12 January 1994

HIGHLIGHTS

- Recent deliveries data for November reveal that the weakness of market fundamentals in 4Q93 was attributable to the relative weakness of product demand in industrialised countries, notably the US and Japan, as well as the larger than expected increase in non-OPEC crude supply. Reliable evidence of demand-side influences have merely taken longer to emerge. OECD demand is now expected to have averaged 39.7 mb/d in 4Q93, down 0.3 mb/d from last month's estimate, despite relatively strong gasoil demand in Europe in November.
- December OPEC production is estimated to have been essentially unchanged from November at 24.7 mb/d. Non-OPEC supply appears to have held the strong increases registered in October, and preliminary estimates for 4Q93 show a 0.9 mb/d quarterly increase compared with 3Q93 in spite of a 0.2 mb/d decline in FSU production.
- The severe storms in the Black Sea and the extended closure of the port of Novorossiysk are now estimated to have cut FSU oil exports to 1.9 mb/d in November from 2.3 mb/d in October. In spite of a recovery in liftings in the second week of December, seaborne availabilities of crude and products have remained relatively scarce and erratic and total exports are expected to have shown only a slight recovery over the month. FSU net exports in 4Q93 are now estimated at 2.0 mb/d, down from 2.5 mb/d in 3Q93.
- Preliminary estimates indicate that OECD industry stocks declined by 0.3 mb/d in November with decreases of 0.4 mb/d and 0.2 mb/d in the Pacific and Europe being partly offset by a 0.4 mb/d increase in North America. Gasoline stocks increased by 0.5 mb/d with 0.4 mb/d of the increase occurring in North America. Total industry stocks at the end of November were 334 million tons (mt), 9 mt higher than a year earlier with increases in North America, the Pacific and Europe of 5 mt, 2 mt and 1 mt respectively. Gasoline stocks were well above year-earlier levels in all three regions while distillate stocks were close to end-November 1992 levels in North America and the Pacific and 1 mt lower in Europe.
- Crude prices continued to decline in December in part reflecting higher stock levels in the US and renewed market perceptions of a possible resumption of crude exports by Iraq. The Brent price declined to below $13/bbl before recovering by more than $1/bbl in early January. In December, not only did product prices fall but there was also a sharp narrowing of the differential between light and heavy product prices compared to November.
- Refinery margins decreased in Europe and the US and remained little changed in Singapore. Margins in the US decreased in the first half of December before recovering in the second half of the month. Crude throughputs in November increased sharply in Europe and Japan but fell in the US. Initial indications for December suggest slightly lower throughputs in the US, higher runs in Japan and little change in Europe.

DEMAND

1. The main points to emerge from the revision to OECD demand in the light of recently released data for October and November and revisions to data for earlier months are as follows:

- Not only the sharp rise in non-OPEC crude supply but also weaker-than-expected product demand in 4Q93, notably in Japan and the United States, contributed to the weak market fundamentals observed since September. OECD demand in 4Q93 is now estimated to have been 39.7 mb/d, a downward revision of 0.3 mb/d from last month's estimate.
- The onset of cold weather in western Europe in November prompted a surge in heating oil deliveries, notably in Germany and France where average temperatures were 2-3° Celsius below historical averages and almost 5° Celsius below the average in November 1992. Total inland deliveries in the four largest European countries (Germany, France, Italy and the UK) are reported to have risen 6.4 per cent year-on-year and almost 11 per cent versus a particularly weak October. December temperatures in western Europe were higher than in November and closer to seasonal norms but overall demand is expected to have been supported by German consumer buying of gasoline and, to a lesser extent, diesel in advance of the increase in transport fuel taxes on 1 January. There is reported to have been some disruption to product distribution and road and river traffic in several north-west European countries in late December and early January as a result of severe flooding.
- In spite of cold weather in the north-east of the United States and eastern Canada since late-December, both North American and Japanese demand in 1Q94 have each been revised down 0.1 mb/d, in the light of weaker than expected demand in 4Q93. Projected OECD demand in the current quarter now stands at 40.1 mb/d, up 0.3 mb/d from 1Q93.

Preliminary Inland Deliveries[1] November 1993
(million barrels per day)

	Motor Gasoline		Gasoil		Residual Fuel Oil		Total Products[2]	
	mb/d	% change	mb/d	% change	mb/d	% change	mb/d	% change
USA[3]	7.49	+3.1	3.33	+13.6	0.89	-14.2	17.25	0.0
Canada	0.60	+6.2	0.43	+8.9	0.15	-11.6	1.44	+2.5
Japan	0.83	+3.7	1.27	+4.7	0.66	-19.2	5.05	-4.4
France	0.37	-1.0	0.89	+20.5	0.13	+9.2	1.85	+8.0
Germany	0.76	+3.3	1.39	+20.7	0.16	-11.1	2.87	+7.2
Italy	0.41	+6.8	0.60	+5.6	0.54	-7.3	1.99	+1.6
UK	0.57	+3.5	0.48	+14.6	0.21	-11.9	1.75	+6.4
European Four	2.10	+3.2	3.36	+16.9	1.04	-7.3	8.51	+6.4
Total	11.02	+3.3	8.39	+13.2	2.74	-12.8	32.25	+1.0

Sources: US EIA, Japan MITI, France CPDP, Germany MWV, UK PIA, Italy Ministry of Industry, Statistics Canada
1 excludes refinery fuel and bunkers (except for US)
2 includes other products not shown and direct use of crude oil
3 50 states only
Percentage change is calculated versus November 1992

2. Oil demand, as measured by ex-refinery deliveries, in the months of December and January are normally highly sensitive to abnormally cold or warm weather as well as possible end-year distortions arising from, first, the extended holiday period and, secondly, accounting practices and fiscal aspects which may influence companies' desired end-year stocks. In December 1993/January 1994, two further influences served to make demand projections for 4Q93 and 1Q94 more difficult, namely the continued weakening in international prices in December (particularly of gasoline, the largest-volume consumer product) and the substantial increase in German taxes on transport fuels on 1 January. The latter is outlined below. The extent of these end of year effects on demand will only be evident towards the end of February once reliable data for December and January are available.

Demand in 1993: Near-Stagnation in OECD

3. Over the past twelve months, estimates of the *rate of growth* of OECD demand have been progressively downgraded from 1.3 per cent to the current estimate of 0.3 per cent growth as a result of, first, the sharp weakening in continental European economics in 1H 1993 and, later, the marked downward revisions to Japan's economic performance. By contrast, projections of real GDP growth in the United States have actually been revised *upward* slightly over the last twelve months to 2.8 per cent. Although lower than expected GDP growth were primary reasons for the observed fall in demand in Europe and Japan in 1993, weather patterns in 1993 were of perhaps equal importance; temperatures in Europe in

1Q93 were milder than normal and in Japan the lower than normal summer temperatures and heavy rainfall severely curbed oil use in electricity generation in 3Q93.

4. Despite this downward revision in the *rate* of demand growth, it should be noted that estimates of the *level* of OECD demand in 1993 (39.0 mb/d) are exactly the same now as they were in January 1993. Over this twelve-month period, demand in 1992 has been revised upward from 38.5 mb/d to 38.9 mb/d, highlighting the importance of a reliable historical basis in demand forecasting. Demand data for the year 1993 are still subject to considerable revision and will not be finalised before late-2Q94.

Demand in 1994: Modest Growth Expected

5. OECD oil demand in 1994 is currently expected to increase 1.2 per cent or almost 0.5 mb/d to 39.5 mb/d. This projection, presented by region in Table 1, is based on the following main technical assumptions:

- real GDP growth in the OECD of 2.1 per cent compared to an estimated 1.1 per cent in 1993,
- normal weather patterns based, wherever possible, on averages of the last thirty years,
- average international crude oil prices unchanged from 1993 ($17/bbl dated Brent and an estimated $16.40/bbl average IEA CIF import price).

6. The OECD's latest published projections for real GDP growth in the main consuming countries in 1993 and 1994, released in December, are reproduced in the table below. Caution should be exercised in the interpretation of the half-year rates of growth since they are calculated in relation to the previous semester, not the corresponding semester of the previous year. It should also be noted that projections for 2H 1993 do not fully incorporate the provisional estimates of GDP growth in 3Q93 released for some countries in December. The US and Canada economies are expected to experience a third year of steady recovery with GDP growth accelerating further, at least until mid-1994. The signs of modest recovery seen in continental Europe in 2H 1993 are expected to foreshadow a more significant improvement in 1994, with aggregate European GDP rising 1.5 per cent compared to a fall of 0.2 per cent in 1993. Japanese economic prospects appear more uncertain in 1994 than in North America and Europe; current forecasts indicate a recovery in 1994 of 0.5 per cent following a decline of the same magnitude in 1993. Japanese GDP is expected to be 0.5 per cent lower in 1H 1994 than in the first six months of 1993 but is projected to grow strongly in 2H 1994.

OECD Real GDP Growth 1991-1994
seasonally adjusted at annual rates
(percentage changes from previous period)

	1991	1992	1993	1994	1H1993	2H1993	1H1994	2H1994
United States	-0.7	2.6	2.8	3.1	2.3	2.8	3.3	2.9
Canada	-1.7	0.7	2.5	3.7	3.3	2.9	4.0	4.1
Germany	4.5	2.1	-1.5	0.8	-4.2	2.1	-0.6	2.4
France	0.7	1.4	-0.9	1.1	-1.7	0.3	1.0	2.1
Italy	1.3	0.9	-0.1	1.7	–	1.4	1.5	2.4
UK	-2.2	-0.6	2.0	2.9	2.0	2.8	3.0	3.0
Europe	1.3	1.1	-0.2	1.5	-0.8	1.0	1.3	2.4
Japan	4.0	1.3	-0.5	0.5	0.6	-1.7	0.8	2.4
Total OECD	0.8	1.7	1.1	2.1	0.8	1.4	2.1	2.7

Source: OECD Economic Outlook, December 1993

7. There have been minor revisions to 1994 demand projections since the full-year forecast was first published two months ago *(Oil Market Report 5 November 1993).* Japanese demand in 1Q94 has been revised down almost 0.1 mb/d in the light of weakening economic activity and lower oil demand in 1993 but projections for North America and Europe are essentially unchanged at 19.5 mb/d (+1.4 per cent) and 13.7 mb/d (+1.0 per cent) respectively. Total OECD demand in 1994 is now projected to grow 1.2 per cent, roughly half the rate of growth of real GDP, in line with the average GDP/oil demand relationship observed over the last four years.

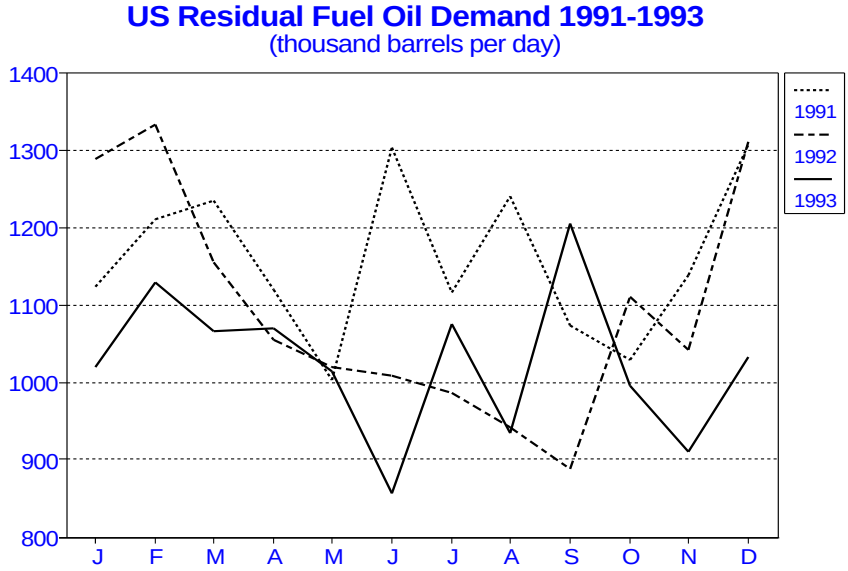
United States

8. The latest EIA/DOE demand estimates for 4Q93, incorporating provisional data for December, indicate a year-on-year fall in US demand in the 50 states of 0.6 per cent to 17.38 mb/d. Weekly data

indicate that deliveries in December dropped 0.4 mb/d to 17.7 mb/d after a marginal net fall year-on-year in October and November. Using the new basis (including fuel ethanol and blending components) to express gasoline demand in both quarters, the fall in total demand in 4Q93 was 1.4 per cent or 0.24 mb/d. It should be remembered that these 4Q93 data are provisional and are subject to considerable revision. Estimated 4Q93 US demand in Table 1, which includes the territories, has been downgraded to reflect these latest EIA/DOE estimates. The reasons for this relative weakness in 4Q93 are thought to lie in the warmer weather between September and mid-December compared to 1992 in the north-eastern states and the extent of secondary restocking of distillate (gasoil/diesel) in 3Q93 in advance of the introduction of low-sulphur diesel on 1 October. Distillate deliveries in September and October averaged 3.0 mb/d but, somewhat surprisingly, are estimated to have risen to more than 3.3 mb/d in November and December in what may prove to have been a continuing adjustment of secondary distribution stocks to the new diesel specifications.

9. US demand for residual fuel oil, consumed mainly as marine bunkers, refinery fuel and in electric power generation, has been in gradual decline since 1988. Deliveries in 1992 averaged 1.09 mb/d. As the graph below shows, residual fuel oil demand in the first half of 1993 was persistently below the level of preceding years but since July deliveries have shown intermittent year-on-year increases largely as a result of the reduction in the price of low-sulphur grades relative to that of natural gas. The strength of natural gas prices since September has encouraged some utilities, mainly in the north-eastern states, to burn low sulphur fuel oil (0.3-1.0 per cent sulphur) rather than natural gas.

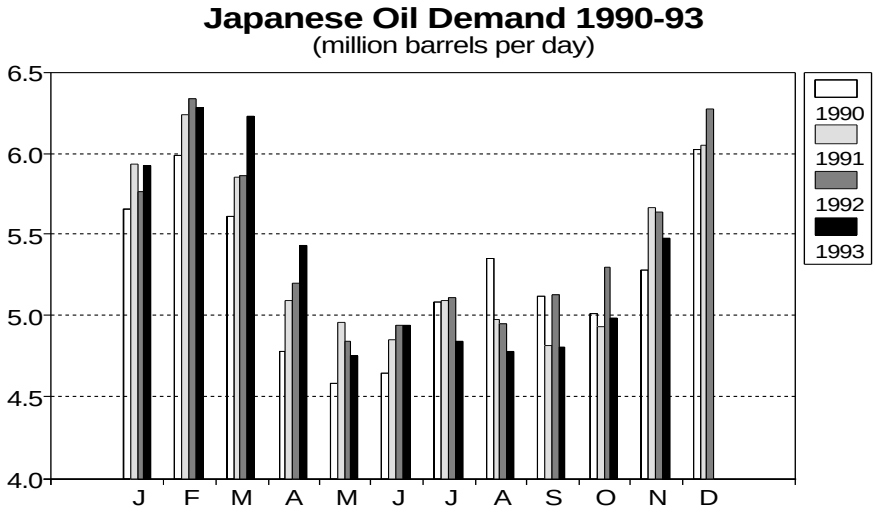
10. Warmer temperatures and high end-user stocks curbed November deliveries but the increase in the price advantage of residual fuel oil over natural gas towards the end of the month apparently prompted increased utility buying for December delivery which may not be fully reflected in current estimates of December demand. The price advantage of buying LSFO rather than December spot natural gas varied considerably according to fuel oil grade but was widely reported to be in the range $0.30-0.80/million BTU. Reported substitution was not restricted to utilities in the north-east; companies in southern California and Florida also reported to have made a partial switch from natural gas. The onset of colder temperatures in the north-east in late-December is expected to have raised electricity demand and with it LSFO consumption.



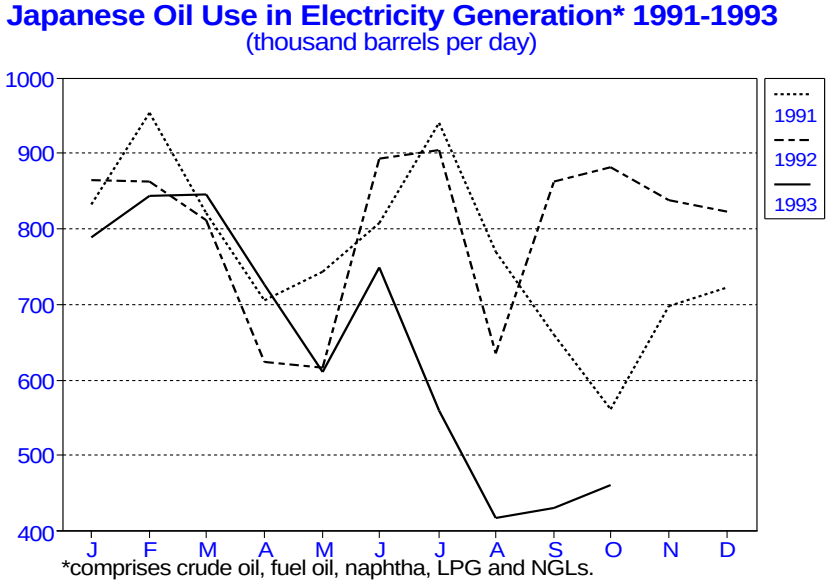
Japan

11. Japanese oil demand (including direct crude use, refinery fuel and bunkers) is estimated to have declined 1.5 per cent to 5.36 mb/d in 1993, the first annual decline in oil use since 1985. There was a marked disparity between the two halves of 1993 as the graph below shows. In the first six months of the year, oil demand increased 1.9 per cent, broadly in line with the rate of growth of demand in 1991 and 1992. However, in the period July-November, oil demand declined 5.0 per cent versus the corresponding period in 1992. Although the observed deterioration of industrial production and the expected decline in real GDP in the second half of the year played a part in this sharp downturn in oil demand, the decline in electricity demand in 3Q93 associated with the cool, wet summer and the contribution of new nuclear

generating capacity, both unrelated to economic activity, were perhaps more important. Indeed, the dramatic fall since June 1993 in oil (mainly crude oil and fuel oil) used in electricity generation accounts for all the overall decline of 0.26 mb/d in oil demand in 2H 1993. Product demand in other sectors actually rose year-on-year in this period.



12. In 3Q93, electricity demand declined 6.8 per cent compared to 3Q92 but oil use in electricity generation fell 40 per cent to 0.47 mb/d from 0.80 kb/d in 3Q92. Preliminary data for October and November also indicate a year-on-year decline of about 0.3 mb/d as oil's share in power generation fell in response to increased generation from coal, hydro and nuclear capacity, as the graph below illustrates. It remains to be seen whether the reduction in oil use in electricity generation marks a temporary short-term effect or a longer-term structural feature as non-oil generating capacity increases.



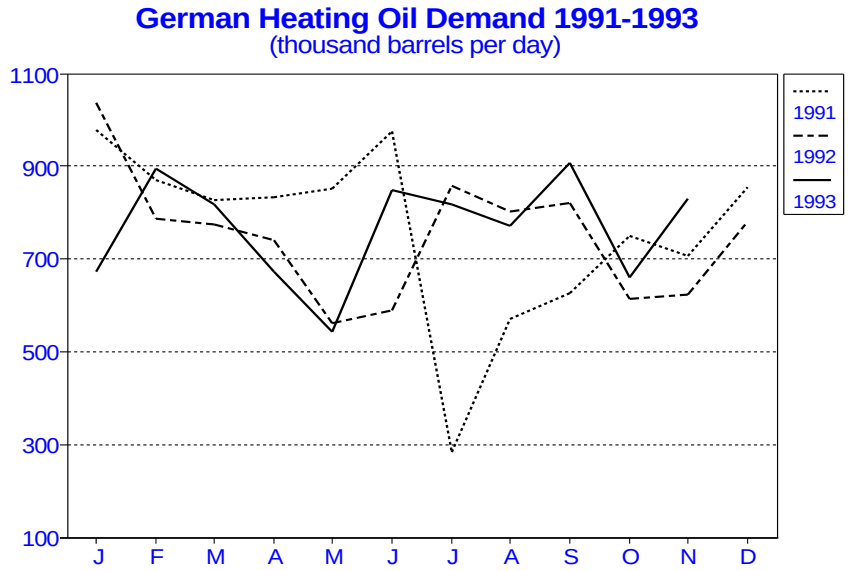
13. Lower oil demand in recent months has been concentrated in direct crude use which averaged 195 kb/d in October-November 1993 compared to 388 kb/d in October-November 1992. Indeed, in looking at the recent downward trend in aggregate Japanese oil demand, it is easy to overlook the fact that *product* demand in 2H 1993 declined only 1.4 per cent and that inland deliveries of distillate products (excluding only residual fuel oil) actually *increased* over the same period. This reflects the fact that private consumption has so far held up in this recession much better than industrial production or exports. Road transport fuels, which account for about 40 per cent of inland demand, have so far showed

considerable resilience in this recession. In the five-month period July-November, deliveries of gasoline increased 1.4 per cent and those of diesel rose 2.5 per cent compared to the corresponding period in 1992.

14. Assuming that Japanese demand in December registers a year-on-year decline of 4.5 per cent, comparable to that seen in recent months, Pacific demand will average a little over 6.3 mb/d in 4Q93, marking a downward revision from last month's report. Discouraging signs from some leading Japanese economic indicators have also prompted a downward revision in demand to 6.8 mb/d in 1Q94.

Germany

15. After a lull in inland deliveries in October, the onset of colder-than-normal weather in November prompted a wave of buying of heating oil. Not only is heating oil the largest-volume product, accounting for 750 kb/d out of total German demand of 2.9 mb/d (including refinery fuel and bunkers), but it is also the most volatile element in domestic demand from month to month due to often sizeable stock movements at distribution (secondary) and consumer (tertiary) levels. The strength or weakness of Germany heating oil demand therefore exercises a considerable influence on Rotterdam gasoil prices and refining activity in north-west Europe. According to provisional data from MWV, heating oil deliveries rose from 0.68 mb/d in October to 0.83 mb/d (3.34 mt) in November, the third consecutive month of year-on-year increase, as the graph below illustrates. Since German consumer stocks of heating oil at the end of November (typically the time at which such stocks have already begun to fall) were at seasonally normal levels and average temperatures were higher, deliveries in December are *not* expected to show the same year-on-year increase as in November.



16. German inland demand in November was also supported by a strong month-on-month increase in deliveries of gasoline and diesel, apparently in anticipation of an increase in consumer demand at the pump in the weeks preceding the increase in consumer taxes on 1 January. The excise duty on unleaded gasoline rose 16 pfennigs/litre (35 US cents/gallon) to 98 pfennigs/litre and the duty on diesel increased 7 pfennigs/litre (15 US cents/gallon) to 62 pfennig/litre, thereby significantly increasing the fiscal advantage enjoyed by diesel fuel in Europe's largest national market. In view of the strong consumer incentive to buy before the tax rise, gasoline deliveries in December are also expected to show a significant year-on-year rise.

17. Demand in the eastern Länder continued to grow in 1993, at a rate of 2.1 per cent in the first eleven months of the year, more slowly than in 1992 when growth exceeded 5 per cent. By comparison, demand in the western Länder, as elsewhere in continental Europe, was almost stagnant, rising at a rate only slightly above the 0.2 per cent increase recorded in 1992. Deliveries of heating oil in the eastern Länder have once again shown the strongest growth, rising more than 15 per cent to almost 100 kb/d as the shift in urban areas away from lignite in residential and commercial space heating continues. Nevertheless, total eastern demand is still a fraction of that in western Germany, amounting to little more than 0.4 mb/d out of a total German demand now expected to have been 2.88 mb/d in 1993, an annual rise of 1 per cent.

Revised Definitions of Product Categories

18. A minor amendment has been made to the product categories in the presentation of OECD demand data in Tables 2 and 2A of this report, bringing the categories more closely into line with those used in other IEA publications, such as the "Quarterly Oil Statistics and Energy Balances". The category "aviation fuels" has been replaced by "jet/kerosene", comprising aviation and heating grades of kerosene; the small volumes of aviation gasoline and naphtha-based aviation fuel are now included in "other products". Likewise, the category "middle distillate", which previously comprised gasoil and non-aviation kerosene, has been replaced by "gasoil/diesel" which incorporates all and only gasoil-range products, principally (light) heating oil, automotive diesel and industrial gasoil grades. The purpose of these changes is to separate more clearly kerosene and gasoil, reflecting both their different distillation ranges and the distinction drawn by most industry sources. There is no change to the composition of the categories "LPG", "naphtha", "motor gasoline" or "heavy fuel oil", now re-named "residual fuel oil". Direct use of crude oil, mainly in Japan, continues to be included in "other products".

Non-OECD Demand

19. There have been no significant changes to quarterly estimates of non-OECD demand in 1993 since last month. FSU apparent demand in 4Q93 remains unchanged at 5.4 mb/d following a downward revision of 0.1 mb/d of both estimated production and net exports in the quarter. It is intended to review recent trends in non-OECD Asian demand in the next issue.

SUPPLY

20. OPEC production appears to have stayed in the same narrow range of 24.6-24.8 mb/d that has characterised the last six months. Total non-OPEC production is estimated to have declined slightly from November to December, but is nonetheless expected to show a quarterly increase of over 0.9 mb/d for the fourth quarter. The major portion of the production increase came from the North Sea, but quarterly increases were registered in all other major regions except for the FSU, where it is estimated that production declined by a relatively modest 0.2 mb/d. North Sea output in December would have been even higher if it had not been for a series of weather related difficulties affecting offshore loadings, primarily in the Norwegian sector. Non-OPEC production was also constrained by guerilla attacks in Colombia and Angola, and weak light crude oil markets in the Asia/Pacific region limiting output from Malaysia.

Non-OPEC Oil Supply
(million barrels per day)

	1990	1991	1992	1Q93	2Q93	3Q93	4Q93*	1993*
Non-OPEC Crude Oil								
United States	7.36	7.42	7.17	6.98	6.83	6.70	6.86	6.85
Canada	1.34	1.32	1.36	1.39	1.40	1.47	1.45	1.43
North Sea	3.59	3.78	4.08	4.10	4.04	4.36	4.93	4.36
Other OECD	1.02	1.04	1.03	0.96	1.00	0.97	0.99	0.98
Total OECD	13.31	13.56	13.64	13.43	13.27	13.50	14.23	13.62
Latin America	4.73	4.84	4.92	4.91	5.00	4.98	5.11	5.00
Asia (inc. China)	4.38	4.43	4.54	4.65	4.64	4.63	4.66	4.64
Other Non-OECD	3.40	3.49	3.60	3.66	3.65	3.72	3.81	3.70
Total Non-OECD (ex. FSU)	12.51	12.76	13.06	13.22	13.28	13.33	13.58	13.35
Russia	10.12	9.02	7.70	7.00	6.80	6.48	6.29	6.64
Other Republics	0.93	0.92	0.88	0.81	0.81	0.80	0.80	0.80
Total FSU	11.05	9.94	8.58	7.81	7.61	7.28	7.09	7.44
NGLs & Other								
United States	1.64	1.75	1.83	1.99	1.96	1.95	2.04	1.98
Canada	0.62	0.66	0.70	0.70	0.72	0.77	0.78	0.75
North Sea	0.22	0.24	0.26	0.30	0.26	0.27	0.31	0.29
Russia	0.24	0.24	0.22	0.22	0.21	0.20	0.20	0.21
Other Non-OPEC	1.30	1.35	1.33	1.38	1.39	1.39	1.40	1.39
Total NGLs & Other	4.02	4.24	4.34	4.59	4.55	4.58	4.72	4.62
Processing Gains	1.35	1.35	1.45	1.45	1.45	1.45	1.45	1.45
Total Non-OPEC Supply	42.24	41.85	41.07	40.46	40.17	40.11	41.06	40.46

* estimated

OECD

United States

21. US production is estimated to have increased sharply in November and then remained essentially unchanged in December as Alaskan and California offshore gains offset declines in the rest of the US. However, there are signs that low oil prices may be beginning to cause some shut-ins and abandonments of certain marginal wells. These reductions seem to have been affecting only small producers on the West Coast, and the total volume is quite small. In particular, production of heavy crude oils in Central California using a gas-fired steam flood process is not expected to be shut down, because of the cost of reheating the reservoirs if production is restored. California production is sensitive because of the local excess supply and US Federal government restrictions on the export of Alaskan crude oil and the relative separation of the West Coast oil market from the rest of the US. It should be noted that the primary impact of sustained lower oil prices would be on future rather than existing US production. There already have been a few announcements of cuts in overall capital expenditure and additional redistribution away from domestic oil projects toward US natural gas and foreign oil activities.

22. The surge in Alaskan production has centred on the Point McIntyre field, which came on stream in mid-October and contributed 40 kb/d to that month's production. Prudhoe Bay, which bounced back from

990 kb/d in September to 1072 kb/d in October, maintained production at about that level during November and December. Full month production from Point McIntyre was 90 k/d in November and appears to have exceeded that in December. Exxon's Santa Ynez unit offshore California started up in December, augmenting production from the 12-year old Hondo platform. The two new platforms, Harmony and Heritage, have drilling slots on the platforms to allow sufficient future drilling to raise total output from the unit to nearly 100 kb/d in the longer term.

Canada

23. Total Canadian oil output for September dropped by a revised 15 kb/d as reductions in output from Alberta's two synthetic crude plants and from conventional wells of 14 kb/d each offset a 13 kb/d gain in gas liquids production. Improved demand for Canadian heavy crudes in the US Midwest allowed October production to increase by about 20 kb/d. There have not been any statements regarding production cutbacks in Canada. Crude oil production in November and December is estimated to have been at about the same level as in October of 1450 kb/d. NGLs and synthetics are assumed to have risen slightly.

24. The level of drilling effort in Canada will be likely to make a significant contribution to crude oil production. According to trade sources, oil and gas drilling license applications more than doubled in 1993 and about 90 per cent of the wells have been completed. Although there is a strong bias toward natural gas drilling throughout North America, significant Canadian effort was directed toward directional drilling of conventional oil reserves as well.

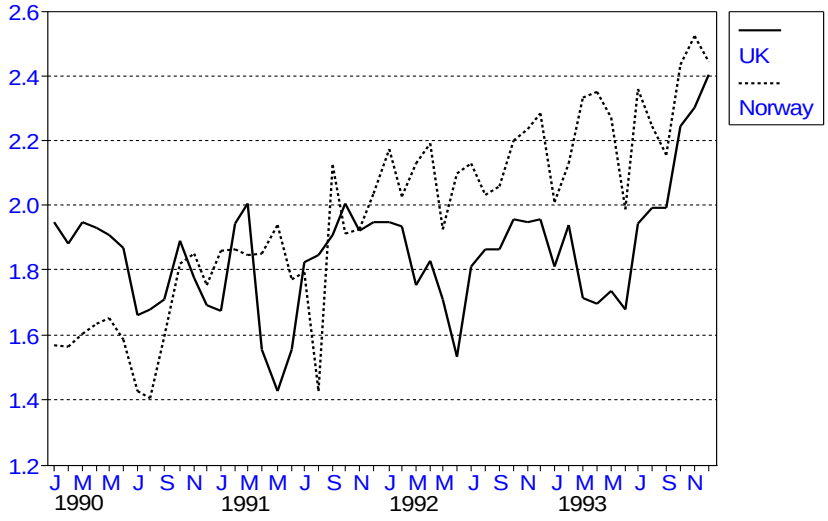
25. Similarly, technological and operating advances have improved the prospects for Canadian synthetic crude production as well. Both Suncor Inc. and Syncrude Canada have recently announced a combined 10 per cent planned production increase for 1994 and Syncrude has an application pending for major long-term production enhancement.

North Sea

26. North Sea oil output surpassed 5 mb/d in November and December despite a series of storms that inhibited offshore liftings. The weather disruptions were sufficient to cause brief periods of significant production reductions at the Norwegian Gullfaks field. Smaller disruptions occurred at the Snorre field (which uses the Gullfaks platform) and at Statfjord. Mechanical difficulties with the gas flaring system on the Forties Delta platform early in the month resulted in a brief disruption to UK production as well.

27. Two new **UK** fields started up in the North Sea during December (East Brae on 24 December at 20 kb/d and Strathspey on 26 December at 15 kb/d), and brief test production from the Alba field added another 2 kb/d to last month's UK output. Start-up of the 15 kb/d Toni field, which was expected in late December, is now planned to begin producing this month. Conversely, the much larger 120 kb/d Nelson field could come on as early as late January rather than its recent March target date. UK offshore crude oil output, which averaged 2218 kb/d in November, is estimated to have increased to over 2300 kb/d in December and, with normal weather, could exceed 2400 kb/d for 1Q94.

UK/Norwegian Crude Oil Production 1990-1993
(million barrels per day)



28. The production problems in **Norway** occurred when a sequence of storms caused Gullfaks storage to reach its limit. Larger storage capacities at Statfjord and some of the UK fields generally allow them to produce into storage even when tankers cannot load. Similarly, the four on-shore terminals in the UK have sufficient storage capacity to accommodate normal production flows even when storms prevent tankers from loading, as happened in late December at Sullom Voe. About 80 per cent of UK production is loaded at terminals, whereas more than half of Norwegian production is loaded offshore.

29. Oil stored at Gullfaks during the storms early in December could not be shipped out in time to accommodate continued production when a major storm occurred in the third week in December. The combined impact of weather on monthly average production from Gullfaks, Snorre and Statfjord's three platforms amounted to about 55 kb/d and contributed to the drop in December Norwegian output of about 80 kb/d preliminarily estimated by the Norwegian Petroleum Directorate. November output had increased by 44 kb/d to 2529 kb/d (excluding an estimated 125 kb/d of NGLs). The November gain resulted entirely from increased production at three new fields - Brage (+36 kb/d), Sleipner East (+17 kb/d), and the Haltenbanken area Draugen field (+12 kb/d) -with production at older fields down by 21 kb/d.

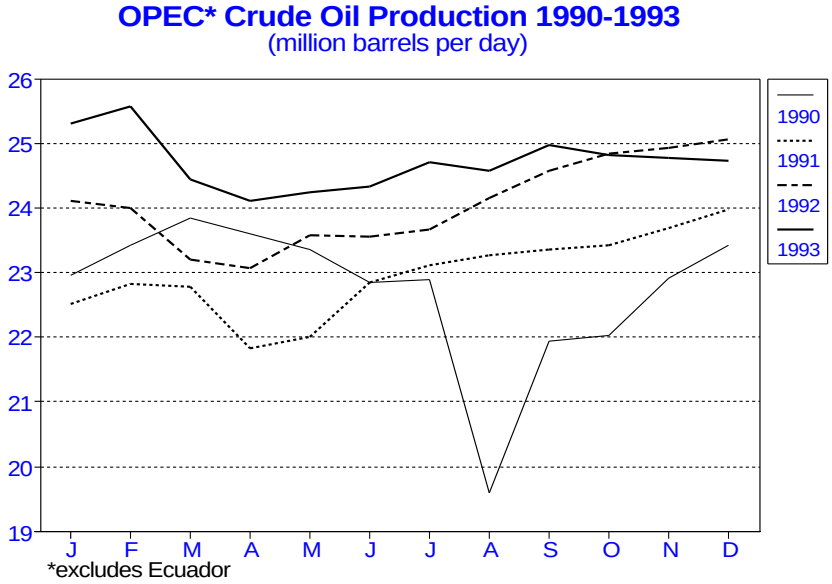
30. **Denmark** and the **Netherlands** experienced impressive oil production gains in November. Denmark achieved record production of 185 k/d on the strength of the build up of the new Valdemar field and a record production from the Gorm field. Provisional data indicate production rose further to 193 kb/d in December. Dutch crude oil production rose by more than 20 per cent to 39 kb/d as two new fields, Horizon and F3-FB, both doubled production from October average levels.

Australasia

31. Australian production declined by about 80 kb/d in October to 416 kb/d as production difficulties and maintenance activities in the Bass Straits Gippsland Basin reduced output by roughly 20 per cent. The Bonaparte Basin of North Australia declined by about 33 per cent as well.

OPEC

32. As depicted in the graph below, OPEC production has typically increased seasonally during the second half of the year. In 1993, however, the monthly production profile was surprisingly flat as high levels of oil inventory inhibited stockbuilding, despite the contango in the third quarter, and seasonal demand increases in the fourth quarter were apparently met by a combination of higher non-OPEC production and a greater drawdown from those oil inventories. Estimated OPEC production numbers for December indicate a level of 24.72 mb/d, about equal to 24.77 mb/d recorded in November.
Revised budgets have recently been released by Saudi Arabia and Indonesia with significantly lower expenditures, primarily reflecting lower price expectations.



33. **Saudi Arabia** has kept production in the neighbourhood of 8 mb/d for much of the year. Estimated output for December is 7.99 mb/d including the Saudi share of the Neutral Zone. The production from the **Neutral Zone** appeared to have recovered to around 0.4 mb/d in December but is reported to be

dropping back to November's levels in January. As had been anticipated, Saudi Arabia has moved to pricing all sales to North American customers entirely on West Texas Intermediate rather than the prior multi-crude formulas, which included highly volatile and thinly-traded Gulf Coast Alaskan North Slope crude prices.

34. There have been some small revisions to estimated production level for other OPEC producers. November production from the **UAE** now appears to have been down by about 0.05 mb/d from October to around 2.16 mb/d. That level held through December and is expected to stay constant in January. **Kuwaiti** production (including its Neutral Zone share) has remained in the vicinity of 2 mb/d for the last two months. Meanwhile, implied **Iranian** production has been quite volatile, with high levels of export in mid-December indicating oil supply levels (including stock draw) of over 4 mb/d, while much lower exports were observed in the beginning and end of the month. Much of the difference among various estimates of recent OPEC production are likely to be attributable to uncertainty over Iran's output. The other source of disagreement among market observers continues to be the extent of unauthorised **Iraqi** exports and local use.

35. Among the six non-Persian Gulf OPEC members, there have been few oil developments over the last month. **Venezuelan** output may be down slightly due to loading problems and difficult heavy oil markets in the Caribbean, but **Indonesia** has been able to maintain production levels as output from the new Belida and Serang fields has compensated for declines in demand for Minas and Cinta crudes. Political difficulties in **Algeria**, **Libya** and **Nigeria** do not appear to have affected their current production.

Former Soviet Union (FSU)

Production

36. November oil production in Russia averaged a reported 6.25 mb/d (26.4 mt), a drop of 0.1 mb/d from the previous month. Output in the first eleven months of the year declined 13.5 per cent, indicating that average production in 1993 will be approximately 6.84 mb/d (340 million tons). Russian crude and condensate production is projected to fall a further 10 per cent or 0.7 mb/d in 1994 to average 6.15 mb/d (307 million tons).

37. Internal Russian accounts of the continuing decline in output have moved away from emphasis given at the beginning of 1993 to the number of idle wells (some of which have since been restored to production) to the financial "crisis" facing Russian producer associations. The rise in domestic crude prices in 1993 and government concessions to producers over access to hard-currency export earnings appear to have been largely negated by the rapid growth in payments arrears by refiners and consumers in Russia and other CIS republics. Government figures released in early January indicate that Russian refiners alone owe 1.9 trillion roubles ($1.5 billion) to Russia producers for crude already delivered. At least two of the larger Siberian associations announced in December their intention to shut in part of their production and to lay off workers as a consequence of reduced cash flow and distribution problems associated with uncreditworthy customers.

Exports

38. Exports of crude and products from the former Soviet Union are now believed to have fallen from 2.3 mb/d in October to about 1.9 mb/d in November as a result of the severe storms which effectively closed the main Russian export port of Novorossiysk for more than three weeks from 10 November. Crude liftings from the port averaged only 250 kb/d over the month, well down on the level of about 600 kb/d in preceding months. According to figures from the Russian Ministry of Fuel and Energy, total crude exports outside the FSU in November, including pipeline deliveries, averaged 1.46 mb/d (5.99 mt) down from 1.71 mb/d (7.26 mt) in October. FSU product exports, transported almost entirely by vessel from Baltic and Black Sea ports, are estimated to have fallen sharply to about 0.4 mb/d in November, reflecting not only the weather-related disruption at Black Sea ports but also the normal seasonal reduction in gasoil and fuel oil availabilities.

39. Seaborne exports rebounded at the end of the first week of December as Novorossiysk re-opened, albeit amid crude quality problems and a temporary restriction on maximum vessel size. However, subsequent reports indicate a slower rate of exports in the second half of the month. On the assumption that December oil exports average 1.9-2.0 mb/d, FSU *net* exports have been revised down 0.1 mb/d to 2.0 mb/d in 4Q93. This marks the only calendar quarter of 1993 in which FSU exports have been lower than in the corresponding quarter of 1992.

40. The consequence of the lower Urals exports since mid-November has been increased demand from Mediterranean refiners for Iranian crude and, more recently, for North Sea grades such as Forties, Oseberg

and Brent for late December/early January arrival and a continued firming of spot sour crude prices in Europe through the month of December. By the end of the year, Urals CIF basis Augusta had risen to dated Brent - 80 cents/barrel, the narrowest differential for several years.

Other Non-OPEC

41. Production is estimated to have increased in each of the four major non-OPEC producing regions between the third and fourth quarters of 1993. The largest increase estimated outside of the North Sea was in the non-OPEC Middle East, where production expanded in **Oman** and **Yemen** by 40 kb/d and 30 kb/d, respectively, and Syria added about 10 kb/d. The Oman increase would be almost exactly reversed by production cuts assumed to have been initiated on the first of the year. Lower output from **Malaysia** and **Egypt** is likely to be the result of weak markets for their crude and **Angola** continues to see its production threatened by guerrila attacks. Private interests in **Yemen** and **Syria** appear to be maximising output.

42. **Latin American** production levels advanced as well, as new production from **Brazil**'s offshore Campos Basin and expanded output of Mexico's Olmeca crude stream helped offset the impact of a Christmas offensive by Colombian guerillas. The impact on **Colombia**'s output would have been larger if not for the initial production test flows from the prodigious Cusiana field in Central Colombia, which helped keep production around the 470 kb/d level. According to the Colombian state oil company, Ecopetrol, average production for the first 11 months of the year was just under 460 kb/d.

43. Official figures for **Mexico** showed a 31 kb/d monthly increase in October to 2731 kb/d. Natural gas liquids production also increased by 19 kb/d to 469 kb/d. Following the relative demand trends, Mexican crude exports to the US were up by 125 kb/d, while exports to Europe dropped by nearly 100 kb/d. Exports of both heavy Maya and lighter Isthmus crudes declined slightly as a greater share of exports were accounted for by Olmeca. In October, monthly exports of Olmeca surpassed Isthmus for the first time. November production is estimated to have remained at the October level, while preliminary estimates indicate a 10 kb/d increase in December.

44. Production increases from **Vietnam** and **Papua New Guinea** contributed to the 20 kb/d gain in Asian oil output in the fourth quarter. Vietnamese output, which was earlier reported to have averaged 117 kb/d in the first 8 months of the year, is estimated by the same source to have averaged 126 kb/d for the year, implying production in excess of 140 kb/d for the last 4 months of the year. Papua New Guinea output has recovered from a mid-year low of around 100 kb/d to over 135 kb/d for October and November, nearly reaching the production record set last March.

OECD STOCKS

45. Preliminary estimates indicate that total industry stocks declined by 0.3 mb/d during November with decreases of 0.4 mb/d and 0.2 mb/d in the Pacific and Europe respectively being partly offset by a 0.4 mb/d increase in North America. The key feature of the stock changes for individual products was a 0.5 mb/d increase in gasoline stocks with 0.4 mb/d of this being in North America reflecting the contango in the market. Crude oil stocks decreased by 0.2 mb/d with a 0.3 mb/d decline in the Pacific partly offset by a 0.2 mb/d increase in North America.

46. At the end of November, total industry stocks were 334 mt, 9 mt higher than a year earlier. In part due to the different stock developments during the month in the individual regions discussed above, the majority of the higher stocks was in North America, up 5 mt compared with 2 mt in the Pacific and 1 mt in Europe. The bulk of the 9 mt increase continued to be in crude oil (5 mt) and feedstocks/NGLs/other hydrocarbons (3 mt) with only 1 mt increase in product stocks. Gasoline stocks were well above year earlier levels in all three regions while distillate stocks were close to end of November 1992 levels in North America and the Pacific and 1 mt lower in Europe.

47. In **North America**, crude oil stocks increased by 0.2 mb/d in November, reflecting a combination of somewhat higher imports and indigenous production and lower runs in the US. Stocks at the end of November were 1 mt higher than a year earlier. The main stock change during the month was a 0.4 mb/d increase in gasoline stocks consistent with lower demand and significantly higher refinery production. This increase left gasoline stocks at the end of the month 1 mt higher than at the end of November 1992 (see graph). The relatively high level of stocks should however be seen in the context of the heavy 1Q94 turnaround schedule. Distillate stocks continued to rise, in spite of the seasonal increase in demand, increasing by 0.3 mb/d to reach typical end of November levels. Fuel oil stocks also continued to rise, increasing by 0.1 mb/d. As shown in Table 4, the end of month stocks were below previous year levels but this should be seen in the context of the continuing low level of demand. Preliminary US DOE data for 31 December indicate that, during the month of December, stocks of crude oil and gasoline both increased by 0.2 mb/d while distillate and fuel oil stocks were little changed. Taking into account estimated reductions in stocks of other oils, total industry oil stocks declined by 0.2 mb/d.

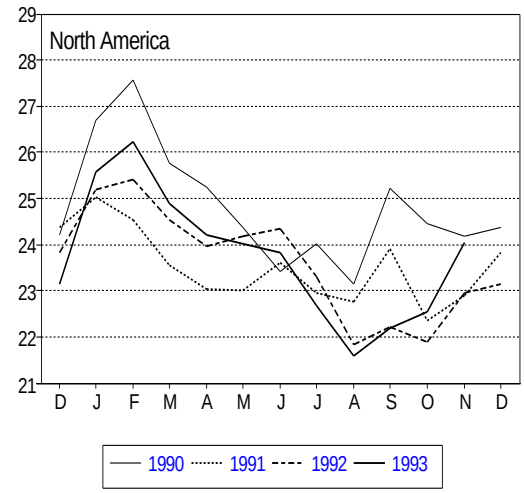
48. Following the increase in **European** crude oil stock levels in October, levels in November were essentially unchanged, consistent with the significant increase in refinery throughputs. At the end of November, crude stocks were 3 mt higher than a year earlier with the largest rise occurring in Germany and Norway. Despite strong distillate demand and in line with the significant increase in refinery production, distillate stocks increased slightly following the decline over the September/October period. Gasoline stock levels increased marginally and ended the month 5 per cent above the level a year earlier. At the end of the month, distillate stocks were 1 mt lower than a year earlier (see graph). The largest reduction in stocks compared with end-November 1992 was in Italy while stocks were somewhat higher in France and Germany. Fuel oil stocks continued to decline slowly and ended the month close to year earlier figures.

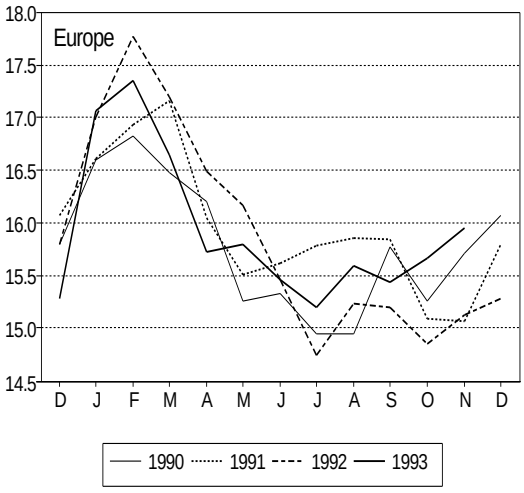
49. In the **Pacific** region, crude oil stocks fell by 0.3 mb/d with the sharp increase in Japanese refinery throughputs more than offsetting the increase in crude imports. At the end of the month, industry crude oil stocks were 1 mt higher than a year earlier while total crude stocks, including those held by the Japanese government, were 3 mt higher. Gasoline stock levels were essentially unchanged during November with little change in production or demand and continued to be significantly above 1992 levels (see graph). Distillate stock levels were also essentially unchanged for the second successive month and were at typical end of November levels. In spite of the continued low level of Japanese fuel oil demand, fuel oil stock levels declined slightly but at the end of the month were still 15 per cent above previous year levels.

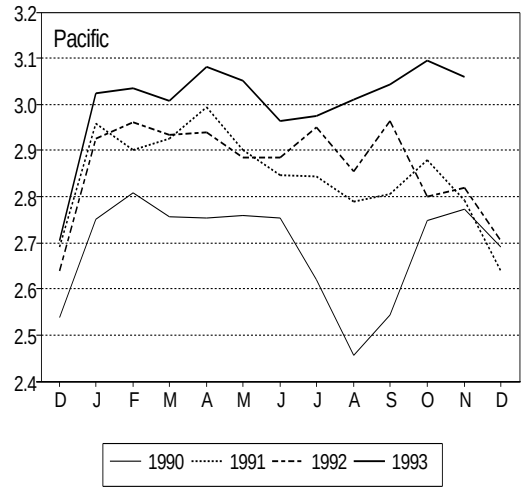
OECD Industry End Month Stocks

(million metric tons)

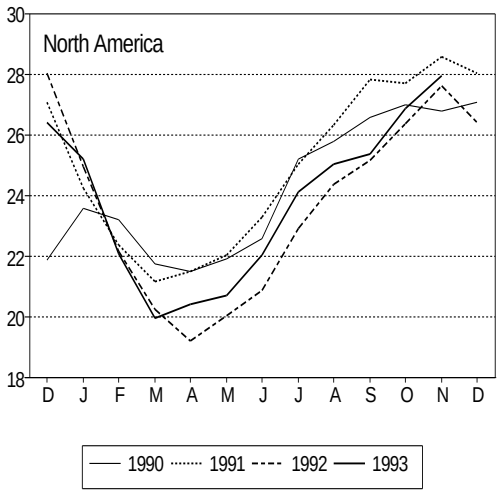
Motor Gasoline

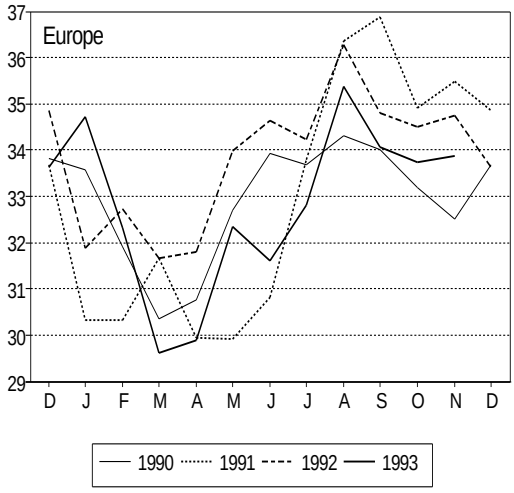


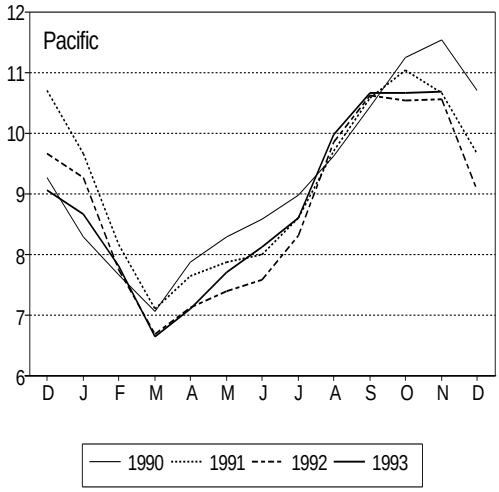




Middle Distillate



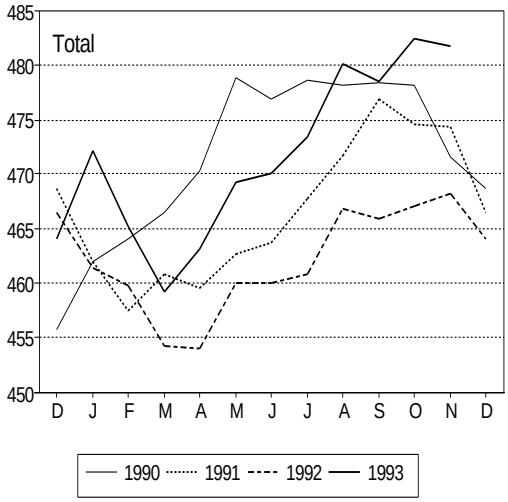


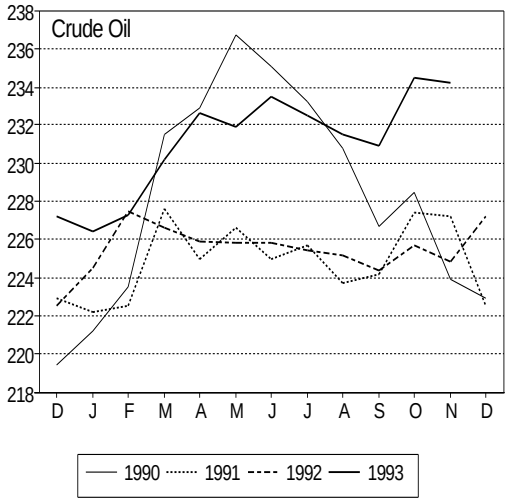


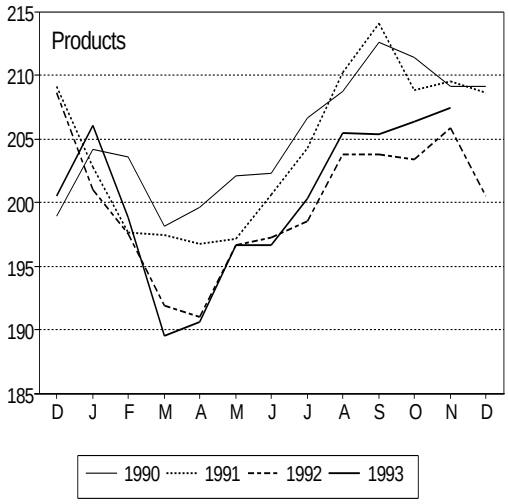
OECD End Month Stocks

(million metric tons)

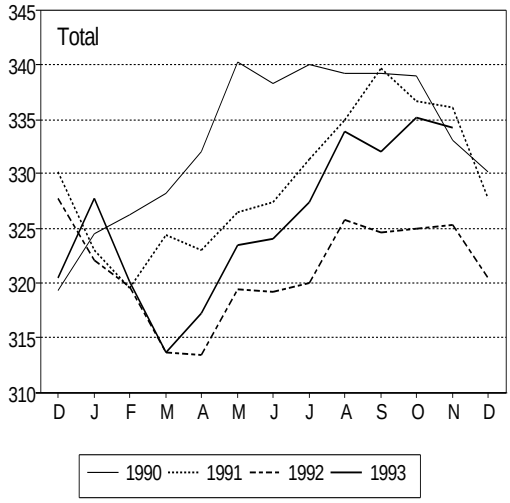
Total Stocks

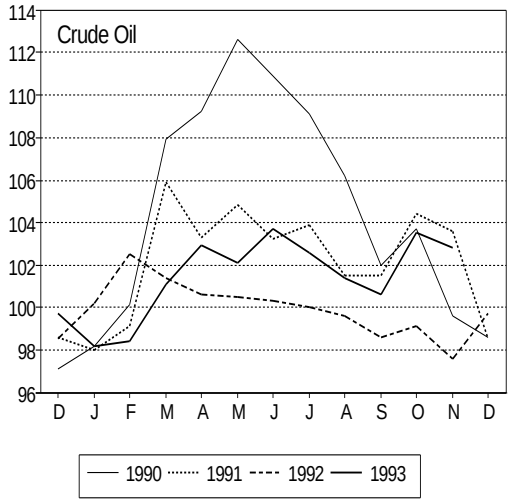


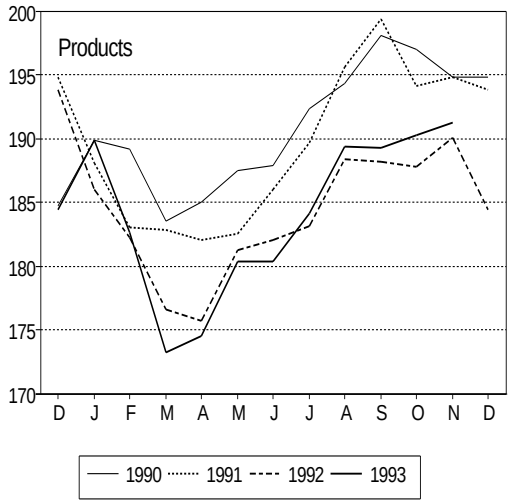




Industry Stocks







PRICES

CIF Crude Import Costs

50. Latest data reported by member governments indicate that the weighted average CIF cost for crude imported into IEA countries in October was $15.68/bbl, $0.15/bbl higher than the September figure. The weighted average CIF prices are estimated to have been $15.10/bbl in November and $13.60/bbl in December. The weighted average CIF price for 1993 is estimated to have been $16.39/bbl, $2.10/bbl lower than in 1992.

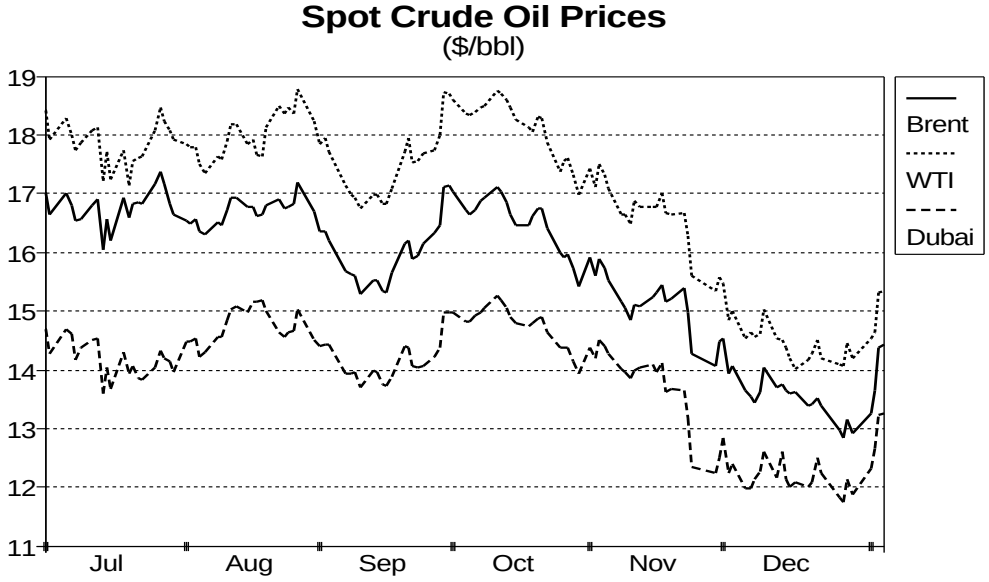
Weighted Average CIF Cost of Crude Oil Imported into IEA Countries
($/bbl)

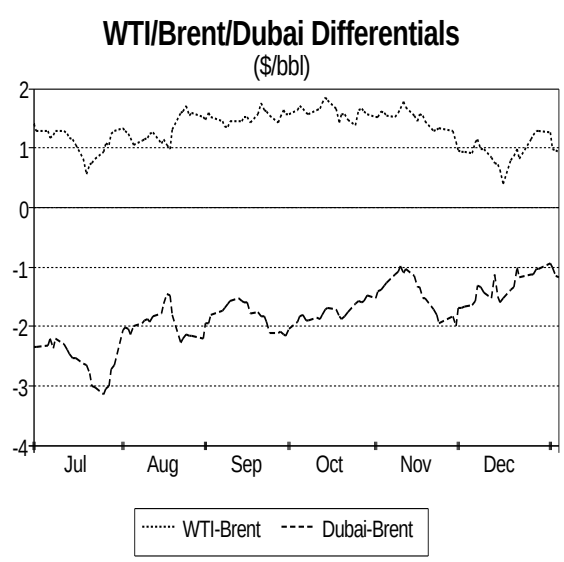
	1991	1992	1993
January	24.75	17.08	17.08
February	20.37	16.99	17.33
March	18.10	16.71	17.81
April	17.96	17.53	17.82
May	18.08	18.53	17.77
June	17.50	19.70	16.99
July	17.89	19.74	16.23
August	18.53	19.40	15.77
September	18.95	19.38	15.53
October	20.30	19.55	15.68
November	20.33	18.91	15.10*
December	18.71	17.86	13.60*
Annual Average	19.30	18.49	16.39*

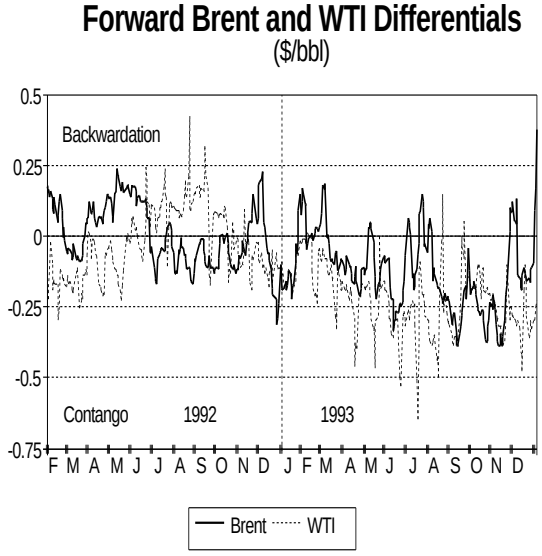
* estimated

Spot Crude Oil Prices

51. Crude prices continued to decline in December with both Brent and WTI prices about $1.50/bbl lower at the end of the month than at the beginning, setting a new five-year low. The WTI price declined sharply in the first half of the month reflecting higher stocks of crude and light products and renewed market perceptions of a the possible resumption of crude exports by Iraq. During this period, the Brent price declined less sharply consistent with a relatively tighter market due in part to weather related supply problems in the North Sea and reduced exports from Russia. In the second half of the month, the Brent price continued to decline whereas the WTI price was relatively more stable. However, prices recovered sharply at the beginning of January by about $1/bbl partly reflecting technical factors and the spell of cold weather on the North American eastern seaboard.







52. In December, dated Brent averaged $13.56/bbl, down $1.61/bbl from November. As shown in Table 7, annual average crude prices in 1993 were over $2.00/bbl below 1992 levels.

53. The WTI Cushing/dated Brent differential decreased sharply in the middle of the month as the WTI price decreased sharply while the dated Brent price declined more modestly. The narrower differential temporarily closed the arbitrage opportunity to move North Sea crudes to the US for the first time in about three months. The differential widened again in the second half as the Brent price declined further. The dated Brent/Dubai differential narrowed during most of December from $2/bbl to $1/bbl, the lowest level since August 1990. Prices of other sour, heavier crudes such as Russian Urals and Iranian crudes also increased relative to Brent crude in Europe (see graph). Underlying the strengthening of sour, heavy crude prices relative to sweet lighter crudes which began in 2Q93 has been the decreasing differentials between light products and fuel oil and between low sulphur and high sulphur oils (see graphs). Contributing to these trends has been the growing availability of North Sea crudes, growing global refinery conversion capacity and, recently, declining availability of Russian supplies as local demand increased seasonally and bad weather disrupted liftings.

54. The Brent price for forward delivery, which briefly became lower than that for prompt delivery (backwardation) at the end of November, continued to be lower at the beginning of the month reflecting stronger demand for prompt cargoes, but became higher than for prompt delivery (contango) again in the second week. The above graph shows that the Brent market was in contango for most of 1993. This contrasts with the market situation in 1992 and reflects, as does the lower spot crude prices, the over-supply position which developed during 1993, and concerns about the impact of the eventual return of Iraqi exports.

Spot Crude Oil Prices and Differentials
Monthly and Weekly Averages
($/bbl)

					Week ending:					
	Oct	Nov	Dec	Change	03 Dec	10 Dec	17 Dec	24 Dec	31 Dec	07 Jan
Brent Dated	16.50	15.17	13.56	-1.61	14.21	13.66	13.66	13.43	12.98	13.93
Dubai	14.75	13.75	12.18	-1.57	12.44	12.20	12.20	12.21	11.89	12.87
WTI	18.11	16.66	14.49	-2.17	15.25	14.68	14.33	14.29	14.20	14.06
Brent over Dubai	1.76	1.42	1.38		1.77	1.46	1.46	1.22	1.08	1.07
WTI over Brent	1.60	1.49	0.93		1.04	1.02	0.67	0.86	1.23	1.03
Brent 1st month minus 2nd month	-0.25	-0.27	-0.07		0.08	0.03	-0.17	-0.14	-0.14	0.14

Spot Product Prices

55. Monthly average spot prices of all major products decreased in all three markets in December. The jet/kerosene price in New York Harbour decreased by $3.71/bbl and other New York Harbour prices, except for high sulphur heavy fuel oil, also decreased by more than $2.50/bbl. Gasoline prices in Rotterdam and Singapore decreased by $2.60-3.10/bbl. Light product prices decreased more rapidly than crude oil prices at the beginning of the month and then remained relatively stable for the rest of the month as trading became generally less active in the second half of December due to Christmas holidays. Fuel oil prices were relatively stable during the month.

56. The **gasoline** price in the US declined sharply at the beginning of the month reflecting the high stock levels, and then fluctuated for the remainder of the month. The sharp contango in the US gasoline market associated with the decline in prompt prices continued to provide an incentive to hold supplies in inventory for forward delivery. Gasoline prices remained considerably lower than gasoil prices in all three regions with the greatest difference being in Europe where refinery throughputs increased consistent with relatively high refining margins at a time of seasonally weak gasoline demand.

57. Worldwide **gasoil** prices also decreased sharply at the beginning of December broadly in parallel with gasoline prices. The price in Europe, however, remained substantially higher than the price in the US during the first part of the month reflecting relatively low stock levels, stronger seasonal demand and reduced Russian supply. The wide differential provided an arbitrage opportunity to move gasoil from the US Gulf coast to Europe, and several cargoes were reported to have been traded. The differential narrowed in the second half of the month as the US price increased, partly reflecting colder weather and somewhat lower refinery throughputs coupled with anticipation of the 1Q94 heavy refinery turnaround schedule. **Jet/kerosene** prices in East Asia also increased relative to the US price in part reflecting the seasonal increases in demand.

58. The low sulphur **heavy fuel oil** price in the US East coast, which decreased slightly in the first half of December increased in the second half of the month reflecting stronger utility demand in part due to higher gas prices. In Singapore, the price of low sulphur waxy residue (LSWR) decreased further at the beginning of the month and provided a temporary arbitrage opportunity to move LSWR to the US before LSWR prices recovered in the second half. Heavy fuel oil prices in Europe were relatively more stable during the month.

Spot Product Prices
(Monthly and Weekly Averages, $/bbl)

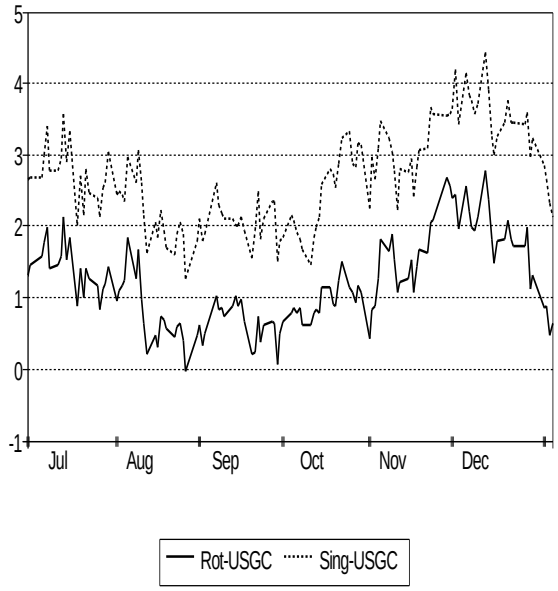
	Gasoline*			Gasoil			Low Sulphur Residual Fuel Oil*		
	Rotterdam	NY Harbour	Singapore	Rotterdam	NY Harbour	Singapore	Rotterdam	NY Harbour	Singapore
Oct 93	19.87	21.13	23.38	22.76	22.61	24.26	12.92	14.73	12.90
Nov 93	18.25	18.66	22.11	21.95	21.11	23.42	11.46	12.75	10.79
Dec 93	15.62	15.86	19.03	19.47	18.23	21.09	10.48	11.84	8.54
Change over month	-2.64	-2.80	-3.09	-2.48	-2.88	-2.33	-0.97	-0.90	-2.25
Week ending:									
03 Dec	16.38	16.73	19.40	20.86	19.18	22.12	10.76	12.00	8.66
10 Dec	15.31	15.76	18.65	19.49	17.99	21.15	10.54	11.63	8.13
17 Dec	15.48	15.45	19.42	19.40	17.90	20.93	10.42	11.67	8.23
24 Dec	15.77	15.89	19.33	19.19	18.01	20.85	10.40	11.84	8.85
31 Dec	15.59	15.86	18.60	19.04	18.62	20.81	10.40	12.34	9.11
07 Jan	15.60	17.54	18.58	19.25	19.69	21.02	10.54	13.09	10.17

* Gasolines are unleaded regular in Rotterdam and New York Harbour, and leaded regular in Singapore. The specification of gasoline in New York Harbour changed from 9.0 RVP to 13.5 RVP as of 7 September 1993. Low Sulphur Residual Fuel Oils are 1.0% LSFO in Rotterdam and New York Harbour, and low sulphur waxy residue in Singapore.

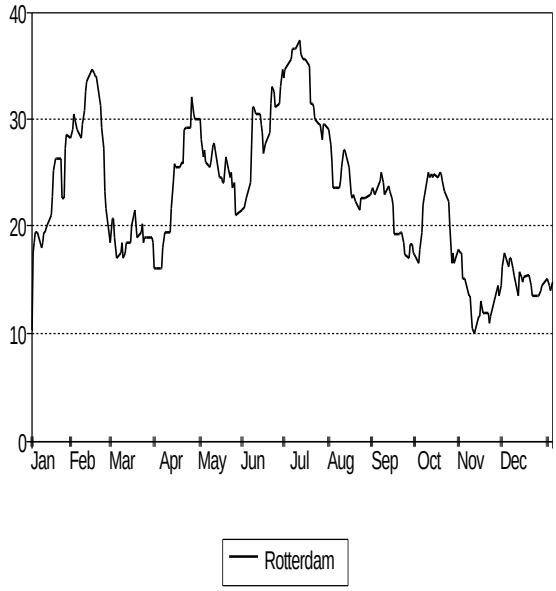
End-User Product Prices

59. In December, end-user prices of heavy fuel oils decreased sharply in Europe with the largest decrease of 9.2 per cent occurring in France. Prices of gasoline in Europe and the US also decreased consistent with lower international spot prices whereas most prices of diesel and domestic heating oil remained little changed. The automotive diesel price in Japan increased markedly reflecting the tax increase of 7.8 yen/litre on 1 December. Table 7 shows average IEA CIF crude import costs, spot crude and product prices and Table 8 shows end-user prices.

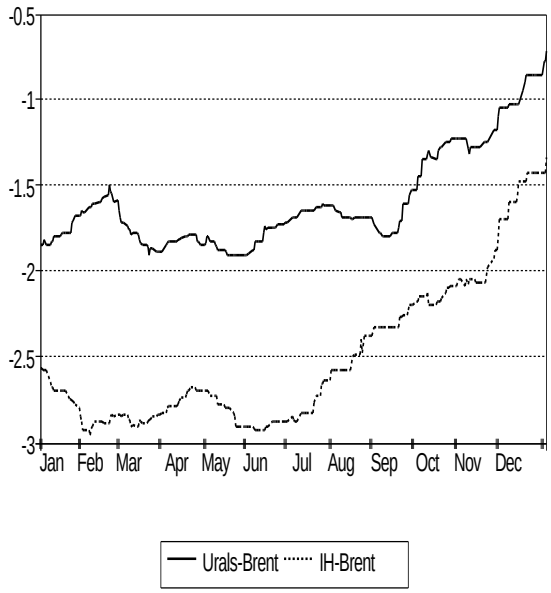
Gasoil Price Differentials
($/bbl)



LSFO/HSFO Price Differentials
($/t)



Urals and Iranian Heavy versus Brent
($/bbl)



Gasoline/HSFO Price Differentials
($/t)

REFINERY ACTIVITY

Refining Margins

60. Monthly average refining margins decreased in Europe and the US as all light product prices decreased more sharply than crude prices. Hydroskimming margins in Europe and cracking margins for ANS crude in the US decreased less than the other margins shown in the table for the two regions reflecting the higher yield of heavy fuel oil (the price of which declined less than the prices of light products). The monthly hydroskimming margin for Dubai crude in Singapore remained little changed as sharper declines in light product prices relative to the Dubai price were offset by relatively small declines in heavy fuel oil prices. The European cracking margin remained higher than $2/bbl for most of December while cracking margins in the US declined sharply early in the month but then recovered to above $1/bbl towards the end of the month reflecting higher product prices.

Refining Margins in Major Refining Centres
($/bbl)

					Week ending:					
	Oct	Nov	Dec	Change	03 Dec	10 Dec	17 Dec	24 Dec	31 Dec	07 Jan
NW Europe										
Brent (Hydroskimming)	0.38	0.51	0.25	-0.27	0.39	0.10	0.05	0.28	0.65	-0.13
Brent (Cracking)	2.65	2.88	2.23	-0.65	2.57	2.04	2.04	2.26	2.61	1.80
US Gulf Coast										
Brent (Cracking)	1.57	0.84	-0.07	-0.91	-0.09	-0.51	-0.40	0.16	0.76	0.84
WTI (Cracking)	0.97	0.40	-0.01	-0.41	-0.05	-0.46	-0.05	0.18	0.43	0.68
ANS (Cracking)	1.80	1.56	1.34	-0.22	1.44	1.04	1.26	1.38	1.68	1.55
Singapore										
Dubai(Hydroskimming)	1.00	0.83	0.80	-0.02	0.90	0.75	0.69	0.76	1.06	0.64

61. As shown in the table below, annual average refinery margins in 1993 increased in North West Europe and Singapore but decreased slightly in the US. The average catalytic cracking margin increased to over $2/bbl in Europe and the hydroskimming margin reached above $1/bbl in Singapore. The increase in margins in Europe and Singapore reflected the fact that product prices tended to follow crude prices with some delay during the long decline in prices from their peak in March. The decline in the price differentials between light and heavy products discussed above tended to offset this effect for cracking margins. In the US, where the cracking yields of light products are higher than in Europe, this contributed to the slight decline in margins compared to the slight increase in Europe. The greater increase in hydroskimming margin compared with the cracking margin in Europe is also due to the lower light/heavy product price differentials.

Comparison of Refining Margins in 1992 and 1993
($/bbl,%)

	1992	1993	Change
NW Europe			
Brent (Hydroskimming)	-0.65	0.06	0.71
Brent (Cracking)	1.80	2.14	0.34
US Gulf Coast			
Brent (Cracking)	1.36	1.20	-0.16
WTI (Cracking)	0.92	0.87	-0.05
ANS (Cracking)	1.67	1.56	-0.12
Singapore			
Dubai(Hydroskimming)	0.35	1.28	0.93

Refinery Crude Throughputs

62. The aggregate refinery throughputs of Europe, Japan and the US increased 1.2 mb/d in November, reaching the highest level recorded last August, with sharp increases in Europe and Japan slightly offset by the small decrease in the US. This aggregate level was 0.6 mb/d higher than the level in November 1992.

63. Total crude throughputs in distillation units in OECD European countries increased by 0.7 mb/d to 12.5 mb/d in November as seasonal refinery maintenance was heavily concentrated in October. Higher throughputs were also consistent with relatively good refining margins. Throughputs in Germany and the Netherlands recovered sharply to close to September levels and refinery throughputs increased in almost all other OECD European countries. Average crude throughputs in OECD European countries from January to November were 0.9 per cent higher than for the same period in 1992.

64. Crude throughputs in the US decreased slightly from 13.8 mb/d in October to 13.7 mb/d in November but continued to be above throughputs of a year earlier. Utilisation of operating capacity (excluding idle plant) decreased to 93 per cent. Average crude throughputs from January to November were 1.8 per cent higher than for the same period in 1992.

65. Japanese crude throughputs increased sharply from 3.8 mb/d in October to 4.3 mb/d in November following the normal seasonal pattern. Average throughputs in November again became higher than a year earlier following the small year-on-year decline in October. Utilisation of operating capacity increased from 82 to 95 per cent. Average crude throughputs from January to November were 3.1 per cent higher than for the same period in 1992.

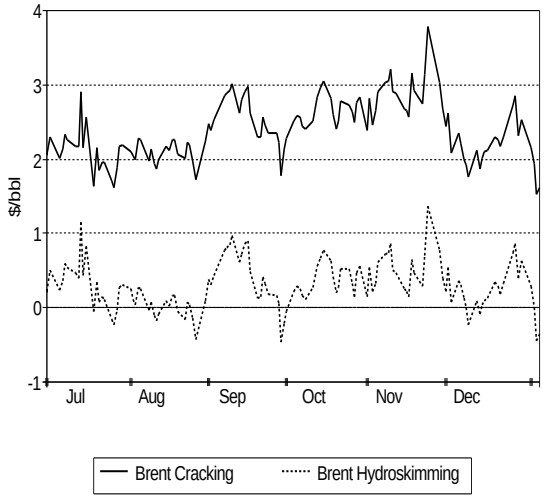
66. Preliminary indications for December suggest little change from November throughput levels in Europe. Weekly US statistics indicate that the throughput level in December decreased slightly, consistent with lower refinery margins. In Japan, crude throughputs in December are believed to have increased only slightly reflecting high stock levels principally of heavy fuel oils.

Refinery Crude Throughputs in OECD Countries

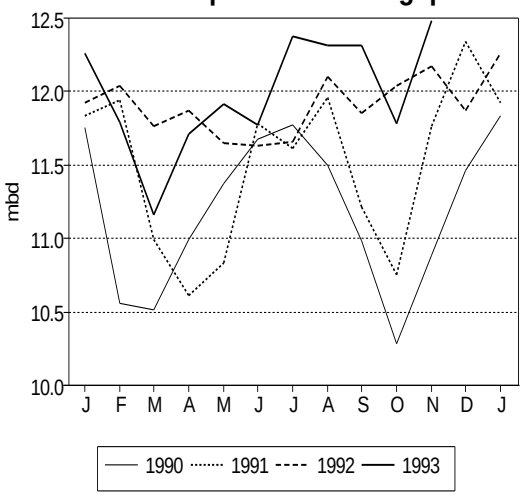
	million barrels per day						% change from prior year	
	Jul	Aug	Sept	Oct*	Nov*	Jan-Nov 93	Nov 93	Jan-Nov 93
OECD Europe	12.37	12.31	12.31	11.78	12.48	11.99	2.5	0.9
France	1.59	1.58	1.58	1.66	1.68	1.56	20.0	5.5
Germany	2.19	2.13	2.17	1.99	2.12	2.07	0.2	1.4
Italy	1.60	1.62	1.69	1.63	1.67	1.63	-7.5	-0.9
Netherlands	1.20	1.17	1.16	0.97	1.14	1.09	7.5	0.5
UK	1.79	1.75	1.71	1.70	1.76	1.73	1.1	6.1
US	14.22	14.02	13.89	13.76	13.70	13.68	1.1	1.8
Japan	3.82	4.12	3.84	3.75	4.31	3.95	2.9	3.1

* estimated

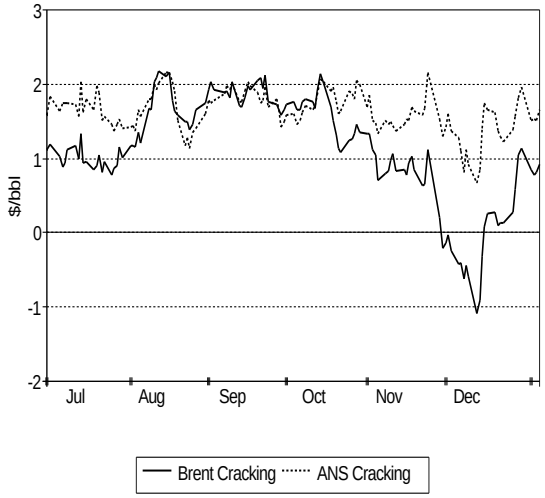
Rotterdam Refining Margins



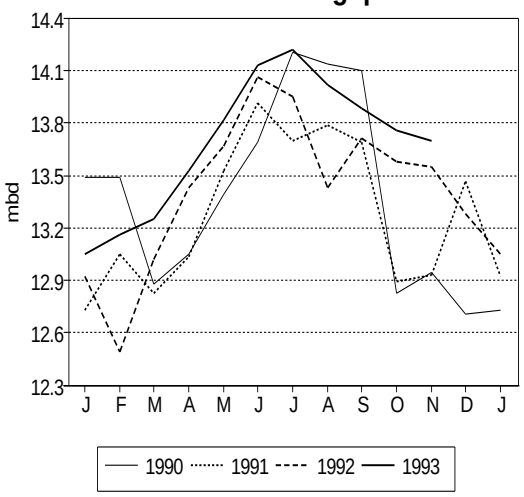
OECD Europe Crude Throughputs



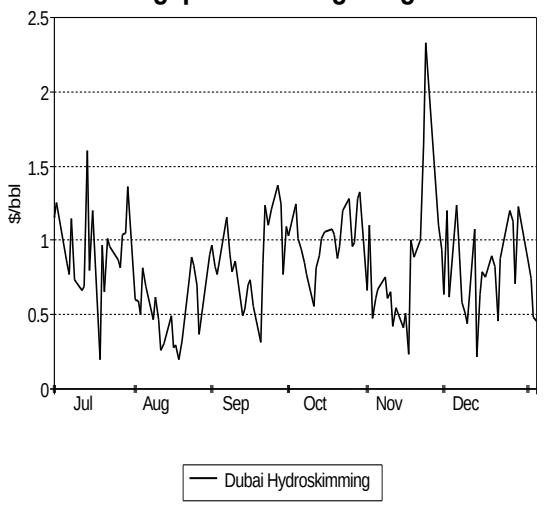
US Gulf Refining Margins



US Crude Throughputs



Singapore Refining Margins



Japan Crude Throughputs

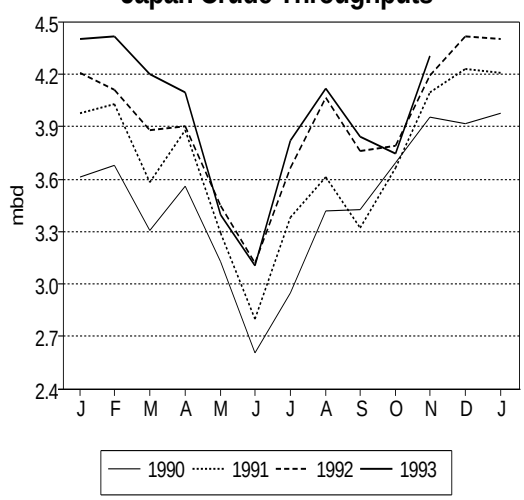


Table 1

WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	1990	1991	1Q92	2Q92	3Q92	4Q92	1992	1Q93	2Q93	3Q93	4Q93	1993	1Q94	2Q94	3Q94	4Q94	1994
DEMAND																	
OECD																	
North America	18.9	18.6	18.7	18.6	19.0	19.4	18.9	19.0	18.8	19.5	19.5	19.2	19.4	19.1	19.5	19.9	19.5
Europe[1]	13.0	13.4	14.1	13.1	13.6	13.8	13.7	13.7	13.1	13.6	13.8	13.6	13.9	13.2	13.7	14.0	13.7
Pacific	6.1	6.2	6.8	5.8	5.9	6.6	6.3	7.0	5.9	5.6	6.3	6.2	6.8	5.8	5.9	6.5	6.3
TOTAL OECD	38.1	38.3	39.6	37.5	38.5	39.8	38.9	39.8	37.8	38.8	39.7	39.0	40.1	38.1	39.1	40.4	39.5
NON-OECD																	
Former USSR[2]	8.5	8.3	8.0	7.0	6.4	6.2	6.9	6.3	5.6	5.2	5.4	5.6	5.4	5.0	4.8	5.0	5.0
China[2]	2.3	2.5	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.9	2.9	2.9	2.9	3.0	3.1	3.1	3.0
Europe[1]	1.6	1.4	1.3	1.2	1.1	1.2	1.2	1.3	1.2	1.1	1.2	1.2	1.3	1.2	1.1	1.2	1.2
Latin America	5.1	5.3	5.2	5.4	5.5	5.5	5.4	5.4	5.6	5.7	5.7	5.6	5.5	5.7	5.8	5.9	5.7
Asia	5.4	5.8	6.5	6.3	6.0	6.8	6.4	6.9	6.6	6.5	7.1	6.8	7.2	7.0	6.8	7.5	7.1
Middle East	3.5	3.4	3.6	3.6	3.6	3.6	3.6	3.8	3.8	3.8	3.8	3.8	3.9	3.9	3.9	3.9	3.9
Africa	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
TOTAL NON-OECD	28.3	28.5	29.3	28.1	27.3	28.1	28.1	28.6	27.6	27.2	28.2	27.9	28.4	27.9	27.6	28.7	28.2
TOTAL DEMAND[3]	66.4	66.8	68.9	65.7	65.8	67.9	67.1	68.4	65.4	66.0	67.9	66.9	68.5	66.0	66.7	69.1	67.6
SUPPLY																	
OECD																	
North America	11.0	11.1	11.2	11.0	10.9	11.1	11.1	11.1	10.9	10.9	11.1	11.0	11.0	10.8	10.6	10.7	10.8
Europe	4.3	4.5	4.9	4.6	4.7	5.1	4.8	4.9	4.8	5.1	5.7	5.1	5.7	5.4	5.4	5.7	5.6
Pacific	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
TOTAL OECD	15.9	16.3	16.8	16.3	16.3	16.9	16.6	16.6	16.4	16.6	17.4	16.7	17.4	16.9	16.7	17.1	17.0
NON-OECD																	
Former USSR	11.5	10.4	9.5	9.2	8.8	8.4	9.0	8.2	8.0	7.7	7.4	7.8	7.2	7.1	7.0	6.8	7.1
China	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Europe	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Latin America	5.4	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.8	5.7	5.9	5.8	5.9	6.0	6.0	6.0	6.0
Asia	1.7	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9
Middle East	1.3	1.4	1.5	1.5	1.5	1.6	1.5	1.6	1.6	1.6	1.8	1.6	1.8	1.8	1.8	1.8	1.8
Africa	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Processing Gains[4]	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
TOTAL NON-OPEC	42.2	41.8	41.7	40.9	40.8	41.0	41.1	40.5	40.2	40.1	41.1	40.5	41.0	40.4	40.1	40.5	40.5
OPEC																	
Crude	22.7	23.0	23.8	23.4	24.1	24.9	24.1	25.1	24.2	24.7	24.7	24.7					
NGLs	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2					
TOTAL OPEC	24.8	25.0	25.8	25.5	26.2	27.1	26.2	27.3	26.4	27.0	26.9	26.9					
TOTAL SUPPLY[5]	67.0	66.9	67.5	66.4	67.0	68.0	67.2	67.8	66.6	67.1	68.0	67.4					
STOCK CHANGE AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	0.2	0.0	-1.2	0.6	0.6	-0.6	-0.1	-0.7	1.0	0.8	-0.4	0.2					
Government	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.1	0.1					
TOTAL OECD	0.3	0.0	-1.0	0.6	0.6	-0.4	0.0	-0.5	1.1	0.9	-0.3	0.3					
Floating Storage/Oil in Transit	0.2	-0.1	0.0	-0.2	0.2	0.0	0.0	-0.2	0.1	0.1	0.2	0.0					
Other & Misc. to balance[6]	0.1	0.2	-0.4	0.3	0.4	0.5	0.2	0.1	0.0	0.1	0.2	0.2					
TOTAL STOCK CH. & MISC.	0.6	0.1	-1.4	0.7	1.2	0.1	0.2	-0.6	1.2	1.1	0.1	0.5					
Memo item:																	
FSU Net Exports	3.0	2.1	1.5	2.2	2.4	2.2	2.1	1.9	2.4	2.5	2.0	2.2	1.8	2.1	2.2	1.9	2.0

Totals may not add due to rounding.

1 Germany's eastern states are included in OECD Europe throughout the time period covered in this table.

2 Figures for former USSR are estimates of apparent domestic demand derived from official production figures and quarterly trade data.

3 Deliveries from refineries/primary stocks plus international marine bunkers, refinery fuel and crude for direct burning (includes oil from non-conventional sources and other sources of supply).

4 Net of volumetric gains and losses in refining process (excludes net gain/loss in former USSR, China and non-OECD Europe).

5 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.

6 Includes changes in non-reported stocks in OECD and non-OECD areas and crude oil ocean losses.

Table 2

OECD REGIONAL OIL DEMAND

(million barrels per day)

	Second Quarter			July			August			September			Third Quarter		
	1992	1993	%	1992	1993	%	1992	1993	%	1992	1993	%	1992	1993	%
North America															
LPG	1.93	1.90	-1.3	2.02	2.08	3.2	1.94	1.86	-4.3	1.99	2.01	1.3	1.98	1.98	0.1
Naphtha	0.30	0.26	-13.6	0.30	0.26	-13.9	0.28	0.27	-5.6	0.27	0.24	-10.6	0.28	0.26	-10.1
Motor Gasoline	7.98	8.23	3.2	8.37	8.52	1.8	8.03	8.63	7.4	8.02	8.41	4.9	8.14	8.52	4.7
Jet/Kerosene	1.37	1.47	7.3	1.46	1.49	2.2	1.54	1.50	-2.5	1.46	1.53	5.0	1.49	1.51	1.5
Gasoil	3.19	3.19	0.1	3.01	3.01	0.2	3.05	3.20	4.8	3.34	3.42	2.3	3.13	3.21	2.4
Residual Fuel Oil	1.18	1.10	-7.2	1.14	1.18	3.5	1.11	1.03	-7.3	1.07	1.35	26.0	1.11	1.18	7.0
Other Products	2.69	2.60	-3.0	2.84	2.77	-2.5	2.90	2.84	-2.0	2.73	2.92	7.0	2.82	2.84	0.7
Total	18.63	18.76	0.7	19.13	19.31	1.0	18.85	19.31	2.5	18.88	19.89	5.3	18.95	19.50	2.9
Europe															
LPG	0.77	0.75	-3.4	0.73	0.75	2.9	0.71	0.74	3.5	0.76	0.82	8.2	0.73	0.77	4.9
Naphtha	0.78	0.73	-6.0	0.75	0.73	-2.4	0.76	0.74	-2.8	0.82	0.68	-17.8	0.78	0.72	-7.8
Motor Gasoline	3.08	3.05	-1.0	3.25	3.30	1.7	3.07	3.12	1.6	3.14	3.08	-1.9	3.15	3.17	0.5
Jet/Kerosene	0.76	0.77	2.0	0.82	0.84	3.2	0.84	0.89	6.3	0.84	0.89	5.6	0.83	0.87	5.0
Gasoil	4.20	4.38	4.3	4.57	4.58	0.4	4.19	4.15	-1.1	4.94	5.00	1.3	4.56	4.57	0.2
Residual Fuel Oil	2.10	2.09	-0.3	2.12	2.06	-2.6	2.05	2.12	3.6	2.27	2.25	-1.0	2.14	2.14	-0.1
Other Products	1.37	1.35	-1.8	1.49	1.43	-4.3	1.34	1.35	0.7	1.50	1.41	-5.7	1.44	1.40	-3.2
Total	13.05	13.12	0.5	13.71	13.69	-0.1	12.96	13.10	1.1	14.27	14.12	-1.0	13.64	13.63	0.0
Pacific															
LPG	0.67	0.68	0.7	0.65	0.64	-1.3	0.57	0.59	3.9	0.64	0.64	1.5	0.62	0.63	1.2
Naphtha	0.47	0.47	-0.7	0.49	0.44	-10.6	0.49	0.49	0.3	0.45	0.46	3.9	0.48	0.46	-2.4
Motor Gasoline	1.12	1.15	2.1	1.17	1.19	1.6	1.23	1.24	0.9	1.14	1.16	1.0	1.18	1.20	1.2
Jet/Kerosene	0.53	0.55	3.5	0.47	0.50	6.3	0.46	0.48	3.8	0.50	0.49	-2.6	0.48	0.49	2.5
Gasoil	1.32	1.32	0.3	1.34	1.33	-1.4	1.24	1.27	3.2	1.31	1.34	1.7	1.30	1.31	1.1
Residual Fuel Oil	0.84	0.85	0.9	0.89	0.78	-12.5	0.88	0.74	-16.2	0.94	0.76	-18.9	0.90	0.76	-15.9
Other Products	0.86	0.89	3.7	0.90	0.79	-11.9	0.88	0.81	-8.0	0.99	0.76	-23.7	0.92	0.79	-14.7
Total	5.82	5.91	1.5	5.91	5.67	-4.2	5.76	5.64	-2.1	5.97	5.61	-6.1	5.88	5.64	-4.1
OECD															
LPG	3.37	3.32	-1.6	3.39	3.47	2.3	3.22	3.19	-1.1	3.38	3.48	2.9	3.33	3.38	1.4
Naphtha	1.55	1.46	-4.8	1.53	1.42	-7.2	1.54	1.50	-2.3	1.54	1.38	-10.3	1.54	1.44	-6.6
Motor Gasoline	12.18	12.43	2.1	12.79	13.01	1.8	12.33	12.99	5.3	12.31	12.65	2.8	12.48	12.89	3.3
Jet/Kerosene	2.66	2.79	5.0	2.75	2.84	3.2	2.84	2.87	1.1	2.80	2.91	3.8	2.80	2.87	2.7
Gasoil	8.70	8.89	2.2	8.92	8.92	0	8.48	8.62	1.6	9.59	9.75	1.7	8.99	9.09	1.1
Residual Fuel Oil	4.12	4.04	-2.1	4.14	4.02	-3.0	4.04	3.89	-3.7	4.28	4.36	1.8	4.15	4.08	-1.6
Other Products	4.92	4.84	-1.5	5.23	4.98	-4.6	5.12	5.00	-2.3	5.22	5.09	-2.5	5.19	5.03	-3.2
Total	37.50	37.78	0.7	38.75	38.67	-0.2	37.57	38.05	1.3	39.12	39.62	1.3	38.47	38.77	0.8

Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply.
Jet/kerosene comprises jet kerosene and non-aviation kerosene grades. Gasoil comprises diesel, light heating oil and other gasoils.
Percentage changes are calculated before rounding.

Table 2A

OECD OIL DEMAND FOR SELECTED COUNTRIES

(million barrels per day)

	July			August			September			Third Quarter			October		
	1992	1993	%	1992	1993	%	1992	1993	%	1992	1993	%	1992	1993	%
United States															
LPG	1.74	1.78	2.3	1.70	1.61	-4.8	1.74	1.81	3.8	1.73	1.73	0.4	2.10	2.06	-2.2
Naphtha	0.23	0.19	-17.9	0.21	0.19	-9.3	0.21	0.18	-15.1	0.22	0.19	-14.2	0.19	0.17	-12.7
Motor Gasoline	7.74	7.89	1.9	7.43	7.99	7.5	7.42	7.78	4.8	7.53	7.89	4.7	7.39	7.51	1.6
Jet/Kerosene	1.38	1.41	1.9	1.45	1.42	-2.3	1.37	1.45	5.2	1.40	1.42	1.5	1.38	1.41	2.7
Gasoil	2.69	2.68	-0.3	2.72	2.84	4.4	2.97	3.01	1.5	2.79	2.84	1.9	3.06	3.06	-0.1
Residual Fuel Oil	1.00	1.05	5.3	0.97	0.87	-10.0	0.96	1.22	27.2	0.98	1.05	7.2	1.11	1.00	-9.7
Other Products	2.58	2.51	-2.7	2.63	2.58	-1.7	2.48	2.67	7.3	2.57	2.59	0.8	2.40	2.39	-0.6
Total	17.37	17.52	0.8	17.11	17.52	2.3	17.15	18.10	5.5	17.21	17.71	2.9	17.63	17.59	-0.2
Japan															
LPG	0.60	0.58	-3.1	0.51	0.52	3.1	0.57	0.58	2.1	0.56	0.56	0.5	0.59	0.58	-1.6
Naphtha	0.48	0.43	-10.8	0.48	0.49	0.5	0.44	0.46	3.9	0.47	0.46	-2.4	0.49	0.48	-2.0
Motor Gasoline	0.85	0.86	0.8	0.91	0.91	-0.7	0.81	0.82	1.1	0.86	0.86	0.3	0.79	0.80	1.7
Jet/Kerosene	0.39	0.42	7.6	0.38	0.40	4.2	0.42	0.40	-3.3	0.40	0.41	2.8	0.51	0.54	6.5
Gasoil	1.14	1.13	-1.2	1.05	1.07	1.9	1.12	1.13	1.1	1.10	1.11	0.5	1.16	1.16	0.8
Residual Fuel Oil	0.85	0.74	-12.3	0.83	0.70	-16.5	0.90	0.72	-19.7	0.86	0.72	-16.2	0.90	0.75	-17.3
Other Products	0.79	0.68	-14.6	0.79	0.70	-11.3	0.88	0.64	-27.5	0.82	0.67	-18.1	0.87	0.67	-22.5
Total	5.11	4.84	-5.2	4.95	4.77	-3.6	5.13	4.75	-7.5	5.07	4.79	-5.4	5.30	4.98	-5.9
Germany															
LPG	0.09	0.09	4.2	0.09	0.09	7.2	0.10	0.11	15.1	0.09	0.10	9.0	0.08	0.09	4.0
Naphtha	0.18	0.19	7.8	0.19	0.19	-2.8	0.21	0.21	0.3	0.19	0.20	1.6	0.18	0.21	16.7
Motor Gasoline	0.77	0.77	0.9	0.72	0.74	2.7	0.77	0.78	0.3	0.75	0.76	1.3	0.76	0.73	-4.3
Jet/Kerosene	0.12	0.12	3.0	0.12	0.13	8.9	0.12	0.12	-1.3	0.12	0.12	3.5	0.11	0.12	8.4
Gasoil	1.41	1.35	-4.0	1.29	1.31	1.7	1.38	1.48	7.4	1.36	1.38	1.6	1.16	1.23	5.4
Residual Fuel Oil	0.20	0.17	-15.8	0.18	0.19	4.0	0.22	0.19	-12.7	0.20	0.18	-8.7	0.21	0.18	-14.5
Other Products	0.27	0.26	-5.6	0.25	0.26	4.6	0.28	0.28	2.2	0.27	0.27	0.2	0.25	0.27	9.4
Total	3.04	2.96	-2.5	2.84	2.91	2.5	3.08	3.17	3.1	2.98	3.01	1.0	2.76	2.82	2.4
Italy															
LPG	0.09	0.08	-16.8	0.08	0.08	1.9	0.09	0.09	8.4	0.09	0.08	-2.7	0.11	0.10	-7.3
Naphtha	0.08	0.10	24.3	0.07	0.10	43.8	0.08	0.10	21.8	0.07	0.10	29.3	0.08	0.11	37.8
Motor Gasoline	0.41	0.46	11.1	0.37	0.36	-1.6	0.39	0.38	-4.6	0.39	0.40	1.9	0.38	0.38	0.6
Jet/Kerosene	0.08	0.08	10.6	0.08	0.11	27.4	0.07	0.10	45.6	0.08	0.10	27.3	0.07	0.08	4.5
Gasoil	0.50	0.45	-9.0	0.37	0.34	-7.5	0.57	0.52	-8.2	0.48	0.44	-8.3	0.59	0.57	-4.0
Residual Fuel Oil	0.53	0.52	-2.2	0.52	0.61	17.0	0.59	0.59	0.1	0.55	0.57	4.8	0.51	0.55	9.1
Other Products	0.22	0.14	-38.3	0.17	0.14	-16.8	0.22	0.16	-26.7	0.21	0.15	-28.1	0.20	0.15	-26.1
Total	1.91	1.83	-4.4	1.67	1.75	4.8	2.01	1.95	-3.3	1.86	1.84	-1.3	1.94	1.94	-0.1
France															
LPG	0.10	0.09	-7.5	0.10	0.08	-20.9	0.12	0.10	-15.4	0.10	0.09	-14.8	0.14	0.13	-8.8
Naphtha	0.18	0.12	-33.2	0.16	0.15	-4.1	0.17	0.11	-34.5	0.17	0.13	-24.5	0.14	0.10	-28.5
Motor Gasoline	0.43	0.42	-2.6	0.41	0.41	-0.9	0.39	0.38	-3.7	0.41	0.40	-2.4	0.38	0.35	-6.2
Jet/Kerosene	0.10	0.11	3.2	0.10	0.11	1.7	0.10	0.10	2.1	0.10	0.11	2.3	0.09	0.08	-14.6
Gasoil	0.78	0.77	-1.2	0.67	0.64	-4.8	0.82	0.76	-7.0	0.75	0.72	-4.3	0.83	0.82	-1.9
Residual Fuel Oil	0.11	0.11	0.4	0.11	0.10	-9.7	0.14	0.13	-6.9	0.12	0.12	-5.5	0.16	0.16	1.2
Other Products	0.23	0.24	4.8	0.18	0.18	-3.0	0.21	0.21	-1.2	0.21	0.21	0.5	0.20	0.18	-9.6
Total	1.93	1.86	-3.7	1.74	1.66	-4.5	1.96	1.80	-8.2	1.88	1.77	-5.5	1.94	1.82	-6.3
United Kingdom															
LPG	0.13	0.14	10.6	0.12	0.15	29.9	0.15	0.15	3.7	0.13	0.15	13.9	0.14	0.15	11.5
Naphtha	0.07	0.07	3.8	0.08	0.08	-0.3	0.08	0.04	-48.9	0.08	0.07	-15.8	0.07	0.07	-1.2
Motor Gasoline	0.58	0.55	-4.3	0.54	0.54	0.6	0.58	0.55	-5.1	0.56	0.55	-3.0	0.56	0.54	-4.8
Jet/Kerosene	0.20	0.21	7.4	0.21	0.22	7.1	0.22	0.23	4.0	0.21	0.22	6.1	0.20	0.22	8.5
Gasoil	0.41	0.40	-2.2	0.38	0.41	8.0	0.45	0.45	1.1	0.41	0.42	2.1	0.44	0.44	-0.3
Residual Fuel Oil	0.25	0.25	1.0	0.23	0.22	-2.6	0.24	0.27	11.2	0.24	0.25	3.2	0.26	0.23	-9.8
Other Products	0.17	0.17	-1.7	0.16	0.16	5.3	0.16	0.16	-3.1	0.16	0.16	0.1	0.16	0.16	2.4
Total	1.81	1.81	-0.2	1.71	1.79	5.0	1.88	1.85	-1.5	1.80	1.81	1.0	1.83	1.81	-1.0
Canada															
LPG	0.27	0.30	8.9	0.24	0.24	-0.6	0.24	0.21	-16.0	0.25	0.25	-2.0	0.22	0.20	-9.4
Naphtha	0.07	0.07	-0.4	0.07	0.07	6.0	0.06	0.07	4.5	0.07	0.07	3.3	0.07	0.06	-10.1
Motor Gasoline	0.62	0.63	1.2	0.60	0.64	6.2	0.60	0.64	5.7	0.61	0.64	4.3	0.57	0.57	0
Jet/Kerosene	0.08	0.09	8.1	0.09	0.08	-4.8	0.09	0.09	0.4	0.08	0.08	1.1	0.09	0.08	-8.4
Gasoil	0.32	0.33	3.9	0.33	0.36	7.6	0.37	0.41	8.7	0.34	0.36	6.9	0.40	0.43	5.3
Residual Fuel Oil	0.14	0.13	-9.1	0.14	0.15	12.4	0.11	0.13	15.6	0.13	0.14	5.5	0.14	0.14	6.8
Other Products	0.26	0.26	-0.1	0.27	0.25	-5.0	0.25	0.26	3.7	0.26	0.26	-0.6	0.23	0.21	-6.6
Total	1.76	1.80	2.1	1.73	1.80	3.7	1.73	1.78	3.3	1.74	1.79	3.1	1.72	1.70	-1.2

Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply.
Jet/kerosene comprises jet kerosene and non-aviation kerosene grades. Gasoil comprises diesel, light heating oil and other gasoils.
Percentage changes are calculated before rounding.

Table 3
WORLD OIL PRODUCTION

(million barrels per day)

	1991	1992	1993	1Q93	2Q93	3Q93	4Q93	Sep93	Oct93	Nov93	Dec93
OPEC											
Crude Oil											
Saudi Arabia	8.16	8.22	7.96	8.14	7.91	7.91	7.87	7.90	7.90	7.92	7.80
Iran	3.33	3.43	3.65	3.70	3.60	3.70	3.60	3.75	3.62	3.55	3.64
Iraq	0.30	0.43	0.48	0.45	0.45	0.48	0.54	0.53	0.53	0.54	0.54
UAE	2.42	2.29	2.19	2.26	2.20	2.16	2.17	2.14	2.19	2.16	2.15
Kuwait	0.13	0.88	1.69	1.64	1.52	1.79	1.82	1.86	1.83	1.82	1.80
Neutral Zone	0.13	0.36	0.36	0.39	0.30	0.38	0.38	0.40	0.39	0.36	0.40
Qatar	0.39	0.40	0.42	0.43	0.42	0.43	0.41	0.43	0.42	0.41	0.41
Nigeria	1.82	1.88	1.89	1.93	1.83	1.90	1.89	1.97	1.89	1.88	1.89
Libya	1.51	1.48	1.37	1.42	1.35	1.36	1.37	1.35	1.36	1.39	1.37
Algeria	0.75	0.75	0.75	0.76	0.74	0.74	0.75	0.74	0.74	0.76	0.75
Gabon	0.29	0.29	0.30	0.30	0.30	0.29	0.30	0.29	0.29	0.31	0.31
Venezuela	2.34	2.33	2.31	2.33	2.26	2.28	2.36	2.28	2.36	2.37	2.35
Indonesia	1.41	1.33	1.34	1.36	1.36	1.34	1.32	1.34	1.30	1.33	1.33
Total Crude Oil	22.97	24.06	24.71	25.08	24.23	24.75	24.77	24.96	24.81	24.77	24.72
NGLs[1]	2.05	2.09	2.21	2.19	2.22	2.24	2.21	2.24	2.19	2.22	2.23
TOTAL OPEC[3]	25.02	26.15	26.92	27.27	26.45	26.99	26.98	27.20	27.00	26.99	26.95
NON-OPEC[2]											
OECD											
United States	9.17	9.00	8.82	8.98	8.79	8.65	8.84	8.67	8.80	8.86	8.86
Canada	1.98	2.06	2.18	2.10	2.13	2.25	2.23	2.26	2.28	2.20	2.21
UK	1.94	2.00	2.13	2.01	1.87	2.15	2.51	2.19	2.43	2.49	2.59
Norway	1.96	2.22	2.38	2.25	2.30	2.36	2.59	2.27	2.56	2.65	2.57
Australia	0.61	0.60	0.57	0.56	0.60	0.57	0.53	0.57	0.47	0.55	0.58
Other OECD	0.69	0.69	0.67	0.66	0.67	0.66	0.70	0.68	0.69	0.70	0.71
Total OECD	16.34	16.56	16.74	16.56	16.36	16.63	17.40	16.64	17.23	17.45	17.52
Non-OECD											
Former USSR	10.37	8.97	7.82	8.20	7.99	7.66	7.43	7.60	7.52	7.42	7.34
Russia	9.26	7.93	6.84	7.22	7.02	6.69	6.46	6.63	6.56	6.45	6.38
Others	1.11	1.05	0.97	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97
China	2.80	2.84	2.90	2.88	2.92	2.88	2.91	2.88	2.93	2.90	2.90
Europe	0.30	0.28	0.28	0.28	0.29	0.29	0.28	0.28	0.28	0.28	0.28
Latin America	5.59	5.67	5.77	5.67	5.75	5.74	5.92	5.79	5.91	5.92	5.93
Mexico	3.13	3.12	3.13	3.07	3.13	3.12	3.21	3.15	3.20	3.22	3.22
Brazil	0.85	0.85	0.88	0.86	0.86	0.88	0.91	0.88	0.90	0.91	0.91
Colombia	0.43	0.45	0.47	0.48	0.47	0.44	0.48	0.46	0.48	0.48	0.48
Ecuador	0.31	0.32	0.34	0.33	0.34	0.34	0.35	0.34	0.35	0.35	0.35
Others	0.87	0.93	0.95	0.93	0.95	0.96	0.97	0.96	0.97	0.97	0.97
Asia	1.71	1.77	1.82	1.84	1.79	1.82	1.84	1.83	1.84	1.84	1.83
Middle East	1.43	1.50	1.63	1.57	1.58	1.63	1.75	1.63	1.69	1.78	1.79
Africa	1.97	2.02	2.05	2.06	2.05	2.02	2.08	2.04	2.07	2.08	2.08
Total Non-OECD	24.16	23.06	22.27	22.49	22.37	22.02	22.21	22.05	22.25	22.23	22.16
Processing Gains[4]	1.35	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
TOTAL NON-OPEC	41.85	41.07	40.46	40.50	40.17	40.11	41.06	40.14	40.93	41.13	41.13
TOTAL SUPPLY	66.87	67.23	67.38	67.76	66.62	67.09	68.04	67.34	67.93	68.12	68.08

Totals may not add due to rounding.

1 Includes condensates reported by OPEC countries and oil from non-conventional sources, e.g. Orimulsion.

2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources.

3 Ecuador is identified separately as a non-OPEC producer country throughout the period covered by this table for the purposes of comparison.

4 Net of volumetric gains and losses in refining (excludes net gain/loss in former USSR, China and non-OECD Europe).

Table 4

INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Tons					PRIOR YEARS' STOCKS[2] in Million Tons			STOCK CHANGES[3] in mb/d			
	JUL93	AUG93	SEP93*	OCT93*	NOV93*	NOV90	NOV91	NOV92	Q492	Q193	Q293	Q393
North America												
Crude	41.0	39.2	37.9	38.9	39.7	39.1	40.5	38.5	-0.08	0.12	0.20	-0.26
Gasoline	22.7	21.6	22.2	22.5	24.0	24.2	22.9	23.0	0.08	0.20	-0.10	-0.15
Middle Distillate	24.1	25.0	25.4	26.9	27.9	26.8	28.6	27.6	0.10	-0.53	0.17	0.27
Heavy Fuel Oil	15.0	14.5	14.5	15.3	15.8	19.0	17.7	16.4	-0.02	-0.13	0.11	-0.09
Total Products [4]	81.8	81.2	81.6	83.7	85.4	87.2	86.5	83.6	-0.26	-0.52	0.56	0.24
Total [5]	144.3	143.4	141.6	144.2	145.8	144.7	145.9	140.6	-0.57	-0.17	0.86	0.09
OECD Europe												
Crude	39.1	40.3	39.5	40.9	40.7	38.8	40.1	37.8	0.24	0.02	-0.06	-0.06
Gasoline	15.2	15.6	15.4	15.7	15.9	15.7	15.1	15.1	0.01	0.11	-0.11	0.00
Middle Distillate	32.8	35.4	34.1	33.7	33.9	32.5	35.5	34.8	-0.09	-0.36	0.16	0.20
Heavy Fuel Oil	24.4	25.2	25.4	25.0	24.7	26.1	25.5	24.5	0.01	-0.04	0.06	0.09
Total Products [4]	82.4	86.5	85.2	84.2	83.7	84.0	86.3	84.9	-0.08	-0.32	0.10	0.34
Total [5]	129.2	134.6	132.3	132.8	131.9	131.4	134.3	130.5	0.15	-0.30	0.05	0.23
OECD Pacific												
Crude	22.4	21.8	23.2	23.7	22.4	21.7	23.1	21.4	-0.08	-0.02	0.08	0.08
Gasoline	3.0	3.0	3.0	3.1	3.1	2.8	2.8	2.8	-0.02	0.03	0.00	0.01
Middle Distillate	8.6	10.0	10.7	10.7	10.7	11.5	10.7	10.6	-0.13	-0.21	0.13	0.21
Heavy Fuel Oil	2.8	2.9	3.0	2.9	2.7	3.0	2.9	2.4	0.00	0.00	0.00	0.04
Total Products [4]	20.0	21.7	22.6	22.5	22.2	23.6	22.0	21.6	-0.15	-0.19	0.08	0.32
Total [5]	53.9	55.9	58.1	58.1	56.5	56.9	55.8	54.2	-0.17	-0.21	0.10	0.52
OECD												
Crude	102.6	101.4	100.6	103.5	102.8	99.6	103.6	97.6	0.09	0.12	0.22	-0.25
Gasoline	40.8	40.2	40.7	41.3	43.1	42.7	40.8	40.9	0.07	0.34	-0.22	-0.15
Middle Distillate	65.5	70.4	70.1	71.2	72.5	70.8	74.7	72.9	-0.13	-1.10	0.46	0.68
Heavy Fuel Oil	42.2	42.6	42.8	43.3	43.2	48.1	46.1	43.3	-0.01	-0.18	0.17	0.04
Total Products [4]	184.1	189.4	189.3	190.3	191.3	194.9	194.8	190.1	-0.48	-1.04	0.75	0.90
Total [5]	327.4	333.9	332.0	335.2	334.2	333.0	336.0	325.3	-0.58	-0.67	1.02	0.83

GOVERNMENT-CONTROLLED STOCKS[6] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Tons					PRIOR YEARS' STOCKS[2] in Million Tons			STOCK CHANGES[3] in mb/d			
	JUL93	AUG93	SEP93*	OCT93*	NOV93*	NOV90	NOV91	NOV92	Q492	Q193	Q293	Q393
North America												
Crude	78.8	78.9	79.1	79.2	79.3	79.2	76.8	77.6	0.04	0.03	0.06	0.03
OECD Europe												
Crude	17.7	17.7	17.7	17.7	17.7	16.9	16.9	17.7	0.00	0.00	0.00	0.00
Products	16.2	16.2	16.1	16.1	16.1	14.3	14.7	15.7	0.04	0.02	-0.01	-0.01
OECD Pacific												
Crude	33.4	33.5	33.5	34.1	34.4	28.2	29.9	31.9	0.10	0.10	0.00	0.01
OECD												
Crude	129.9	130.1	130.4	131.0	131.4	124.3	123.6	127.2	0.13	0.13	0.06	0.04
Products	16.2	16.2	16.1	16.1	16.1	14.3	14.7	15.7	0.04	0.02	-0.01	0.00
Total [5]	146.1	146.3	146.5	147.2	147.5	138.6	138.3	142.9	0.18	0.16	0.05	0.03

* Estimated
1 Stocks are on land primary stocks excluding unreported entrepot stocks.
2 Closing Stock levels.
3 Conversion factors are country specific and vary over time.
4 Total products includes gasoline, middle distillates, fuel oil and other products.
5 Total includes crude, products, NGL and feedstocks.
6 Includes government-owned stocks and entity stocks held for emergency purposes.

Table 5

STOCKS ON LAND IN OECD COUNTRIES

('millions of metric tons' and 'days')

	End September 1992		End December1992		End March 1993		End June 1993		End September 1993[1,2]	
	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
Canada	15.2	71	14.3	68	14.4	70	14.5	66	14.6	-
United States	201.8	94	199.0	94	198.4	95	207.0	95	206.2	-
NORTH AMERICA	216.9	92	213.3	92	212.8	93	221.5	93	220.8	93
Australia	4.7	52	4.6	50	4.6	50	4.7	51	5.0	-
Japan	80.0	109	79.4	101	78.2	122	79.5	131	85.4	-
New Zealand	1.2	81	1.1	77	1.1	77	1.1	86	1.2	-
PACIFIC	85.9	103	85.1	96	83.9	112	85.3	120	91.6	114
Austria	2.9	92	2.9	98	2.9	98	2.9	95	2.9	-
Belgium	5.4	77	5.1	76	4.9	77	5.1	78	5.5	-
Denmark	4.1	153	4.0	152	3.5	138	3.2	124	3.5	-
Finland	3.1	99	3.3	126	3.1	120	2.9	97	2.7	-
France	19.5	78	19.2	74	18.2	76	18.3	80	19.6	-
Germany	42.3	117	43.6	121	43.6	120	43.8	113	44.1	-
Greece	4.5	95	4.4	90	4.8	120	4.7	111	4.5	-
Ireland	1.2	79	1.2	86	1.2	95	1.2	90	1.3	-
Italy	21.2	78	22.5	87	21.2	90	21.6	88	21.2	-
Luxembourg	0.4	69	0.4	73	0.4	71	0.4	73	0.4	-
Netherlands	10.8	107	10.3	105	9.3	96	10.2	103	11.2	-
Norway	3.5	149	4.7	203	4.7	185	3.8	145	5.1	-
Portugal	3.5	97	3.0	83	3.1	88	3.1	90	3.2	-
Spain	10.4	79	9.9	72	9.9	80	9.7	69	9.7	-
Sweden	5.4	107	5.2	123	4.9	127	5.5	136	5.4	-
Switzerland	5.0	140	5.0	148	5.2	158	4.8	134	4.7	-
Turkey	3.3	50	3.4	51	3.5	52	3.7	44	3.3	-
United Kingdom	16.7	72	17.5	75	18.2	83	18.3	80	17.7	-
EUROPE [3]	163.1	91	165.6	94	162.4	97	163.3	93	166.1	93
OECD [4]	465.9	93	464.0	93	459.2	97	470.1	97	478.5	96
DAYS OF IEA NET IMPORTS [5]	-	147	-	145	-	139	-	143	-	-

1 End September 1993 stock level based on preliminary data.
2 End September 1993 forward demand figures are IEA Secretariat forecasts.
3 Data not available for Iceland.
4 May not add due to rounding.
5 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions. Net exporting IEA countries are excluded.

Table 6
STOCKS ON LAND IN OECD COUNTRIES

	Millions of Metric Tons			Days of Forward Demand[3]		
CLOSING STOCKS	Total[1]	Government[2] controlled	Companies	Total[1]	Government[2] controlled	Companies
Q484	440	105	334	95	23	72
Q185	415	106	309	100	25	74
Q285	422	108	314	98	25	73
Q385	420	115	304	93	25	67
Q485	429	118	311	93	25	67
Q186	416	113	303	94	25	68
Q286	428	114	315	96	25	71
Q386	454	115	338	98	25	73
Q486	444	118	326	94	25	69
Q187	429	119	310	97	27	70
Q287	432	120	312	95	26	68
Q387	453	122	331	96	26	70
Q487	457	126	331	95	26	68
Q188	440	129	311	98	29	69
Q288	454	129	325	98	28	70
Q388	462	129	332	92	26	66
Q488	451	132	319	92	27	65
Q189	445	134	311	97	29	67
Q289	453	134	319	97	29	68
Q389	466	136	331	93	27	66
Q489	456	136	319	93	28	65
Q190	466	138	328	99	29	70
Q290	477	139	338	98	29	69
Q390	478	139	339	100	29	71
Q490	469	138	330	96	28	68
Q191	461	136	324	98	29	69
Q291	464	136	327	98	29	69
Q391	477	137	340	96	28	68
Q491	466	139	328	94	28	66
Q192	454	141	314	96	30	67
Q292	460	141	319	95	29	66
Q392	466	141	325	93	28	65
Q492	464	144	320	93	29	64
Q193	459	145	314	97	31	66
Q293	470	146	324	97	30	67
Q393	478	146	332	96	30	67

1 May not add due to rounding.
2 Includes government-owned stocks and entity stocks held for emergency purposes.
3 Days of forward demand calculated using actual demand except in 1993 (when latest forecast is used).

Table 7

AVERAGE IEA CIF CRUDE COST AND SPOT CRUDE AND PRODUCT PRICES ($/bbl)

	1991	1992	1993	4Q92	1Q93	2Q93	3Q93	4Q93	Jul93	Aug93	Sep93	Oct93	Nov93	Dec93
Crude Oil Prices														
IEA CIF Average Import	19.30	18.49	N.A.	18.76	17.41	17.53	15.86	N.A.	16.24	15.77	15.53	15.68	N.A.	N.A.
FOB Spot														
Brent (Dated)	19.99	19.30	17.00	19.18	18.21	18.23	16.49	15.08	16.78	16.70	15.99	16.50	15.17	13.56
WTI (1st month)	21.53	20.54	18.44	20.46	19.81	19.76	17.78	16.42	17.86	17.98	17.50	18.11	16.66	14.49
Dubai (1st month)	16.53	17.18	14.93	17.14	15.85	15.93	14.37	13.56	14.18	14.75	14.18	14.75	13.75	12.18
Product Prices 1														
Rotterdam														
Premium 0.15 g/l	28.37	25.31	22.45	24.38	23.12	24.42	22.59	19.67	23.18	22.87	21.73	21.75	20.07	17.19
Regular Unleaded	26.57	23.75	20.70	23.16	21.72	22.82	20.33	17.91	20.78	20.75	19.46	19.87	18.25	15.62
Naphtha	23.71	20.93	18.47	20.93	19.76	20.14	17.66	16.33	18.35	17.77	16.88	17.72	16.68	14.59
Jet/Kerosene	28.07	24.90	23.37	25.82	24.24	23.72	22.41	23.10	22.09	22.38	22.75	24.42	23.63	21.27
Gasoil	26.96	23.76	22.28	24.20	22.90	23.26	21.54	21.39	21.51	21.39	21.73	22.76	21.95	19.47
Fuel Oil 1.0%S	14.22	14.26	13.50	15.01	14.58	14.67	13.13	11.62	13.90	12.94	12.54	12.92	11.46	10.48
Fuel Oil 3.5%S	12.27	12.90	10.22	14.25	11.27	10.95	9.35	9.30	9.03	9.48	9.53	9.83	9.69	8.38
Gross Product Worth 2	24.63	22.11	20.27	22.25	21.03	21.46	19.81	18.76	20.03	19.84	19.57	20.28	19.14	16.87
NY Harbour														
Premium Unleaded 92	29.27	26.44	23.34	25.91	23.52	25.69	24.00	20.14	23.96	25.15	22.90	22.98	20.02	17.42
Regular Unleaded 87	27.54	24.57	21.58	23.98	22.33	23.91	21.53	18.55	21.77	22.35	20.46	21.13	18.66	15.86
Jet/Kerosene	26.65	24.88	23.33	25.03	24.34	23.91	22.34	22.72	21.81	21.93	23.28	24.81	23.54	19.83
No.2 (Heating Oil)	25.56	24.00	22.04	24.38	23.41	22.74	21.33	20.65	20.91	21.29	21.80	22.61	21.11	18.23
Fuel Oil 1.0%S	15.02	15.31	14.63	16.46	15.26	15.87	14.28	13.11	14.69	13.78	14.38	14.73	12.75	11.84
Fuel Oil 3.5%S	11.42	12.34	11.21	14.42	11.91	12.17	10.93	9.83	10.83	11.16	10.79	10.57	9.83	9.09
Gross Product Worth 3	23.91	22.30	20.16	21.97	20.79	22.26	19.83	17.76	19.81	20.16	19.53	19.95	17.94	15.41
Singapore														
Regular 0.15 g/l	28.63	26.56	24.01	25.96	24.66	26.59	23.28	21.51	22.78	23.75	23.29	23.38	22.11	19.03
Naphtha	22.84	20.24	17.22	19.36	18.45	19.24	16.38	14.80	17.69	16.64	14.81	15.90	15.16	13.36
Jet/Kerosene	28.29	25.39	24.42	26.15	25.55	25.29	22.77	24.07	22.96	22.59	22.77	25.08	24.74	22.39
Gasoil	28.20	25.12	24.02	25.83	24.97	25.27	22.91	22.92	22.83	22.75	23.14	24.26	23.42	21.09
LSWR (0.3%S)	15.16	14.72	14.90	16.21	16.17	19.16	13.53	10.74	14.10	13.39	13.12	12.90	10.79	8.54
HSFO (3.5%S 180cst)	14.10	13.44	11.83	14.07	12.69	13.23	11.37	10.04	10.65	11.67	11.80	11.45	9.58	9.07
Gross Product Worth 4	20.06	18.45	17.17	18.98	18.24	18.94	16.16	15.32	16.29	16.21	15.99	16.66	15.47	13.84

1 Product prices are converted to $/bbl using following conversion factors.
Rotterdam: 8.35 bbl/MT for premium leaded gasoline, 8.46 bbl/MT for regular unleaded gasoline, 8.82 bbl/MT for naphtha, 7.88 bbl/MT for jet fuel, 7.46 bbl/MT for gasoil, 6.49 bbl/MT for 1.0% LSFO and 6.31 bbl/MT for 3.5% HSFO.
Singapore: 6.46 bbl/MT for 3.5% HSFO.
2 Calculated using Brent cracking yield of a refinery in North West Europe.
3 Calculated using Brent cracking yield of a refinery in US Gulf Coast.
4 Calculated using Dubai hydroskimming yield of a refinery in Singapore.

Table 8

END USER PRICES FOR PETROLEUM PRODUCTS[1]
December 1993

	National Currency						US Dollars					
			%ch Prev.Month		%ch Year Ago				%ch Prev.Month		%ch Year Ago	
	Price	Tax	Price	Excl.Tax	Price	Excl.Tax	Price	Excl.Tax	Price	Excl.Tax	Price	Excl.Tax
GASOLINE[2] Price per Litre												
France	5.540	4.443	-1.2	-5.2	6.3	-5.6	0.947	0.187	-0.2	-4.1	-2.0	-13.0
Germany	1.293	0.989	-3.0	-10.3	-1.6	-8.7	0.756	0.178	-3.6	-10.6	-9.1	-15.6
Italy	1585.0	1213.3	-2.6	-8.7	2.1	-5.5	0.938	0.220	-3.8	-9.8	-14.8	-21.1
Spain	107.1	74.5	-1.2	-3.4	7.3	4.2	0.762	0.232	-3.4	-5.7	-13.7	-16.2
UK	0.530	0.385	-1.7	-5.2	3.5	-8.2	0.790	0.216	-1.0	-4.4	-0.6	-11.8
Japan	121	58	0.0	0.0	-2.4	-4.5	1.103	0.574	-1.7	-1.7	10.2	7.7
Canada	0.494	0.260	-2.3	-4.1	-9.0	-5.3	0.371	0.175	-3.4	-5.4	-13.1	-9.8
USA[3]	0.283	0.087	-3.7	-5.3	-5.7	-8.0	0.283	0.196	-3.7	-5.3	-5.7	-8.0
AUTOMOTIVE DIESEL[4] Price per Litre												
France	3.267	2.037	-0.6	-1.6	11.7	-0.8	0.559	0.211	0.5	0.0	2.9	-8.3
Germany	0.929	0.544	0.2	0.5	1.2	2.9	0.543	0.225	-0.4	0.0	-6.5	-5.1
Italy	1042.02	676.04	-1.7	-4.8	6.2	2.8	0.617	0.217	-3.0	-6.1	-11.4	-13.9
Spain	72.93	40.30	0.3	0.8	8.1	8.1	0.519	0.232	-1.9	-1.7	-13.1	-13.1
UK	0.416	0.251	-1.4	-3.5	5.0	-1.8	0.621	0.246	-0.8	-3.1	0.8	-5.7
Japan	80	34	11.1	-0.2	5.3	-8.2	0.729	0.418	9.1	-2.1	18.9	3.7
Canada	0.518	0.214	-0.6	0.7	-1.5	7.0	0.389	0.228	-1.8	-0.9	-6.0	1.8
USA	..	..	..	..	..	..	..	..	..	..	..	..
DOMESTIC HEATING OIL Price per 1000 Litres												
France	2112.5	807.5	-1.4	-1.9	3.6	1.0	361.2	223.1	-0.3	-0.8	-4.5	-6.9
Germany	458.1	139.8	0.3	0.4	2.4	1.9	267.9	186.2	-0.3	-0.2	-5.4	-5.8
Italy	1252000	875940	0.2	0.7	7.3	5.9	741.3	222.7	-1.0	-0.6	-10.4	-11.6
Spain	45800	17774	-0.2	-0.3	0.4	-5.5	326.1	199.6	-2.4	-2.5	-19.2	-23.9
UK	133.33	14.90	-0.6	-0.6	-1.4	-2.7	198.8	176.6	0.0	-0.0	-5.3	-6.6
Japan[5]	49440	1440	-1.0	-1.0	-2.2	-2.2	450.7	437.6	-2.7	-2.7	10.4	10.4
Canada	..	..	..	..	..	..	..	..	..	..	..	..
USA[6]	244.9	..	0.3	..	-5.2	..	244.9	..	0.3	..	-5.2	..
HFO FOR INDUSTRY[4,7] Price per Metric Ton												
France	541.8	151.8	-9.2	-12.4	-10.3	-16.1	92.6	66.7	-8.3	-11.5	-17.3	-22.7
Germany	173.0	30.0	-7.0	-8.3	-7.5	-8.9	101.2	83.6	-7.5	-8.9	-14.5	-15.8
Italy	224770	45000	-3.9	-4.9	-8.9	-10.9	133.1	106.4	-5.1	-6.0	-24.0	-25.6
Spain	14858	1800	-2.6	-3.0	-1.7	-2.6	105.8	93.0	-4.7	-5.1	-20.9	-21.6
UK	62.84	10.56	-4.2	-5.0	-15.4	-19.1	93.7	77.9	-3.6	-4.5	-18.7	-22.4
Japan	19776	576	-5.0	-5.0	-24.6	-24.6	180.3	175.0	-6.6	-6.6	-14.9	-14.9
Canada	..	..	..	..	..	..	..	..	..	..	..	..
USA	..	..	..	..	..	..	..	..	..	..	..	..

1 Mid Month Prices
2 Premium leaded gasoline for France, Italy, Spain, UK; regular unleaded gasoline for Canada, Germany, Japan, and USA.
3 Estimated
4 VAT excluded where it is refundable : HFO for Industry, Automotive Diesel for Industry
5 Kerosene
6 November data.
7 High sulphur fuel oil price for France, Spain, UK and Japan; low sulphur fuel oil price for Germany and Italy.

Sources and Use of Data

Supply, Demand, Stock and Refinery Activity Data

The historical data in this report are submitted in the monthly oil and gas statistics questionnaire returned by the 24 OECD countries consisting of the 23 Member countries of the International Energy Agency (IEA) and Iceland. The returns are made during the seven to eight week period following the month to which the figures relate and cover supply, demand and stock data for crude oil and individual oil products. The data are revised as necessary, and notably when more definitive annual data become available.

In addition, the governments of the IEA Member countries submit each month preliminary data to the IEA Secretariat for the three months centred on the month of submission. These figures cover crude oil production, crude oil and product imports, stocks and net supply of oil. The reports are less detailed and are based on data received by Member governments from oil companies.

The statistical material received by the Secretariat is supplemented by a variety of other sources, including industry contacts and the trade press. In addition, the Secretariat projects the world oil demand and non-OPEC supply for the time period shown in Table 1.

Price Data

Monthly average CIF crude import prices are submitted every month by IEA Member countries. Data are averaged for the total IEA Member countries using the quantity of crude imports for individual countries by weight. The spot crude and product price assessments are based on daily Platt's prices, converted where appropriate to US Dollars per barrel according to the Platt's specification of products. Graphs in the text are of daily price data, while tables in the text and Table 7 show arithmetic averages by weeks, months, quarters and years. Gross product worth and refining margins are derived from spot crude and product prices, using the Secretariat's own estimates of refinery yields, freight and other costs. End-user prices are mid-month prices submitted monthly by OECD countries. The prices are net of any rebates and usually include transportation costs to the consumer. They include all taxes to be paid by the consumer which are not refundable.

Use of Data

The data used in the report are taken from sources considered by the Secretariat to be reliable, but are inevitably of variable quality. They should therefore always be used with caution, and as indicative of *broad trends* rather than as a numerically accurate description of the world oil markets at any particular moment. In particular:

Data up to the end of last month

OECD country data

The most recent month of official statistics available from national administrations is generally the latest shown in Tables 2 and 2A. Figures beyond that period are based on the preliminary data and estimates submitted by the Member countries and are provisional and subject to revision.

Other demand and supply data

Data for non-OECD oil supply and demand are not formally reported in questionnaire format but are based on published reports by some of the respective governments and other international organisations and contain some estimates by the Secretariat. There is consequently a greater margin for error, even for past periods. Demand figures for the former USSR and China are for "apparent demand"; that is production less net oil exports. As such, they include changes in stocks, losses and volumetric gains in the refinery process.

Stocks and stock changes

Figures for stocks on land in IEA/OECD countries, including government-controlled stocks, are based primarily on reports from Member governments. Both preliminary and historical data are, however, subject to revision.

Forward projections

Forward projections of demand and non-OPEC supply are given as a guide to the overall state of the oil market. By definition they are subject to any changes in the assumptions on which they are based.