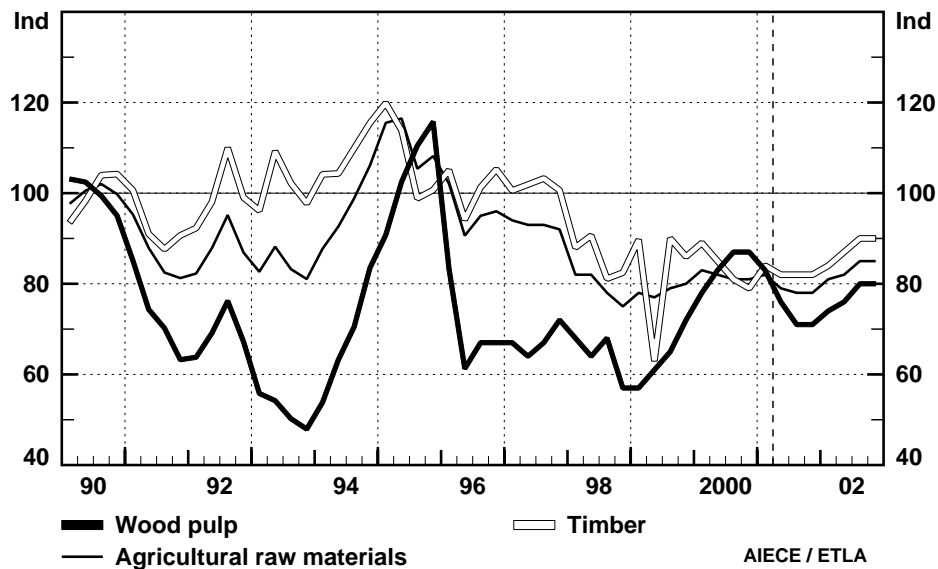
Inventories continued to rise even though producers tried to limit production to change this development. Inventories rose to over two million tons in February. As a result the decline in the prices is expected to continue. Prices are expected to reach the lowest level by autumn. In the latter half of this year the restriction of production and improving demand will begin to affect the price. The strength of the recovery is not as strong as the previous one. Thus the price rise is also expected to be milder than in the couple of previous upturns.

The curve of natural **rubber** prices seems to have stabilised at a very low level since the beginning of 1998. Both oversupply and devaluations of ASEAN currencies made the price in dollar terms to plunge in 1997. Since then, the ending stocks of 1.9 millions tonnes have still represented about three month of consumption. Oversupply may not be bound to disappear as during 2000 the production was roughly balanced by consumption, and we can expect a quite similar pattern for the ongoing year: most small farmers are not keen to reduce their plantation, and the slowdown of the USA could affect broadly the ASEAN economies. Moreover, in the short term the price should be affected by the weakening of the currency of Indonesia, the second largest producer natural rubber. Resulting from this the price should stabilise in 2001. It should increase slowly in 2002 expecting that the consumption will accelerate.

The **cotton** price has eroded sharply in the first quarter of 2001, due to the weaker economic performance in the United States and news of an increased production of China, the largest producer besides the US. Production and consumption figures for the 1999/00 season and recent estimates for 2000/01 point to a production deficit. As the consumption estimate for the 2000/01 season takes into account the lower demand in the USA, the imbalance seems to be structural, making room for price increases. But the high ratio of ending stocks to consumption which is still about 40 per cent will have a dampening effect on any price increase. Moreover, the deficit may shrink in 2001/02 as the International Cotton Advisory Committee forecasts that the global production will catch up with consumption. The group expects that cotton prices will end falling soon and start to rise moderately afterwards.

Agricultural raw material prices

HWHA index, 1990=100



The price of **wool** plummeted dramatically between mid-1997 and the first quarter of 1998, as a consequence of oversupply and a demand crisis in emerging countries. Since then the price is on the rise due to a recovery of demand combined with drastic cuts in production until 1998. The production of wool is forecast to remain stable in Australia, the dominant producer, for the 2000/01 and 2001/02 seasons. Thus, demand for wool should continue to outstrip production. It would be mirrored in further reductions of stocks leading to a quasi depletion of the official Australian stocks in 2001. Therefore the bullish trend should persist until the end of the forecast period.

The descent of **tobacco** prices from an early-1999 peak came to a halt in the end of last year. World production of unmanufactured tobacco in 2000 is estimated by the US Department of Agriculture to have fallen by 2.4 per cent, after a slight increase in the year before. Total demand by tobacco manufacturers, after a 6 per cent rise in 1999, is expected to have fallen by about 3 per cent. World consumption has surpassed production now four years in a row, reducing the large global tobacco stocks. A weaker world economic growth will dampen the manufacturing of tobacco products further this year. Tobacco growing will hardly be expanded as long as the price level is that low. Tobacco prices are expected to stagnate in the projection period.

2.6 Food, tropical beverages and sugar

The quotations on the international **wheat** markets rose sharply in the last quarter of 2000 and since fluctuated around the slightly increased level during the first quarter of 2001. This price development reflects the global production deficit in 2000/01 and extremely low stocks at the end of the financial year.

The decrease in global production compared to the previous year had its origin mainly in a drop of about 11 million tons in China and smaller outturns in Kazakhstan, Ukraine, and the US. This shortfall has been only partly compensated by an increase of 8 million tons in the EU where the

area planted to wheat as well as the yield increased. On the demand side a decrease of 2 million tons on the global scale conceals regional differences as well as structural changes between feed use and human consumption. A point in case is the EU where the reduction of border protection for wheat (and coarse grains) stimulated the feed use of wheat at the costs of grain substitutes, whereas human consumption stagnated over many years.

For the financial year 2001/02 preliminary estimates of area planted to winter wheat in the Northern Hemisphere point to a slight decrease in area in the US, the EU, and China. The main reason seems to be unfavourable weather conditions. Since – at least in Western Europe – the actual weather conditions are still adverse because of too much rain, a compensating expanded planting of spring wheat is not very likely. An increase of production which might partly compensate these reductions could be expected in some Eastern European states and FSU states where the last harvest was adversely effected by a lack of moisture.

Given the very low global stocks of wheat, an expected slight increase in demand and the described expected reductions in wheat production, an increase of wheat prices is forecasted. After a reaction of production on higher prices in the Southern Hemisphere and – later – in the North, prices will slightly fall during spring 2002.

The international quotations for **coarse grains** fluctuated strongly during the last year. That reflects changing expectations on production for the financial year 2000/01. After the first high estimates proved to be wrong, prices rose sharply during the winter 2000/01. Now a production deficit of 22 million tons is forecasted, in spite of an unexpected decrease in global consumption. The stock/consumption ratio at the end of the financial year 2001/02 will reach about 16 per cent, a very low level.

The drop in global production results a.o. from shortfalls in China (-20 per cent) and Eastern Europe (-30 per cent). This will be compensated only partly by larger outturns in the EU, the US, the FSU, and Brazil.

For the beginning planting season in the Northern Hemisphere no major expansion of area could be expected. This is because the price incentives have hardly changed compared to the previous year. Since yields were quite high in 2000 in the US and in the EU, in these important countries even a decrease in production seems possible. In contrast, normal weather conditions assumed, a slightly higher production could be expected in Eastern Europe and China. The demand will be strong because of growing incomes, a high income elasticity for meat and thereby for feed grain.

The major crisis in animal production in Europe, e.g. BSE and MFD, will primarily affect the cattle and sheep production. A shift in consumer demand to pork and poultry will on balance have positive effects on feed grain demand. However, this effect might be rather small, if in addition to cattle herds an increasing number of pigs will be killed because of MFD, and a shift of consumers to vegetarian food gets momentum.

On balance, tight supplies during the rest of the year will cause price increases. However, with beginning reactions of producers in the Southern Hemisphere on the higher prices, prices will fall back slightly in 2002.

The latest estimates for the 2000/01 global **rice** production have been increased slightly. Although there is still a production deficit forecasted, the prices will change little since stocks will remain on a safe level in a medium term view.

Estimates of global **soybean** production for 2000/01 point to an all-time record high of 169.0 million metric tons, an increase of 6 per cent compared to the 1999/01 crop. The increase is the

Table 7 Food, tropical beverages and sugar

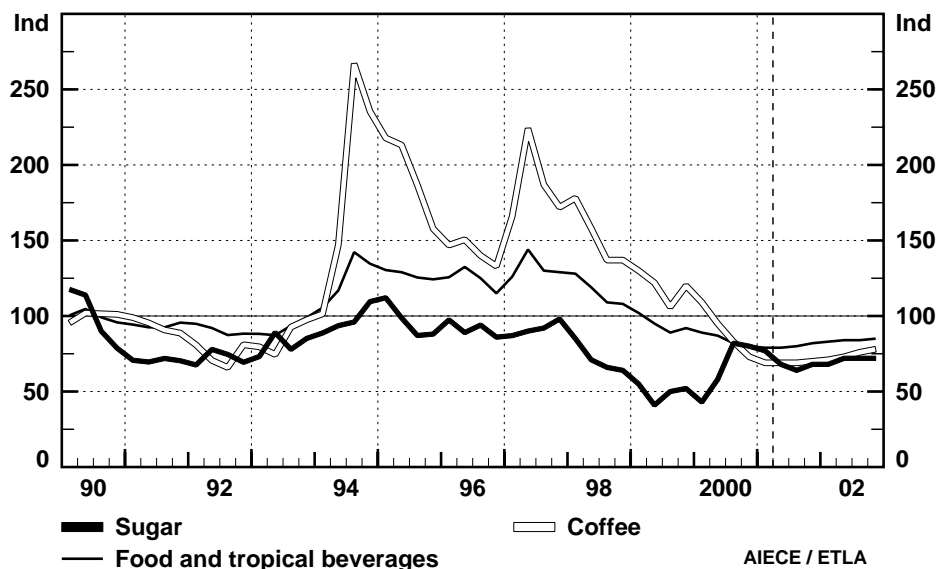
COMMODITY	00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
FOOD AND TROPICAL BEVERAGES,	89	87	82	80	79	79	80	82	83	84	84	85	94	84	80	84
CEREALS	-3	-2	-6	-2	-1	0	1	3	0	1	1	1	-19	-11	-5	5
BEVERAGES	87	87	75	83	85	88	90	93	90	88	86	86	86	83	89	87
TOBACCO, SUGAR	7	0	-13	10	3	4	2	3	-3	-2	-1	0	-12	-3	7	-2
OILSEEDS AND OIL	88	85	84	78	78	76	77	78	79	81	83	84	97	83	77	82
	-8	-3	-1	-7	-1	-1	0	2	1	3	1	1	-20	-14	-7	6
	93	94	82	83	79	78	81	84	85	87	87	87	95	88	80	87
	2	1	-13	1	-5	0	3	3	1	2	1	0	-19	-7	-9	8
BARLEY CAN	91	90	87	95	97	99	101	103	106	108	111	111	92	91	100	109
	2	-2	-3	9	1	2	2	2	4	2	2	0	-10	-1	10	9
MAIZE USA	88	89	72	82	85	87	88	91	87	85	82	82	83	83	88	84
	12	1	-19	14	3	2	2	3	-5	-2	-3	0	-13	-1	6	-4
RICE THAI	79	73	65	62	62	62	62	64	64	64	64	64	86	70	63	64
	2	-8	-11	-5	0	1	0	3	0	0	0	0	-15	-19	-10	2
WHEAT USA	95	94	88	96	100	107	111	115	111	107	107	107	97	93	108	108
	0	-1	-6	9	5	7	4	3	-3	-3	0	0	-7	-4	16	0
COFFEE USA	109	95	83	73	69	69	69	70	71	73	76	78	120	90	69	75
	-10	-13	-12	-12	-6	0	0	2	2	3	3	3	-21	-25	-23	8
COCOA USA	71	73	71	65	85	88	95	98	99	102	104	105	90	70	92	103
	-6	2	-2	-8	30	4	8	3	1	3	2	1	-32	-22	31	12
TEA (av) ALL	99	94	100	96	93	96	97	98	99	100	100	100	107	97	96	100
	-7	-5	6	-4	-3	3	1	1	1	1	0	0	1	-9	-1	4
TOBACCO USA	89	91	88	87	87	86	86	87	88	88	88	88	92	89	86	88
	-2	2	-3	-1	0	-1	0	1	1	0	0	0	-10	-4	-3	1
SUGAR USA	43	58	82	80	77	68	64	68	68	72	72	72	50	66	69	71
	-17	35	40	-2	-4	-11	-6	6	0	6	0	0	-31	33	6	3
SOYBEANS USA	85	89	79	82	78	77	78	81	81	82	83	83	80	84	78	82
	7	5	-12	4	-5	-1	2	3	1	1	1	0	-21	4	-7	5

result of increases in both the areas planted with soybeans and the average yield per hectare in all main soybean producing countries. Due to the record production, of which a part has still to be harvested, soybean prices have fallen steadily. In early March they fell below the US\$ 200 per ton level. Although this is, seen from a historical perspective, quite a low level, the supply effect of the record production on prices has been quite limited so far. The reasons for this are twofold. First, demand for meal and oil has increased quite fast. Second, and probably more important, production of competing oilseeds have decreased in 2000/01. In particular production of rape seed in the EU and sunflower seed in Argentina showed a decline. In the EU the change in price relation oilseeds vs. grains caused a production decline for rape seed of over 2 million tons. In Argentina, favourable price expectations and weather conditions induced a shift from sunflower seed to soybeans. Soybean production is expected to increase by 3.8 million tons while production of sunflower seed is forecast to decrease by 2.1 million tons.

At the moment the soybean crop from the Southern Hemisphere countries, in particular Brazil, Argentina and Paraguay, is entering the market. Because of its record size and the favourable harvest conditions, until now, prices of beans will remain under pressure in the coming months. Once the crop has been absorbed by the market, prices can be expected to increase. However, for

Food and tropical beverages prices

HWHA index, 1990=100



a number of reasons we expect soybean prices will remain at a rather low level. First, despite the increase in demand, soybean stocks are growing. Second, since in the US the price ratio soybean vs. corn is still favourable for soybeans and nitrogen fertiliser prices are high, US producers will likely continue to expand soybean planting. Finally, the current 'crisis' in the livestock sector of the EU is not conducive to a demand increase of oil meals.

A record bean production implies a record **soybean meal** production and, ceteris paribus, lower prices. So the sharp rise in meal prices in the fourth quarter of last year seems a bit of an anomaly. The sudden price rise was caused by the EU ban of all feed from animal origin. Because of the ban, which was part of a package of measures to abate BSE, demand for vegetable meals would increase by at least 2 million tons so. However, the effect of the ban was short-lived. Already in January soybean meal prices started to fall again. Then it became clear that livestock disease problems would curb meal feeding rates in the EU and thus counterbalance the demand effect caused by the substitution from animal meals to vegetable meals.

In the short and medium term the price picture for meal does not look very rosy (for the producers). As discussed under soybeans, for the time being there will be an ample supply of soybeans and thus of soybean meal. Moreover, as it looks now, demand for soybean oil is picking up somewhat. As a consequence bean crushing will increasingly be triggered by demand for oil. This has a depressing effect on meal prices. An improvement of the livestock disease problems in the EU is also not in sight. The only 'bullish' factor is the broiler sector. Improved prices, partly caused by the shift in demand from beef to chicken, has boost profitability here. In some countries this will lead to production increases and, consequently, to an increase in demand for soybean meal. On balance, we expect that prices of soybean meal will, in the forecasting period, remain at the current, rather low, level.

Contrary to what was expected half a year ago, prices of **soybean oil** did not turn the corner in September. On the contrary, oil prices have further declined. In February they temporarily fell below the US\$ 300 per ton. To put this price somewhat into perspective: in 1984 the yearly

average price for a ton soybean oil amounted to over US\$ 700. The extremely low price level must partly be attributed to the expansion of palm oil production. Global palm oil production is forecast to register its third consecutive year of above-trend growth, reflecting expanding bearing tree numbers in Malaysia and Indonesia. However, there are indications that soybean oil prices have bottomed out now. First, given the current oil/meal price ratios, producers of high oil content oilseeds (e.g. rapeseed, sunflowers), will likely shift land from oilseeds to grain. Canadian planting intentions are an early indicator of this. Second, both Malaysia and Indonesia have recently introduced schemes to reduce palm oil output. In addition the Malaysian government purchases palm oil for power generation. Finally, in an attempt to help oilseed producers, the Indian government has raised tariffs on vegetable oil imports. However, with the 1994 Uruguay Round agreement, the maximum tariff on soybean oil imports is 45 per cent, while the tariff binding on other vegetable oils is 300 per cent. Since India is by far the largest import market for vegetable oils, this will certainly have an effect on demand for soybean oil. Estimates by USDA point indeed to an increase of soybean oil imports by India.

All three developments exert an upward pressure on prices. As global demand for vegetable oils will also increase, the worst seems over for vegetable oil producers. Therefore higher prices are forecasted. It is assumed that in the course of next year soybean oil prices will pass the US\$ 400 per ton again, but even then soybean oil is still quite cheap.

Contrary to what was expected half a year ago, **coffee** prices have further declined. In December 2000 the composite indicator price dived below US\$50 per lb, a 30-year low. Since then prices have been fluctuating around that level, in spite of the Association of Coffee Producing Countries' global retention scheme. According to this scheme most members agreed to a 20 per cent cut in output. But until now the plan has failed to increase prices. There are indications that not all countries are holding back the stocks agreed so far.

We think that the end of the period of very low prices is not yet in sight. The current coffee season will again show a serious production surplus. Due to massive plantings in the mid-nineties in both Brazil and, even more, Vietnam the situation of chronic oversupply will not change in the years to come. Moreover, as history has taught, not much has to be expected from attempts by the ACPC to reduce output either. Looking at demand, the situation is also quite gloomy. Despite the extremely low prices, global coffee consumption is increasing only marginally. In a number of, mainly rich, countries coffee consumption has even decreased in recent years.

But although there seems to be not much room for a significant price increase in the short term, a further price deterioration seems not very likely either. The main reason for this is that in some countries market prices seem to be well below marginal costs now. As a consequence not all potential coffee enters the market. For example, exports by Mexico have plunged in recent months as many producers cannot afford to harvest their crop. And in Brazil, modern plantations are cutting expenditures on labour, fertiliser and husbandry. The steep price falls has also driven away new investors. In the end, that will of course cut in future production. However, the effects of this will only be felt after the forecasting period. In the short term only bad weather can seriously change the current situation of very low prices.

Throughout the fourth quarter of 2000, **cocoa** prices were driven sharply lower as it was expected that 2000/2001 would again be a year in which production would surpass consumption. In December cocoa prices touched a 28-year low. Average prices in 2000 were only half the level of 1998. However, in January conditions on the cocoa market experienced a sudden turn around. The turn around was triggered by reports that cocoa supplies from Côte d'Ivoire, which is by far the most important cocoa producer in the world, would seriously fall short of expectations. When field surveys showed that the pod load was almost 15 per cent down on the previous year, prices

started to rise. They were further pushed up by rumours that civil unrest led to the abandoning of farms owned by non-Ivorian farmers and that immigrants were leaving the country, exacerbating the already tight labour market in the cocoa growing areas. At the end of February prices reached a temporary peak. Then it appeared that cocoa arrivals from Côte d'Ivoire were above the lowest forecast and that the cocoa crop would probably be somewhat bigger than predicted in January. This put an end to the price rally. Since then prices are fluctuating around the 45 US\$ cents/lb. Seen from a historical perspective, cocoa prices are still cheap. Although the stock/grinding ratio amounts to respectable 0.41, the ratio has not been so low in 15 years. Moreover, global consumption of cocoa products is still increasing, while, due to the low prices in recent years investments in cocoa trees have been low and many (marginal) cocoa farms have been abandoned. Given these supply and demand conditions, we think cocoa prices have some upward potential. If normal weather conditions prevail and no serious political problems in the main producing countries, we think prices will increase, from about US\$ 45 cts/lb at the moment to 55 US\$/lb at the end of next year.

In the fourth quarter of 2000 the 3-auction average **tea** price decreased by some 4 per cent. The decrease was mainly caused by falling prices for poor quality teas from Southern India. Teas on the Mombasa auction could, more or less, maintain their rather high level. Since the beginning of the current year, the situation on the main tea markets seems to have changed a bit. Due to an increase in Kenyan tea production, prices at the Mombassa auction have decreased by nearly twenty per cent. On the other hand, tea prices in India have risen quite sharply as production in Assam and West Bengal fall short of expectations and demand from Russia and other former USSR-countries is picking up. In March, the 3-auction price average price surpassed the US\$ 2100 per ton again, a 5 per cent rise compared to the average price in the fourth quarter of 2000.

In evaluating price developments for the remainder of this year and next year, the following has to be taken into account. First, it must be stressed that the global tea market is a mature one. World demand for the beverage is growing at a little over 1 per cent a year. However, demand in some countries can fluctuate quite strongly. Russia is a prime example. During the rouble crisis tea imports fell back (resp. shifted to very low quality teas) due to a lack of foreign exchange. Thanks to the high crude oil prices, imports are picking up again now. Therefore one may expect that tea consumption will grow well above the 1 per cent per year in the coming years. On the supply side one sees a strong recovery of the Kenyan crop which was hit by a severe drought in early 2000. Tea production in India has, in the preceding months, been restricted by bad weather. Generally speaking it is however too early to do make serious statements about the size of the world tea crop. But if average weather conditions prevail, supply and demand will more or less be in balance in the forecasting period. Because of the shift to higher quality teas, tea prices are expected then to climb slowly towards slightly higher levels.

The international **sugar** quotations remained on a high level during winter 2000/01 and started to decline only in March 2001. The rather high prices reflected the expectation of a production deficit in the financial year 2000/01. However, during the first weeks of March 2001 the estimates for the global demand and supply point to a rather balanced situation. Therefore, and because of expectations for a production increase in the next financial year, the quotations declined slightly.

In the regional perspective, the decline of the global sugar production in 2000/01 is mainly caused by a shortfall in Brazil of more than 3 million tons compared to the previous year. Similar to Australia, where the decline amounts to 1.4 million tons the decline in production was due to adverse weather conditions. In the EU a decline in production of about 1 million tons was the result of restrictive political decisions, reflected in a decrease of planted area.

For the financial year 2001/02 in several countries an increase in production could be expected. On the one hand because normal weather conditions are assumed, on the other hand because the actual price level seems to be attractive to producers. This is particularly true for Brazil, the most important sugar producer beside the EU. In Brazil the high sugar prices give strong incentives to expand the cane production. This effect is strengthened by high alcohol prices which result from high oil prices since alcohol produced from sugar cane is a gasoline substitute. Therefore, a production increase of about 25 per cent is expected over the next two years. Because at the actual price relations, about 55 to 60 per cent of the cane production is used for alcohol, the increase in sugar production will be only half of the increase in cane production. Since the domestic food consumption is also increasing, the additional exports in 2001/02 will amount to only about 2 million tons.

Beside Brazil other low cost producers could also expand production and even for EU producers the price level could be attractive for quantities produced beside the quotas. Therefore, the global production will increase in 2001/02 slightly stronger than the 'normal' expansion of demand of about 2 per cent. Because the stocks are still extremely high a decline in international quotations is expected during 2001 and a slight recovery in 2002.

Appendix Tables

Table A1 Actual and forecast commodity price indices (index in dollar terms, 1990=100, percentage change on previous period)

COMMODITY	00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
HWWA TOTAL	102	102	110	109	100	95	95	97	95	95	95	97	81	106	97	96
	<i>8</i>	<i>0</i>	<i>7</i>	<i>0</i>	<i>-8</i>	<i>-6</i>	<i>0</i>	<i>2</i>	<i>-1</i>	<i>-1</i>	<i>1</i>	<i>1</i>	<i>12</i>	<i>32</i>	<i>-9</i>	<i>-1</i>
TOTAL EXCEPT	84	82	81	80	81	80	80	80	82	83	84	85	81	82	80	83
CRUDE OIL	<i>3</i>	<i>-2</i>	<i>-1</i>	<i>-1</i>	<i>1</i>	<i>-2</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>0</i>	<i>-8</i>	<i>1</i>	<i>-2</i>	<i>4</i>
INDUSTR. MATERIALS	86	84	83	81	81	79	79	80	82	83	85	85	81	83	80	84
AND FOOD	<i>3</i>	<i>-2</i>	<i>-1</i>	<i>-2</i>	<i>0</i>	<i>-3</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>0</i>	<i>-8</i>	<i>2</i>	<i>-4</i>	<i>5</i>
FOOD AND TROPICAL	89	87	82	80	79	79	80	82	83	84	84	85	94	84	80	84
BEVERAGES	<i>-3</i>	<i>-2</i>	<i>-6</i>	<i>-2</i>	<i>-1</i>	<i>0</i>	<i>1</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>-19</i>	<i>-11</i>	<i>-5</i>	<i>5</i>
CEREALS	87	87	75	83	85	88	90	93	90	88	86	86	86	83	89	87
	<i>7</i>	<i>0</i>	<i>-13</i>	<i>10</i>	<i>3</i>	<i>4</i>	<i>2</i>	<i>3</i>	<i>-3</i>	<i>-2</i>	<i>-1</i>	<i>0</i>	<i>-12</i>	<i>-3</i>	<i>7</i>	<i>-2</i>
BEVERAGES, TOBACCO, SUGAR	88	85	84	78	78	76	77	78	79	81	83	84	97	83	77	82
	<i>-8</i>	<i>-3</i>	<i>-1</i>	<i>-7</i>	<i>-1</i>	<i>-1</i>	<i>0</i>	<i>2</i>	<i>1</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>-20</i>	<i>-14</i>	<i>-7</i>	<i>6</i>
OILSEEDS AND OIL	93	94	82	83	79	78	81	84	85	87	87	87	95	88	80	87
	<i>2</i>	<i>1</i>	<i>-13</i>	<i>1</i>	<i>-5</i>	<i>0</i>	<i>3</i>	<i>3</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>0</i>	<i>-19</i>	<i>-7</i>	<i>-9</i>	<i>8</i>
INDUSTRIAL RAW	85	83	83	82	82	79	79	79	81	83	85	85	77	83	80	84
MATERIALS	<i>5</i>	<i>-3</i>	<i>1</i>	<i>-2</i>	<i>1</i>	<i>-3</i>	<i>-1</i>	<i>1</i>	<i>3</i>	<i>2</i>	<i>3</i>	<i>0</i>	<i>-2</i>	<i>8</i>	<i>-4</i>	<i>5</i>
AGRICULTURAL RAW MATERIALS	83	82	81	81	82	79	78	78	81	82	85	85	79	82	79	83
	<i>4</i>	<i>-2</i>	<i>0</i>	<i>-1</i>	<i>1</i>	<i>-3</i>	<i>-1</i>	<i>0</i>	<i>3</i>	<i>2</i>	<i>3</i>	<i>0</i>	<i>-1</i>	<i>4</i>	<i>-3</i>	<i>5</i>
NON-FERROUS METALS	86	81	84	81	80	76	76	77	79	81	83	84	72	83	77	82
	<i>7</i>	<i>-6</i>	<i>4</i>	<i>-4</i>	<i>-1</i>	<i>-6</i>	<i>0</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>16</i>	<i>-7</i>	<i>6</i>
IRON ORE, SCRAP	89	89	87	86	89	89	89	90	90	90	91	91	83	88	89	91
	<i>6</i>	<i>1</i>	<i>-2</i>	<i>-1</i>	<i>4</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>-14</i>	<i>6</i>	<i>2</i>	<i>1</i>
ENERGY RAW	113	115	127	127	113	105	105	107	104	102	102	104	80	121	107	103
MATERIALS	<i>11</i>	<i>1</i>	<i>11</i>	<i>0</i>	<i>-12</i>	<i>-7</i>	<i>0</i>	<i>3</i>	<i>-3</i>	<i>-2</i>	<i>0</i>	<i>2</i>	<i>30</i>	<i>51</i>	<i>-11</i>	<i>-4</i>
COAL	71	71	71	74	79	83	83	82	82	80	78	78	76	72	82	80
	<i>-1</i>	<i>0</i>	<i>1</i>	<i>3</i>	<i>7</i>	<i>5</i>	<i>0</i>	<i>-1</i>	<i>0</i>	<i>-4</i>	<i>-1</i>	<i>0</i>	<i>-12</i>	<i>-6</i>	<i>15</i>	<i>-3</i>
CRUDE OIL	117	119	132	132	116	107	107	110	106	104	104	106	80	125	110	105
	<i>11</i>	<i>1</i>	<i>12</i>	<i>0</i>	<i>-12</i>	<i>-8</i>	<i>0</i>	<i>3</i>	<i>-3</i>	<i>-2</i>	<i>0</i>	<i>2</i>	<i>36</i>	<i>56</i>	<i>-12</i>	<i>-4</i>

Table A2 Actual and forecast commodity price indices (index in EURO terms, 1990=100, percentage change on previous period)

COMMODITY	00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
HWWA TOTAL	132	140	153	160	139	128	125	126	124	122	121	122	96	146	129	122
	14	6	9	5	-13	-8	-2	0	-1	-2	0	0	25	51	-11	-6
TOTAL EXCEPT	108	112	113	118	112	108	106	104	106	106	107	107	96	113	108	107
CRUDE OIL	8	3	1	4	-5	-4	-2	-1	2	0	1	-1	2	17	-5	-1
INDUSTR. MATERIALS	111	114	115	119	113	107	105	104	106	107	108	108	97	115	107	107
AND FOOD	8	3	1	3	-5	-5	-2	-1	2	1	1	-1	3	18	-6	0
FOOD AND TROPICAL	114	119	114	117	110	107	106	107	107	108	107	107	112	116	108	107
BEVERAGES	2	4	-4	3	-6	-2	-1	1	0	0	0	0	-9	3	-7	0
CEREALS	112	118	105	121	117	119	119	121	116	113	110	109	102	114	119	112
	13	6	-12	15	-3	1	0	1	-3	-3	-2	-1	-2	11	5	-6
BEVERAGES,	113	116	116	114	107	104	102	102	103	105	105	106	116	115	104	105
TOBACCO, SUGAR	-3	2	1	-2	-6	-4	-2	0	1	2	0	0	-11	-1	-10	1
OILSEEDS AND OIL	120	128	114	122	109	106	108	109	110	112	111	110	113	121	108	111
	7	7	-11	6	-11	-2	1	1	1	1	0	-1	-10	7	-11	3
INDUSTRIAL RAW	109	113	116	119	114	107	105	103	106	107	108	108	92	114	107	107
MATERIALS	11	3	3	3	-5	-6	-3	-1	3	1	2	-1	9	24	-6	0
AGRICULTURAL RAW	107	112	113	119	113	107	104	102	105	106	108	107	94	113	106	107
MATERIALS	10	4	2	5	-5	-5	-3	-2	3	1	2	-1	11	20	-6	0
NON-FERROUS	111	111	117	118	111	103	100	100	103	104	106	106	86	114	103	105
METALS	13	0	6	1	-6	-8	-2	-1	3	1	2	0	13	33	-9	1
IRON ORE, SCRAP	114	122	122	126	124	121	118	117	117	116	116	115	99	121	120	116
	12	7	0	4	-2	-2	-2	-1	1	-1	0	-1	-4	22	-1	-3
ENERGY RAW	146	156	177	186	156	142	139	140	136	132	130	131	95	166	144	132
MATERIALS	16	7	13	5	-16	-9	-2	1	-3	-3	-1	1	45	74	-13	-8
COAL	91	96	99	108	109	113	110	107	107	102	100	99	91	98	110	102
	4	6	3	9	1	3	-2	-3	0	-4	-2	-1	-2	8	12	-7
CRUDE OIL	151	162	184	194	160	144	141	143	138	134	133	134	96	172	147	135
	17	7	14	5	-17	-10	-2	1	-3	-3	-1	1	51	79	-14	-8

Table A3 Actual and forecast prices of individual commodities

Index in dollar terms, 1990=100, percentage change on previous period

COMMODITY		00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
BARLEY	CAN	91 2	90 -2	87 -3	95 9	97 1	99 2	101 2	103 2	106 4	108 2	111 2	111 0	92 -10	91 -1	100 10	109 9
MAIZE	USA	88 12	89 1	72 -19	82 14	85 3	87 2	88 2	91 3	87 -5	85 -2	82 -3	82 0	83 -13	83 -1	88 6	84 -4
RICE	THAI	79 2	73 -8	65 -11	62 -5	62 0	62 1	62 0	64 3	64 0	64 0	64 0	64 0	86 -15	70 -19	63 -10	64 2
WHEAT	USA	95 0	94 -1	88 -6	96 9	100 5	107 7	111 4	115 3	111 -3	107 -3	107 0	107 0	97 -7	93 -4	108 16	108 0
COFFEE	USA	109 -10	95 -13	83 -12	73 -12	69 -6	69 0	69 0	70 2	71 2	73 3	76 3	78 3	120 -21	90 -25	69 -23	75 8
COCOA	USA	71 -6	73 2	71 -2	65 -8	85 30	88 4	95 8	98 3	99 1	102 3	104 2	105 1	90 -32	70 -22	92 31	103 12
TEA (av)	ALL	99 -7	94 -5	100 6	96 -4	93 -3	96 3	97 1	98 1	99 1	100 1	100 0	100 0	107 1	97 -9	96 -1	100 4
TOBACCO	USA	89 -2	91 2	88 -3	87 -1	87 0	86 -1	86 0	87 1	88 1	88 0	88 0	88 0	92 -10	89 -4	86 -3	88 1
SUGAR	USA	43 -17	58 35	82 40	80 -2	77 -4	68 -11	64 -6	68 6	68 0	72 6	72 0	72 0	50 -31	66 33	69 6	71 3
SOYBEANS	USA	85 7	89 5	79 -12	82 4	78 -5	77 -1	78 2	81 3	81 1	82 1	83 1	83 0	80 -21	84 4	78 -7	82 5
COTTON	USA	79 11	79 0	83 5	88 6	77 -12	77 0	79 3	81 2	83 2	83 0	84 2	84 0	76 -20	82 8	79 -4	83 6
WOOL	AUS	56 4	55 -1	59 7	55 -7	58 6	58 0	60 3	60 0	62 3	62 0	64 3	64 0	55 -12	56 2	59 5	63 6
SOFTWOOD	S/US	89 4	85 -5	81 -5	79 -2	84 6	82 -2	82 0	82 0	84 3	87 3	90 3	90 0	88 3	83 -5	82 -1	88 6
RUBBER	GB	81 0	80 -2	80 0	78 -2	75 -5	73 -2	73 0	73 0	74 2	74 0	75 2	75 0	75 -8	80 6	73 -8	75 2
WOODPULP	FIN	78 7	83 6	87 5	87 0	83 -5	76 -9	71 -6	71 0	74 4	76 3	80 5	80 0	64 -1	84 31	75 -10	77 3
ALUMIN	GB	100 9	90 -10	95 6	92 -3	96 4	90 -6	90 0	92 2	96 4	98 2	100 2	100 0	83 0	94 14	92 -2	98 7
COPPER	GB	67 3	65 -3	70 8	69 -1	66 -4	64 -4	64 1	66 2	68 3	69 2	72 4	74 3	59 -5	68 15	65 -5	71 8
LEAD	GB	56 -6	52 -8	58 13	58 0	61 5	59 -3	59 0	60 2	60 0	61 1	61 0	62 2	62 -5	56 -10	60 7	61 2
NICKEL	GB	104 21	104 0	91 -12	82 -10	72 -12	65 -10	63 -3	62 -1	62 0	64 3	66 3	68 3	66 30	95 44	66 -31	65 -1
TIN	GB	91 0	88 -4	87 -1	85 -2	83 -3	79 -4	79 0	79 0	81 2	81 0	81 0	82 2	87 -3	88 1	80 -9	81 1
ZINC	GB	75 -3	75 0	78 4	71 -9	68 -5	65 -4	64 -2	64 0	65 2	67 3	69 4	70 1	71 5	75 5	65 -13	68 4
IRON ORE	BRA	92 4	92 0	92 0	92 0	95 4	95 0	95 0	95 0	95 0	95 0	95 0	95 0	88 -9	92 4	95 4	95 0
STEEL SCRAP	US	88 15	98 11	90 -8	79 -11	78 -1	77 -2	77 0	80 5	84 5	84 0	89 5	89 0	73 -34	89 22	78 -12	86 11
STEAM COAL	AUS	64 -2	64 0	65 1	68 6	80 16	82 3	82 0	80 -2	80 0	78 -3	76 -3	76 0	67 -13	65 -3	81 25	77 -4
COKING COAL	ALL	78 -1	78 0	78 0	79 1	78 -1	85 8	85 0	85 0	85 0	81 -4	81 0	81 0	85 -11	78 -8	83 6	82 -1
CRUDE OIL (av)	ALL	117 11	119 1	132 12	132 0	116 -12	107 -8	107 0	110 3	106 -3	104 -2	104 0	106 2	80 36	125 56	110 -12	105 -4

Table A4 Actual and forecast prices of individual commodities

Index in EURO terms, 1990=100, percentage change on previous period

COMMODITY		00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
BARLEY	CAN	118 7	122 4	121 -1	140 15	134 -4	134 0	134 0	133 -1	138 4	139 0	141 1	139 -1	110 1	125 14	134 7	139 4
MAIZE	USA	113 18	122 7	101 -17	121 20	117 -3	117 0	117 0	118 1	112 -5	109 -3	104 -4	103 -1	100 -3	114 14	117 3	107 -9
RICE	THAI	102 7	99 -3	90 -9	91 0	86 -5	84 -2	83 -2	83 1	83 0	83 -1	82 -1	81 -1	103 -5	96 -7	84 -12	82 -2
WHEAT	USA	122 5	128 5	123 -4	141 14	139 -1	145 5	148 1	149 1	145 -3	138 -4	137 -1	135 -1	116 4	128 11	145 13	139 -5
COFFEE	USA	140 -5	129 -8	116 -10	107 -7	95 -12	93 -2	91 -2	91 0	93 2	94 2	96 2	98 2	143 -12	124 -13	92 -25	95 3
COCOA	USA	92 -1	99 8	99 0	96 -3	117 23	119 2	126 6	128 1	129 1	131 2	133 1	133 0	107 -24	96 -10	123 27	131 7
TEA (av)	ALL	128 -2	128 1	140 9	141 1	129 -8	130 1	129 -1	128 -1	129 1	129 0	128 -1	126 -1	127 13	134 5	129 -4	128 -1
TOBACCO	USA	115 3	124 8	123 -1	127 4	120 -6	116 -3	114 -2	113 -1	114 1	113 -1	111 -1	110 -1	110 0	122 11	116 -5	112 -3
SUGAR	USA	56 -12	79 43	114 43	117 3	106 -9	92 -13	85 -8	89 4	89 0	93 5	92 -1	91 -1	59 -23	90 53	93 3	91 -2
SOYBEANS	USA	110 13	122 11	110 -10	120 9	107 -11	104 -3	104 0	105 1	106 1	106 0	106 0	105 -1	96 -12	115 20	105 -9	106 1
COTTON	USA	102 17	108 5	115 7	128 12	107 -17	105 -2	105 1	105 0	107 2	106 -1	107 1	106 -1	91 -10	113 25	105 -6	107 1
WOOL	AUS	72 9	75 4	82 9	81 -2	81 0	79 -2	79 1	78 -2	80 3	79 -1	81 2	80 -1	66 -2	77 17	79 2	80 1
SOFTWOOD	S/US	115 9	116 0	112 -3	115 3	116 0	111 -4	109 -2	107 -2	110 3	112 2	114 2	113 -1	105 15	115 9	110 -4	112 2
RUBBER	GB	105 5	109 4	111 2	115 3	103 -10	99 -4	97 -2	95 -2	96 2	95 -1	96 0	95 -1	90 2	110 23	99 -10	96 -3
WOODPULP	FIN	100 13	113 12	121 8	128 5	115 -10	102 -11	94 -8	92 -2	96 4	98 2	101 4	100 -1	76 11	115 51	101 -12	99 -2
ALUMIN	GB	129 15	123 -5	133 8	135 2	133 -1	122 -8	120 -2	120 0	125 4	126 1	127 1	126 -1	99 12	130 31	124 -5	126 2
COPPER	GB	87 8	89 3	98 10	102 4	92 -10	86 -6	85 -1	85 0	88 3	89 1	91 3	93 2	71 6	94 33	87 -7	90 4
LEAD	GB	73 -1	71 -3	81 15	85 5	84 -1	80 -5	78 -2	78 0	78 0	78 0	77 -1	78 1	74 6	77 4	80 4	78 -3
NICKEL	GB	134 27	141 6	127 -10	120 -6	100 -17	88 -12	84 -5	81 -3	81 0	83 2	84 2	86 2	79 45	131 65	88 -33	84 -5
TIN	GB	118 5	120 1	121 1	124 3	114 -8	107 -6	105 -2	103 -2	105 2	104 -1	103 -1	104 1	104 9	121 16	107 -11	104 -3
ZINC	GB	96 2	102 6	109 6	104 -4	94 -10	88 -6	84 -4	83 -2	84 2	86 2	88 3	88 0	85 17	103 21	87 -15	87 0
IRON ORE	BRA	118 10	125 6	127 2	134 5	132 -1	129 -2	127 -2	124 -2	124 0	123 -1	122 -1	120 -1	105 1	126 20	128 2	122 -5
STEEL SCRAP	US	114 21	133 17	125 -6	116 -7	108 -7	104 -4	102 -2	104 3	110 5	109 -1	113 4	112 -1	87 -26	122 41	104 -14	111 6
STEAM COAL	AUS	82 3	87 6	90 4	100 11	110 10	111 1	109 -2	105 -4	105 0	100 -4	96 -4	95 -1	80 -3	89 12	109 21	99 -9
COKING COAL	ALL	100 4	106 6	108 2	116 7	108 -6	115 6	112 -2	110 -2	110 0	104 -5	103 -1	102 -1	102 0	107 6	111 4	105 -6
CRUDE OIL (av)	ALL	151 17	162 7	184 14	194 5	160 -17	144 -10	141 -2	143 1	138 -3	134 -3	133 -1	134 1	96 51	172 79	147 -14	135 -8

Table A5 Commodities not included in the HWWA index

Percent change over the previous period

COMMODITY	00/1	00/2	00/3	00/4	01/1	01/2	01/3	01/4	02/1	02/2	02/3	02/4	1999	2000	2001	2002
SOYBEAN MEAL	7	6	-3	15	-7	-4	-3	3	0	-3	3	-1	-12	16	-2	-1
SOYBEAN OIL	-6	-5	-5	-3	-2	3	9	3	3	8	0	5	-32	-21	-1	19
STEEL REINFORCING ROUNDS	2	3	0	0	3	0	0	2	2	2	1	0	-13	6	1	6

Table A6 Weights of commodities and commodity groups

shares in %			
HWWA index, total	100	Industrial raw materials	29.5
HWWA index excluding energy	39.5	Agricultural raw materials	16.9
		- Rubber	0.9
		- Cotton	1.2
Food, tropical beverages	10.0	- Wool	1.1
		- Hides	0.8
Cereals	2.1	- Wood	8.6
- Barley	0.1	- Wood pulp	4.3
- Maize	1.1		
- Wheat	0.6	Non-ferrous metals	8.9
- Rice	0.3	- Aluminium	3.8
		- Copper	3.0
Oilseeds, oils	2.0	- Lead	0.2
- Soybeans	1.6	- Nickel	0.9
- Coconut oil	0.1	- Tin	0.3
- Palm oil	0.1	- Zinc	0.6
- Sunflower oil	0.1		
		Iron ore, scrap	3.7
Beverages, sugar, tobacco	5.9	- Iron ore	3.0
- Coffee	2.5	- Steel scrap	0.7
- Cocoa	0.7		
- Tea	0.4	Energy raw materials	60.5
- Tobacco	1.3	- Coal	5.0
- Sugar	1.0	- Crude oil	55.5

Table A7 Price quotations included in the HWWA index

No	Commodity	Variety, quality	Market/ origin	Currency / units of quotation
1	Barley	Western No 1/2, nearest month	Winnipeg	Can. \$ per t
2	Maize	Yellow No 2, nearest month	Chicago	US cents per bushel
3	Rice	Thai, white, milled, 5% broken	Bangkok	US \$ per t
4	Wheat	Canadian, Western Red Spring 1, 13.5 % protein, ex warehouse	Winnipeg	Can. \$ per t
5	Wheat	US, standard, nearest month, ex warehouse	Chicago	US cents per bushel
6	Soybeans	US, yellow No 2, nearest month	Chicago	US cents per bushel
7	Coconut oil	Philippines, cif Rotterdam	London	US \$ per t
8	Palm oil	Malaysian, 5 % , cif England, nearest month	London	US \$ per t
9	Sunflower seed oil	All origins, ex tank Rotterdam, nearest month	London	US \$ per t
10	Coffee	ICO price, unweighted average of different qualities, ex dock	New York	US cents per lb
11	Cocoa	ICCO price, average daily	London/NY	SDR per t
12	Tea	Average price of Calcutta, Colombo and Kenia auctions		US cents per kg
13	Tobacco	US import unit values, general unmanufactured tobacco	USA	US \$ per t
14	Sugar	Raw, world contract No 11, spot New York	New York	US cents per lb
15	Cotton	Middling upland, 1 1/16 inches, contract No 2, nearest month	New York	US cents per lb
16	Wool	Coarse, crossbred, 48's, clean, dry combed basis		US cents per kg
17	Wool	Australian, Merino, type 78, nearest month	Sydney	Aus. cents per kg
18	Hides	US, heavy domestic steers, loco	Chicago	US cents per lb
19	Sawn Wood	Swedish pine fob Nedderbottens, 63 x 175 mm	Sweden	Skr per cbm
20	Round wood	Softwood logs, average value exported from northern US	USA	US \$ per cbm
21	Rubber	RSS 1, cif European ports, nearest month	London	GB p per kg
22	Woodpulp	PIX pulp benchmark index NBSK	Helsinki	US \$ per t
23	Aluminium	LME, high grade, ex warehouse, cash	London	US \$ per t
24	Lead	LME, standard, ex warehouse, cash	London	US \$ per t
25	Copper	LME, Grade A, ex warehouse, cash	London	US \$ per t
26	Nickel	LME, ex warehouse, cash	London	US \$ per t
27	Zinc	LME, ex warehouse, cash	London	US \$ per t
28	Tin	LME, ex warehouse, cash	London	US \$ per t
29	Iron ore	Brazilian, standard feed, 64.3 % iron, contract price to Germany, fob	Tubarao	US \$ per t
30	Steel scrap	Heavy melting No 1, Iron Age scrap bulletin composite, delivered	Pittsburgh..	US \$ per long ton
31	Steel scrap	Heavy open hearth, merchants' buying price, delivered	Belgium	Euro per t
32	Steam coal	Australian, fob New Castle	Australia	US \$ per t
33	Coking coal	Import price cif North Sea ports	EU	US \$ per t
34	Crude oil	Dubai, 32% API, nearest month, fob	London	US \$ per barrel
35	Crude oil	Brent, 38% API, nearest month, fob	London	US \$ per barrel
36	Crude oil	West Texas Intermediate, 40% API, nearest month	London	US \$ per barrel