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Tight Supply Keeps Oil Prices Soaring

While there has been no further increase in the price of industrial commodities this year, oil prices recovered from a temporary decline to reach record levels. Does the oil producers' new-found unity mean a farewell to low oil prices?

Global commodity prices have continued their upward trend in the past few months. In August, calculated using the HWWA index on a US dollar basis, they were a quarter higher than a year previously; they have climbed by almost 10 % since the start of the year (see HWWA Index of World Market Prices of Raw Materials). This upward trend has been driven throughout by the rise in oil prices. Together with more vibrant demand, the production discipline of the oil producing countries sent the price of crude oil to 35 dollars per barrel for Brentoil in mid-September. The release of oil from the US strategic reserve brought the price back to 30 dollars more recently. Since the end of 1998, when the price of a barrel of Brent crude had fallen below the 10 dollar mark and was thus well below the long-term average price of 18 dollars,[1] oil prices have more than trebled. Most of this increase had already taken place by the start of the year, yet – following a temporary period of calm – it maintained its upward momentum and prices finally reached the highest mark since the Gulf war ten years ago. From a "real" point of view, measured in terms of industrial commodity prices, crude oil today is again as expensive as it was in the wake of the first oil crisis in the early 1970s, but is still significantly cheaper than in the early 1980s (see Figure 1).

The trebling of oil prices since the spring of 1999 has brought the oil producers a marked increase in their export revenues. Thanks to OPEC's new-found production discipline, Venezuela, which had previously helped bring about the dramatic 1997/98 price slump by exceeding its agreed output levels, was thus able to double its income from oil sales in the first half of the year 2000 compared to the same period of the previous year.[2] A year-on-year comparison shows that total OPEC oil revenues had already increased by one third in 1999 – following a decline of similar dimensions in 1998. Assuming an oil price of around 30 dollars per barrel in the months ahead, these revenues would increase by a further two thirds this year, thus reaching – both in nominal and real terms – the highest level since the early 1980s.

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The unexpectedly high degree of success of the production limit had already twice led the OPEC countries to undertake a relaxation of their output restrictions prior to their most recent meeting; in April and July, the production ceiling agreed for the ten participating countries[3] one year previously was raised by a total of 2.4 million barrels per day (10.5%). Actual production, however, which was above this ceiling, rose at a slower rate because the member countries were more rigorous in abiding by their self-imposed output targets (see Table 1). World oil supplies, which had shrunk by almost 2% in 1999, grew by around 2% in the first six months of this year compared to the same period of the previous year; this was partly due to an intensification of production efforts in North America, Western Europe and Russia in response to the improved earnings opportunities generated by higher oil prices. In view of the exceptionally high oil prices and in anticipation of falling prices in the near future, refineries and consumers have further reduced their inventories. By the end of August, stockpiles in the USA had fallen to their lowest level for 20 years. To a considerable degree, however, this is also due to the fact that the oil industry has been turning increasingly to a "just in time" delivery policy in recent years – a policy that enables significant cost reductions but also carries an inherent risk of production disruptions. This year, despite the high price levels and following a very modest increase at the start of the year, demand for oil, which rose by 1.6 % in 1999, has recovered much more strongly in recent months, not least as a result of the continuing economic recovery in Southeast Asia.

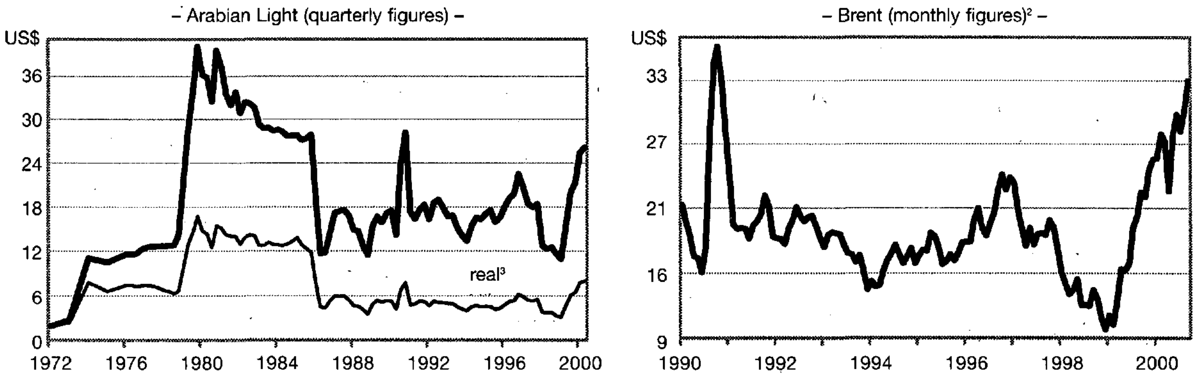
With winter approaching and the world economy expanding rapidly, there is growing demand-side apprehension that supply shortages could arise, leading to a renewed increase in oil prices. The

[1] Average price of Brent oil from 1986 to 1997. The OPEC price target in 1998 was 21 dollars.

[2] F. Pals: Venezuela to urge Opec to stick to price band at mtg, in: Wall Street Journal, 29.8.2000.

[3] Excluding Iraq, which is not subject to the quota agreements.

Figure 1
World Market Prices for Oil[1]



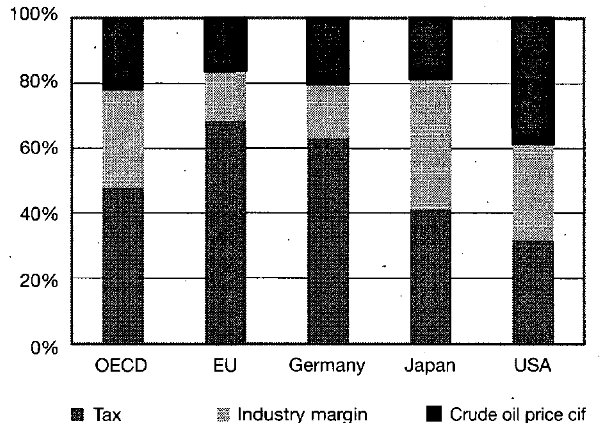
[1] Spot prices fob per barrel. [2] September 2000: up to 8th September. [3] Deflated with export prices of manufactured goods. Base year 1972.

Sources: IEA; OPEC; own calculations.

consuming countries are concerned that the persistently high level of oil prices could have an adverse impact on the current economic upturn, and increasingly this apprehension is also being shared by the oil producing countries. Within OPEC, however, there are still conflicting opinions as to the cause of the oil price explosion. The prevalent view among consumers – that low production levels are primarily responsible – is not shared by some of the exporting countries. They point to high taxes in the consuming countries, bottlenecks at the refineries and oil market speculation. According to OPEC figures, the mean tax burden on oil products in the industrialised countries accounts for approximately half of the price paid by consumers, in the EU the proportion is as high as two thirds. In contrast, the commodity cost of imported oil in Europe and Japan makes up only around one fifth of the price paid by consumers (see Figure 2). In the opinion of the OPEC president, countries with such high tax rates benefit far more from high prices than do the oil producing countries.[4]

The high tax burden on oil products in many industrialised countries – especially those of western Europe – can hardly be made responsible for the current high level of oil prices. The tax burden was already high and, by inducing savings, it has unquestionably contributed to a permanent reduction in the consumption of oil products, thus limiting the rise in oil prices. Since taxes on oil products are volume-based, any additional tax revenues resulting from higher oil prices are limited to sales and/or value added tax. However, references to the taxation of oil products touch on a sensitive topic, as the French

Figure 2
Structure of the Average Consumer Price for Oil Products 1999[1]



[1] Individual oil product prices, weighted with consumption shares.

Source: OPEC.

hauliers' recent – and apparently successful – protests aimed at achieving a reduction in the level of tax on diesel fuel clearly demonstrate. The concessions made by the French government make it clear that the oil importing countries do indeed have ways and means of softening the impact of high oil prices on the private sector. On the other hand, any such concessions would have consequences for state budgets and could arouse expectations of new subsidies.

Market Difficult to Judge

One major reason for OPEC's hesitancy in adjusting output levels is likely to be the concern that any addition to the oil supply could be overcalculated and thus lead to a subsequent slump in oil prices. Too fresh are the memories of autumn 1997 when the OPEC countries misjudged the market situation and

[4] Cf. F. Pals: Opec pres sees need for more oil on the market, in: Wall Street Journal, 4. 9. 2000.

Table 1
OPEC: Crude Oil Production Quotas and Actual Production
(in million barrels per day)

	Oil quotas from:				Total agreed increases (%)	Production 2000		Production increase since March (%)	August production in % of July quota
	April 1 1999	April 1 2000	July 1 2000	October 1 2000		March	August		
Algeria	0.73	0.79	0.81	0.84	14.4	0.77	0.83	7.8	102
Indonesia	1.19	1.28	1.32	1.36	14.5	1.25	1.31	4.8	99
Iran	3.36	3.62	3.73	3.84	14.4	3.81	3.67	-3.7	98
Kuwait	1.84	1.98	2.04	2.10	14.4	1.99	2.14	7.8	105
Libya	1.23	1.32	1.36	1.40	14.4	1.41	1.43	1.4	105
Nigeria	1.89	2.03	2.09	2.16	14.4	1.96	2.01	2.6	96
Qatar	0.59	0.64	0.66	0.68	14.5	0.67	0.70	4.5	106
Saudi Arabia	7.44	8.02	8.25	8.51	14.4	7.87	8.55	8.7	104
UAE	2.00	2.16	2.22	2.29	14.5	2.22	2.28	2.7	103
Venezuela	2.72	2.85	2.93	3.02	11.0	2.80	2.92	4.3	100
OPEC 10	22,98	24.69	25.40	26.20	14.0	24.74	25.84	4.4	102
Iraq[a]						2.18	2.95	35.3	
OPEC total						26.92	28.79	6.9	

[a] Iraq is not a party to the production agreements.

Sources: IEA; OPEC; own calculations.

raised output levels just as demand in Asia collapsed, thus magnifying the drastic decline in oil prices.

Despite the fact that Saudi Arabia's announcement at the start of July to the effect that it would increase its output by 500,000 barrels per day over and above its agreed production quota was indeed implemented in the months thereafter, there had been no "automatic" increase in OPEC's output – as had been agreed should the price of oil[5] rise beyond 28 dollars – prior to the September meeting, because the condition for such a step – that the price must be above the target corridor ceiling for 20 consecutive trading days – was not fulfilled until September 8. Although there had been renewed talk of an expansion of total OPEC output prior to the recent meeting of OPEC oil ministers, this failed to induce a drop in oil price quotations, since the volumes proposed were considered insufficient in view of the low levels of inventories and the approaching winter. As the March and June agreements have demonstrated, raising quotas does not necessarily lead to an increase in OPEC output of corresponding dimensions. The implementation of any resolutions made to expand output could also be hampered by the fact that oil production in most OPEC countries is running close to full capacity. Exceptions are Saudi Arabia, the United Arab Emirates and Kuwait, which could together produce an additional 3 million barrels per day.

OPEC Capacity Bottlenecks

In the short term, it is above all Saudi Arabia that can call on significant spare production capacity – at 2 million barrels per day it has more additional capacity than any other oil producing country. The fact that only Saudi Arabia has recently been producing at levels above its pledged ceiling has nurtured the belief that a great number of members could have difficulties in raising production by the agreed percentage. As a result, Saudi Arabia would presumably be the primary beneficiary of any resolution to expand OPEC production. Most of the other member countries would be more or less incapable of increasing output volumes in order to offset the decline in revenues caused by falling oil price quotations.

Despite the fact that capacity limits had been reached in many countries, and notwithstanding the contradictory interpretations of the market situation within OPEC, an oil price which stubbornly remained above the target corridor ceiling increased the likelihood of a resolution to expand OPEC production if the global economic upturn and the recovery in Asia in particular were not to be jeopardised. Although the economy in the industrialised countries has not yet suffered any apparent significant impairment, the recent renewed oil price rise has increased concerns of an economic slowdown in Europe and the USA. Given that, thanks to the additional output on the part of Saudi Arabia, the current level of production among the 10 OPEC countries was already around 440,000 barrels per day higher than the previous production ceiling (see Table 1), this ceiling would have to be

[5] Average price of seven varieties of oil ("Opec basket").

raised by a far more significant amount in order to stabilise oil prices. The OPEC ministers' resolution of September 10 to increase the production quota by 800,000 barrels per day from October onwards represents a step in this direction. In view of the tight supply situation with regard to oil products, however, this increase will probably not yet be sufficient to induce significantly lower prices. An oil price approaching the new OPEC target of 25 dollars can be expected at the end of the winter. Come the spring, on the other hand, OPEC could even be forced to throttle output once again in order to counteract an even stronger decline in prices.

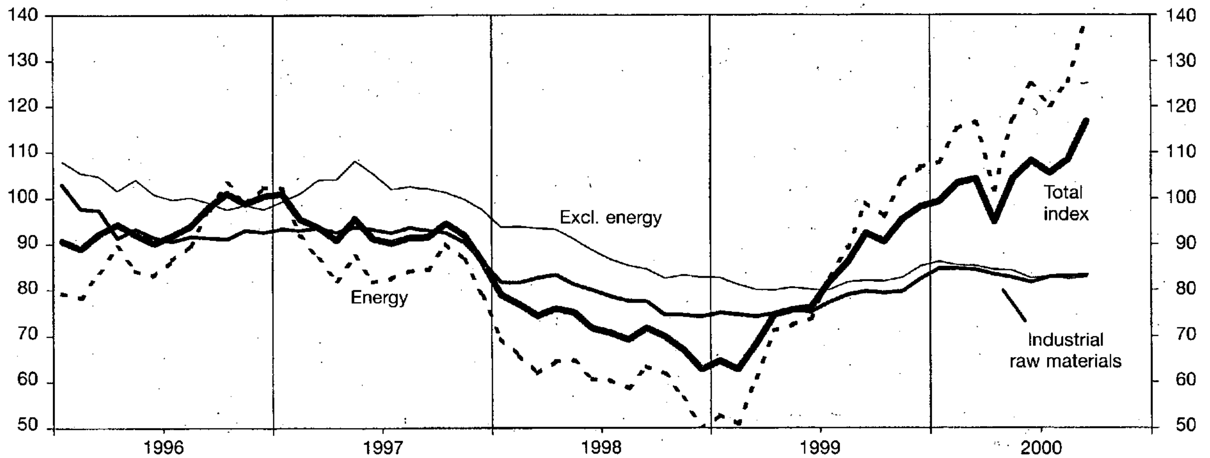
Criticism of the Adjustment Mechanism

The increase in oil prices to over 30 dollars reinforced criticism of the OPEC's new oil output adjustment mechanism. Apart from fundamental doubts regarding the suitability of the mechanism,[6] fault is found with its lack of flexibility. Output is supposed to be adjusted "automatically" by 500,000 barrels per day if oil prices have been above the target corridor ceiling for 20 consecutive trading days or if they have been below its floor for 10 consecutive trading days. The outcome is that if the price of oil remains within the target corridor for just one single trading day, this would be enough to begin counting from scratch. A further problem can result from the fact that a change in production levels should, on a percentage basis, be the same for all member countries. In the case of capacity bottlenecks such as those existing today, it may not be possible to actually achieve the required expansion of output. The necessity to revise the mechanism in order to be able to react more quickly to market developments and so to reduce violent price fluctuations is also recognised by OPEC representatives.

[6] Cf. K. Matthies: Relaxation on the Oil Market, in: INTERECONOMICS, Vol. 35 (2000), No. 2, p. 103.

HWWA Index of World Market Prices of Raw Materials

(1990 = 100)



Raw Materials and Groups of Materials[1]	1999	Mar. 00	Apr. 00	May 00	June 00	July 00	Aug. 00	Sep. 00[2]
Total Index	80.5 (11.8)	104.2 (52.4)	94.9 (27.2)	104.3 (38.0)	108.1 (41.9)	105.4 (28.9)	108.3 (25.8)	116.7 (26.4)
Total, excl. energy	81.5 (–7.7)	85.2 (6.5)	84.4 (5.6)	84.2 (4.6)	82.6 (3.2)	82.9 (3.7)	82.4 (0.9)	82.8 (0.9)
Food, tropical beverages	94.2 (–18.7)	87.5 (–10.1)	87.6 (–8.1)	88.6 (–7.0)	85.1 (–10.0)	83.0 (–5.6)	80.7 (–10.2)	81.3 (–9.0)
Industrial raw materials	77.2 (–2.2)	84.4 (13.9)	83.4 (11.5)	82.7 (9.6)	81.7 (8.8)	82.9 (7.3)	83.0 (5.2)	83.3 (4.6)
Agricultural raw materials	78.6 (–0.9)	83.4 (7.3)	83.8 (8.7)	81.5 (5.1)	80.4 (3.3)	81.7 (4.4)	82.3 (2.9)	80.6 (1.8)
Non-ferrous metals	71.9 (1.0)	84.6 (33.4)	80.1 (19.2)	82.3 (19.2)	80.9 (20.0)	82.7 (12.6)	82.5 (9.5)	86.8 (9.5)
Energy	79.9 (30.1)	116.5 (91.8)	101.7 (43.1)	117.4 (62.1)	124.8 (69.4)	120.1 (44.8)	125.2 (40.8)	138.8 (40.3)

[1] On a US dollar basis, averages for the period; figures in brackets: percentage year-on-year change.
[2] Up to and incl. 22nd September.