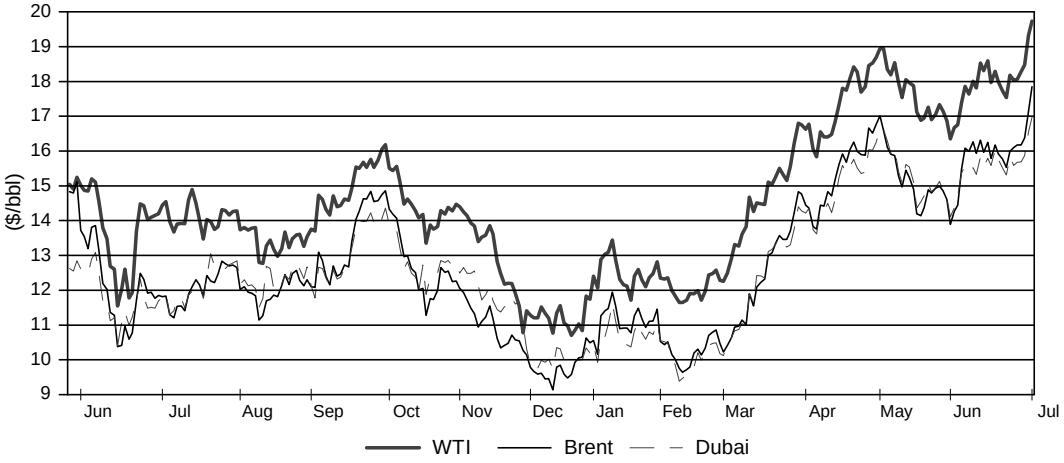
OIL PRICES AND REFINERY ACTIVITY

Summary

- **Crude oil prices** more than made up for the declines in May and have reached levels not seen since the end of 1997. Continued high levels of compliance in June with production targets by OPEC and a few non-OPEC producers and inventory drawdowns, particularly in the bellwether US markets, teamed up to bolster crude prices. Most crude prices made near-term lows on 1 June and then rose relatively steadily throughout the month, closing at monthly highs on the last day of June. The rally continued into the first two days of July, with prices of West Texas Intermediate and Brent closing higher than they had since mid-November 1997 and early-December 1997 respectively.
- In addition to the sharp upward move in crude price levels, crude differentials and crude futures prices affected market fundamentals in June. Crude price differentials moved in a tight band around $2 per barrel for WTI-Brent and a negative $1 per barrel for Dubai-Brent. The WTI-Brent differential had been as high as $3 per barrel in early May and Dubai-Brent around 50 cents per barrel, indicating reduced incentives for both transatlantic trade and for Brent-related West African and North Sea crudes going to Asia. Differentials between Brent and Asian local crudes did a round trip during June, starting the month near parity for both Tapis and Minas, rising to $2 per barrel and $1.50 per barrel premia and then returning to near parity in early July. Futures markets supported prices in physical markets, although the front end of the forward price curves for WTI and Brent were flat and further along the curves there was a mild downward slope. There also continues to be a positive gap between dated Brent prices and the first month future. Speculative interests as represented by the net positions of non-commercial traders rose to levels approaching April record highs at the end of June adding support to prices.
- **Spot product prices** also rose sharply in June, particularly gasoline prices in the US, driven again by supply problems on the West Coast and in Singapore. New York Harbour gasoil prices slightly outperformed crude, but most other product prices lagged the crude price increases. Regional differentials reversed for several products, with gasoline prices in Singapore moving above those in Rotterdam, while gasoil and high sulphur fuel oil went the other way. The flood of Russian product into Northwest Europe and the Mediterranean and even to US markets eased somewhat in June.
- **Refinery margins** in June did not improve from recently depressed levels, as crude and product prices moved more or less in tandem. Monthly average margins declined in all four major refining centres but showed some improvement over the course of the month. Voluntary and unscheduled reductions in crude runs failed to achieve the desired result of raising margins.
- **Refinery throughputs** of OECD countries in May decreased by just over 1 mb/d from April levels. OECD Pacific was responsible for the bulk of this reduction as refinery maintenance followed its normal west-to-east pattern. The average refinery utilisation rate in OECD countries was 88% in May, down 3 percentage points from the very high levels of the previous year.

Spot Crude Prices

June 1998 - July 1999



Spot Crude Oil Prices and CIF Crude Import Costs

Crude prices rallied in June as additional OPEC production cuts brought its compliance level to 91% and refineries took in higher volumes to meet seasonal demand increases despite continued weak margins in most markets. Prices were strongest in the Mediterranean and Asian markets with lower Russian exports into the Mediterranean and signs of strengthening Asian demand. Prices for most crudes reached 18-month highs by early July. Among the major crudes, the price increases between the beginning and end of June ranged from $1.67 per barrel for Indonesian Minas to $3.64 per barrel for Russian Urals. Monthly average prices increased by much less because of the relatively high prices in the first half of May, with prices generally following a "v-shaped" course through the two months, with the bottom on the first day of June.

Spot Crude Oil Prices and Differentials

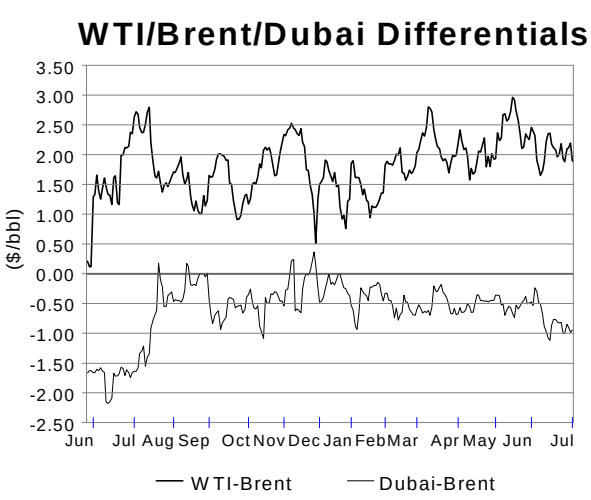
(monthly and weekly averages, $/bbl)

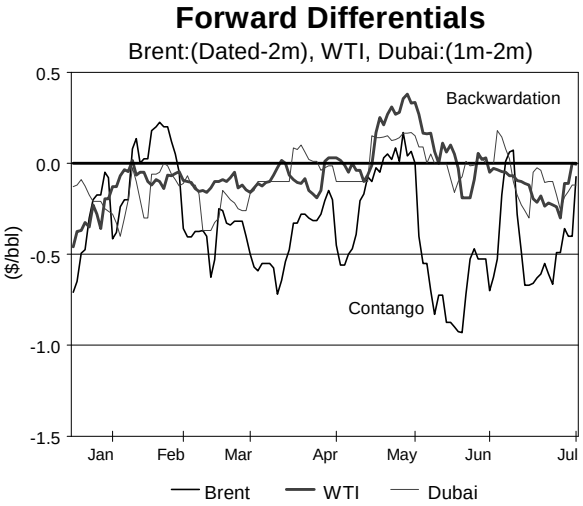
	Apr	May	Jun	*Change*	Week Ending: 28 May	04 Jun	11 Jun	18 Jun	25 Jun	02 Jul
WTI	17.34	17.68	17.90	*0.22*	17.06	16.79	17.97	18.23	17.91	18.96
Brent Dated	15.36	15.22	15.82	*0.60*	14.84	14.52	16.12	16.02	15.92	16.88
Urals (delivered Mediterranean)	14.27	14.04	14.80	*0.76*	13.88	13.39	14.88	14.99	15.06	16.16
Dubai	15.00	15.34	15.50	*0.16*	14.88	14.64	15.54	15.75	15.58	16.27
Tapis	16.29	16.63	17.05	*0.42*	16.20	15.86	16.78	17.50	17.45	17.86
Brent over Dubai	0.36	-0.12	0.32		-0.05	-0.12	0.58	0.27	0.33	0.61
WTI over Brent	1.99	2.46	2.08		2.23	2.27	1.85	2.22	1.99	2.07
Tapis over Brent	0.93	1.41	1.23		1.36	1.34	0.66	1.48	1.53	0.98
Brent 1st month minus 2nd month	0.09	-0.12	-0.13		-0.19	-0.17	-0.07	-0.16	-0.18	-0.05
WTI 1st month minus 2nd month	0.13	0.05	-0.13		-0.04	-0.04	-0.08	-0.16	-0.25	-0.06

The increases in the monthly averages shown in the table above were only around 20 cents per barrel for Dubai and West Texas Intermediate (WTI) and were under $1 per barrel for other crudes, the 76 cents per barrel rise in Russian Urals again being the largest for the major crudes. Nonetheless, by the end of the month WTI had passed $19 per barrel and dated-Brent was over $17 per barrel. A decrease in Russian crude exports into the Mediterranean market and increases in refinery purchases supported prices for Urals, Iranian Heavy and Iraqi Kirkuk. The flood of West African crude into Asia and the US eased some in June, but Latin American exports to the US Gulf kept prices from rallying further.

WTI prices gained $2.97 per barrel between the beginning and end of June, more than recovering the $2 per barrel drop in May. WTI prices continued to surge in the first few days of July, closing at $19.74 per barrel on 2 July, its highest level since 19 November 1997. There was a decrease in arbitrage cargoes coming from the North Sea and West Africa, partly because of reduced differentials between WTI and Brent (which serves as the pricing benchmark for West Africa) and partly because of lower availability due to scheduled maintenance in the North Sea and social unrest in Nigeria. The WTI-Brent differential fell by 21 cents per barrel during the month (38 cent on a monthly average basis), ending the month at $2.19 per barrel. The differential had reached $2.46 at the beginning of the month and was close to $3 per barrel in mid-May. With the lower imports and domestic production reduced by shut-ins and a very limited amount work-over activity, crude stocks have continued to fall and remain well below last year's levels (see Stocks section page 24). In contrast, low refinery margins are working to constrain US crude prices as product prices continue to trail crude prices. Sporadic refinery run cuts in the midcontinent and on the East Coast have not yet been able to push product prices up faster than crude prices.

Regionally, pipeline constraints from the Gulf Coast to the midcontinent kept WTI's premium to other US crudes relatively high: around $1.50 per barrel against West Texas Sour (WTS) and more the 50 cents per barrel relative to Light Louisiana Sweet (LLS). WTS pricing is also being negatively impacted by the return of a significant amount of Western Canadian heavy crude that had been shut in as a result of last year's price collapse. LLS had to compete with an increasing number of Latin America crudes, particularly Colombian Cuisiana and Vasconia and, unusually, Argentine Escalante crude. There also continues to be a lot of Iraqi Basrah Light available on the Gulf Coast. Nonetheless, LLS managed a $3.11 per barrel increase in June, and reached $19.22 per barrel on 2 July. Pipeline problems of a different sort affected West Coast crude supplies. The explosion of a products pipeline in Washington state (see Downstream Developments at the back of this section) has restricted refinery operations as far south as San Francisco. This along with earlier refinery problems has caused diversion of some Alaskan crude into export markets and led to some shut-ins on the Alaskan North Slope (see Supply section page 12).





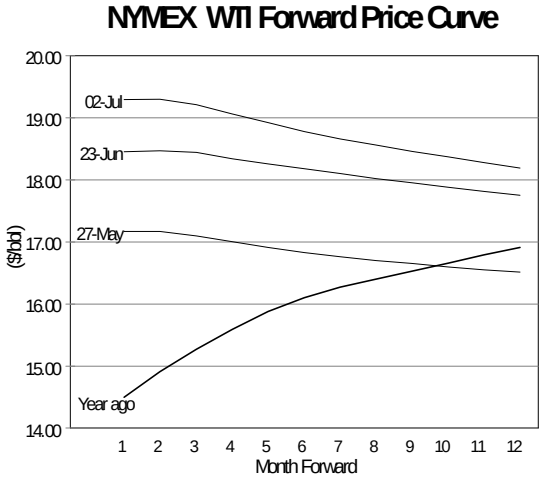
Dated-Brent prices increased more strongly than WTI, advancing by $3.24 per barrel during the month and 60 cents per barrel on a monthly average basis. Prices jumped from $14 per barrel to $16 per barrel in the first few days of the month, aided by speculative buying by a trader, and then oscillated around that level until the end of the month and into early July, when prices shot up to almost $18 per barrel. The closing price on 2 July of $17.85 per barrel was the highest since 8 December 1997. The return of a number of refineries from maintenance in Northwest Europe increased demand for North Sea crudes at the same time scheduled platform maintenance at North Sea fields was reducing supplies. The sharper rise in Brent prices compressed the differential between Brent and WTI and reduced the incentive for transatlantic arbitrage. The differential tightened to as little as $1.65 per barrel on 8 June, a level seen only a couple of times since January. North Sea field maintenance over the next few months should support Brent prices, but product demand in Northwest Europe continues to be unimpressive and refinery margins have reflected this. This places considerable importance on export outlets for the North Sea crude, where there is active competition from Brent-related **West African** crudes. The price of Nigerian Forcados crude rose by even more than Brent, $3.33 per barrel, almost reaching parity at $17.84 per barrel on 2 July. A combination of unplanned outages due to Nigerian social unrest and production cuts agreed to with other OPEC members and a few others have constrained export volumes. At the same time, demand for Nigerian crudes has remained high in Asia, particularly in India.

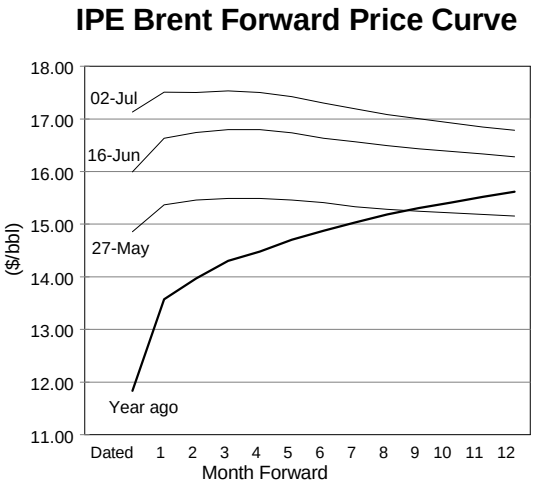
The strongest of the crude markets in June was the Mediterranean. Russian **Urals** and **Iranian Heavy** prices increased by $3.64 per barrel and $3.61 per barrel, with Urals at $17.17 per barrel and Iranian Heavy at $16.11 per barrel on 2 July. The key driver of the June price increases was a reduction in Russian crude exports, although the return of Mediterranean area refiners from maintenance helped firm demand for crude. The negative impact of the unexpectedly smooth roll-over of the Iraqi "oil-for-food" programme was ameliorated somewhat by the movement of Iraqi crude out of the Mediterranean to the US Gulf Coast. Still, refinery margins in the Mediterranean are very low and product imports, especially from Middle East refineries, are keeping product prices from rising. Similarly, low margins in the Persian Gulf are restraining local crude runs and pushing more Persian Gulf crude into Asian markets, offsetting some of the OPEC production cuts. For instance, some Abu Dhabi crude has been shipped atypically to India. Nonetheless, the major factor for prices of Middle East crude remains crude price differentials in export markets, especially Asia.

The Dubai-Brent differential traded in a range between negative 24 cents per barrel and negative $1.12 per barrel, with the month average declining by 44 cents per barrel compared to May. **Dubai** prices increased by the least of any of the major crudes, both on a monthly average (only +0.16 per barrel) and between the beginning and end of the month (+$2.43 per barrel). By 2 July the Dubai price had risen to $16.97 per barrel. **Oman**i crude traded at a premium to Dubai for most of the month, but finished at parity as the impact of reduced Chinese imports began to be felt. Chinese refiners had cut runs because of waning domestic demand.

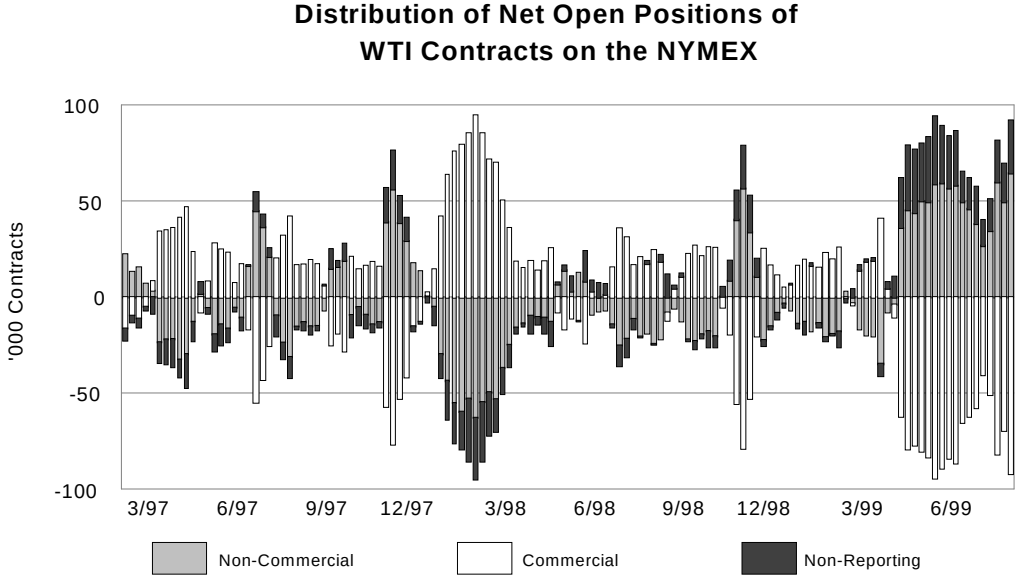
In other Asian markets, India continued to take West African crudes in addition to atypical cargoes of Abu Dhabi crude. Prices of local crudes Malaysian **Tapis** and Indonesian **Minas** did a round-trip relative to Brent, with differentials rising to mid-month premiums of $2 per barrel and $1.50 per barrel before

returning to near parity in early July. Uncertainty over the availability of Chinese Daqing exports to Japan continued to help push up Minas prices, but the Chinese run cuts are seen as releasing more Daqing for export. Consequently, Minas prices grew by much less than Dubai prices through the month, $1.67 per barrel compared to $2.43 per barrel for Dubai. Tapis prices advanced by $2.00 per barrel (+42 cents per barrel on a monthly average basis) as a result of demand for high quality crude by several of the recovering economies in the region. The most recent prices for Tapis and Minas (for 2 July) were $18.50 per barrel and $17.83 per barrel.





Forward price curves for WTI and Brent, shown in the two graphs above shifted upward, while maintaining about the same shape. For WTI the first two months were equal and the slope for the third through the twelve month sloped down a bit more than in mid-June or late May. These curves are in stark contrast to the steep upward slope of the forward price curve a year ago. The Brent curve has evolved similarly with the additional feature of the positive differential between the first month futures price and the dated-Brent price. That differential was almost $2 last year and has declined to about 20 cents per barrel. Futures prices continue to be supported by strong interest by non-commercial traders. As shown in the graph below, after falling below 50,000 contracts at the beginning of June, the net long position of non-commercial and non-reporting traders has again risen above 90,000 contracts, approaching the record 94,000 contracts held in early May.



The preliminary weighted average **CIF crude import cost** into IEA member countries in April averaged $14.42 per barrel, up $2.64 from the March levels. This represents a second consecutive monthly price increase after declines in 10 of the previous 16 months. Prices increased substantially across all major import centres, with the largest CIF increase coming in IEA North America. CIF import prices for IEA Europe, North America and the Pacific in May increased by $2.60, $2.74 and $2.58 respectively. Higher spot crude prices in May spread quickly to higher CIF prices in all major import centres.

Weighted-Average CIF[1] Crude Import Cost by Area

$/bbl

	Total IEA	IEA Europe	IEA North America	IEA Pacific
Nov 98	11.36	10.65	11.06	13.54
Dec 98	10.24	9.66	9.40	12.85
Jan 99	10.61	10.77	10.08	11.16
Feb 99	10.42	10.28	9.96	11.53
Mar 99*	11.78	11.96	11.74	11.46
Apr 99*	14.42	14.56	14.48	14.04

* estimated
1 cost, insurance and freight

Spot Product Prices in June

Higher crude oil prices provided the spark that ignited the product market in June. Product prices increased across all markets and major refining centres. They resumed an upward track from what now appears as a minor correction that took place in May. Weekly product prices rebounded over the course of the month, reaching annual peaks at month end. Monthly price increases ranged from $1.69 per barrel for heavy fuel oil in Rotterdam, $1.55 and $1.01 for jet/kerosene in York Harbour and Singapore respectively to $1.23 for gasoil in the Mediterranean

Gasoline and naphtha lagged behind other monthly product price increases in all four major refining centres. On a monthly basis, gasoline averaged less than a 1% per barrel increase in all markets and actually declined by 8 cents per barrel in Singapore. Naphtha also increased by less than 1% per barrel, declining 18 cents per barrel in Rotterdam. The extent of these increases is surprising given significant reductions in crude runs and increased gasoline demand associated with the peak driving season in North America. Monthly averages, however, distort what happened over the course of the month.

On a month-to-month average basis, New York Harbour regular unleaded gasoline prices increased by $2.82 per barrel. Singapore outpaced New York Harbour with a $3.95 per barrel increase. Rotterdam and the Mediterranean followed suit with $2.76 and $3.03 per barrel increases respectively. Prices clearly tracked lower in the first part of the month and rebounded sharply towards the end of the month. The story is similar for Naphtha where European prices increased by $3.10 and $3.27 per barrel in Rotterdam and the Mediterranean. Reforming margins improved somewhat over the previous lows achieved in May. The gasoline-naphtha differential, however, appears mired in the unprofitable $1.50 to $2.00 range.

Jet fuel prices faired better in all markets. Prices increased 3% to 8% on an average monthly basis. On a weekly basis, New York Harbour jet fuel prices increased $3.15 per barrel over the course of the month. Gasoil prices experienced significant gains in the Mediterranean, and to a lesser extent, in Rotterdam and Singapore. Heavy fuel oil prices increase in Rotterdam by 15%, the percentage average monthly increase of all products.

On a monthly average basis, the heavier ends outperformed the lighter products across all markets, with fuel oil and gasoil leading the way in Europe. The light products, however, recovered the most over the course of the month with gasoline establishing new 12 month annual highs.

Americas

Product prices in the US generally moved in tandem with higher crude oil prices. Increased seasonal demand for gasoline, unscheduled refinery outages, pipeline ruptures and cuts in crude runs combined to prop up prices in all major markets. Crude runs fell by another 180 kb/d in May causing utilisation rates to hover in the 92% range. Higher product prices have not translated into significantly improved product margins for many US refiners. New York Harbour and US Gulf Coast product prices recovered from the correction that took place in May and most product prices ended the month of June at 12 month highs. Kerosene showed the single largest average monthly price increase followed by 1% fuel oil and heating oil.

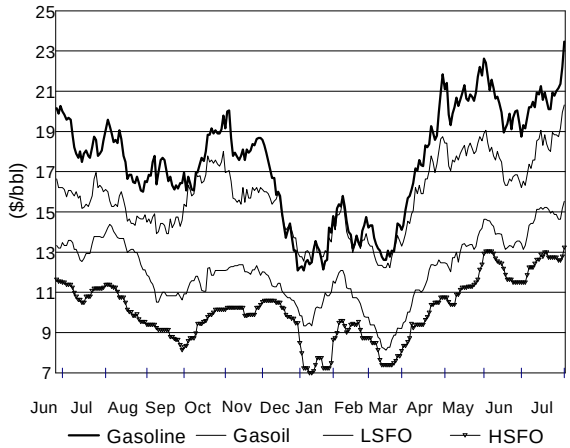
Spot Product Prices

(monthly and weekly averages, $/bbl)

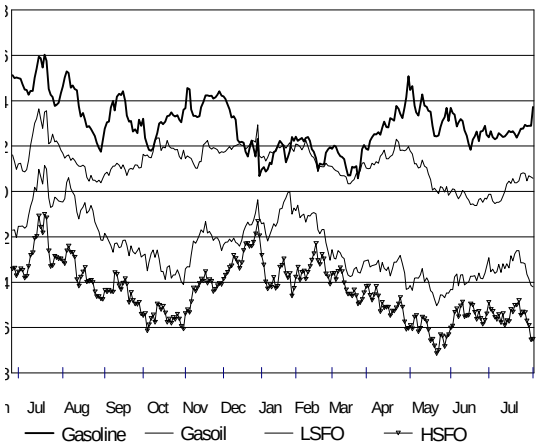
	Apr	May	Jun	*Jun-May*	*%-Chg*	Week Ending 04 Jun	11 Jun	18 Jun	25 Jun	02 Jul	Apr	May	Jun
Rotterdam, Barges FOB											***Differential to Brent***		
Premium 0.15 g/l	20.01	20.01	20.20	*0.19*	*0.9%*	18.83	20.08	20.63	20.34	21.59	4.65	4.80	4.39
Regular Unleaded	18.32	18.20	18.26	*0.07*	*0.4%*	16.92	17.99	18.63	18.51	19.75	2.96	2.98	2.44
Naphtha	15.45	17.36	17.18	*-0.18*	*-1.0%*	15.62	16.44	17.64	17.89	18.72	0.10	2.15	1.36
Jet/Kerosene	19.40	18.61	19.12	*0.51*	*2.8%*	17.27	18.68	19.85	19.63	20.51	4.04	3.40	3.30
Gasoil	17.37	16.26	16.84	*0.58*	*3.6%*	15.21	16.24	17.62	17.37	18.16	2.01	1.04	1.03
Fuel Oil 1.0%S	11.76	12.65	12.81	*0.16*	*1.3%*	11.94	12.10	13.24	13.53	13.46	-3.60	-2.56	-3.01
Fuel Oil 3.5%S	11.14	10.93	12.62	*1.69*	*15.4%*	10.65	11.85	13.62	13.68	13.24	-4.22	-4.29	-3.20
Mediterranean - Basis Italy, Cargoes FOB											***Differential to Urals***		
Premium 0.15 g/l	19.81	20.08	20.40	*0.33*	*1.6%*	18.86	20.36	20.96	20.44	21.89	5.54	6.03	5.60
Naphtha	14.36	16.23	16.24	*0.01*	*0.1%*	14.60	15.43	16.70	17.03	17.87	0.09	2.19	1.44
Jet/Kerosene	18.40	16.71	17.35	*0.63*	*3.8%*	15.28	16.71	17.97	18.01	19.34	4.13	2.67	2.54
Gasoil	15.56	14.75	15.98	*1.23*	*8.3%*	14.14	15.38	16.75	16.68	17.24	1.29	0.71	1.17
Fuel Oil 1.0%S	10.92	11.67	12.09	*0.42*	*3.6%*	11.02	11.40	12.48	12.73	12.98	-3.34	-2.38	-2.72
Fuel Oil 3.5%S	10.33	9.98	10.74	*0.75*	*7.5%*	9.11	9.81	11.41	11.70	11.77	-3.93	-4.06	-4.07
NY Harbour, Barges											***Differential to WTI***		
Premium Unleaded 93	22.99	22.76	22.81	*0.05*	*0.2%*	21.70	23.02	23.12	22.65	24.14	5.65	5.08	4.91
Regular Unleaded 87	20.77	20.42	20.49	*0.07*	*0.4%*	19.23	20.41	20.83	20.59	22.05	3.43	2.74	2.59
Jet/Kerosene	18.92	17.92	19.47	*1.55*	*8.7%*	17.82	19.20	19.83	19.94	20.97	1.58	0.24	1.57
No.2 (Heating Oil)	18.01	17.40	18.09	*0.70*	*4.0%*	16.49	17.65	18.65	18.55	19.54	0.67	-0.28	0.19
Fuel Oil 1.0%S (Cargo)	13.08	13.83	14.63	*0.79*	*5.7%*	13.41	14.59	15.19	14.96	14.99	-4.26	-3.85	-3.27
Fuel Oil 3.0%S (Cargo)	11.12	12.26	12.44	*0.19*	*1.5%*	11.57	12.35	12.85	12.72	12.79	-6.22	-5.42	-5.46
Singapore, Cargoes											***Differential to Dubai***		
Gasoline Unleaded 95	19.75	18.58	18.49	*-0.08*	*-0.5%*	16.41	17.28	19.10	19.80	20.36	4.76	3.24	2.99
Naphtha	16.22	17.42	17.68	*0.25*	*1.5%*	16.39	17.49	18.42	17.83	18.45	1.23	2.08	2.18
Jet/Kerosene	19.31	17.81	18.82	*1.01*	*5.6%*	17.39	18.71	19.33	19.29	19.63	4.32	2.47	3.32
Gasoil	16.75	16.99	17.19	*0.20*	*1.2%*	16.67	16.86	17.79	17.47	17.13	1.75	1.65	1.69
LSWR (0.3%S)	13.15	14.02	14.17	*0.15*	*1.1%*	13.51	14.22	14.56	14.30	14.23	-1.84	-1.32	-1.33
HSFO (3.5%S 180cst)	12.83	13.53	13.45	*-0.08*	*-0.6%*	13.09	13.67	13.68	13.31	13.57	-2.17	-1.81	-2.05
HSFO (3.5%S 380cst)	12.07	12.80	12.80	*0.01*	*0.0%*	12.47	13.07	13.00	12.61	12.93	-2.92	-2.54	-2.70

Monthly average **gasoline** prices rose by less than 1% in June, cutting the differential to WTI to just under $2.60 per barrel for regular. Prices recovered over the course of the month with a big surge at month end. When all was said and done, gasoline prices resumed their upward trend in June, overlooking the correction that took place in May. Arbitrage opportunities existed for gasoline imports from Europe and Latin America to the US East and Gulf coasts. Some European cargoes were diverted to the US West Coast as refinery problems, and now a product pipeline rupture, continue to plague this region. The Olympic pipeline, which supplies products to the Pacific Northwest, was damaged by fire on June 10 and is not expected to return to full capacity until the end of July. The peak driving season will draw down gasoline stocks and cuts in crude runs will tighten the market further.

New York Harbour Product Prices



New York Harbour Product Spread to WTI



The **kerosene** market on the West Coast continued to show strength as crude runs are limited by refinery problems. The void on the West Coast was filled by cargoes from Asia and the US Gulf. Monthly average prices for **jet fuel** at New York Harbour increased by just under 9%. Jet fuel firmed on the East Coast as limited supply from the Colonial Pipeline forced traders to move into the spot market.

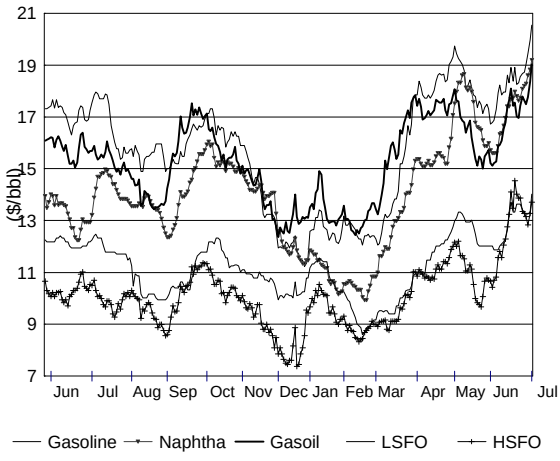
With the end of the heating season, tight European inventories forced Russian fuel oil to seek US markets. These transatlantic flows ebbed over the course of the month as European demand strengthened, especially in the Mediterranean. Continued hydrocracker problems at Chevron's San Francisco refinery caused low-sulphur vacuum gasoil (VGO) purchases from the US Gulf Coast. Consequently, June **gasoil** prices increased by 4% over May levels and left prices 19 cents per barrel above crude compared with a discount of 28 cents in May. Fuel oils continued their upward movement. Monthly average **low sulphur fuel oil** prices (LSFO) rose by 5.7% and **high sulphur fuel oil** (HSFO) by 1.5% in June. Both advanced against WTI, with LSFO gaining 58 cents on the month.

Spot gasoline differentials between New York and Rotterdam stood at over $2.20 per barrel for most of June, making transatlantic arbitrage attractive. Jet fuel was slightly more expensive in New York than Rotterdam for most of the month. Low sulphur fuel oil differentials between the two markets traded mostly in the $1.50 range per barrel in favour of Rotterdam. The high sulphur fuel oil differential traded at a 92 cents premium in New York at the start of the month but closed out the month at a 45 cents discount to Rotterdam.

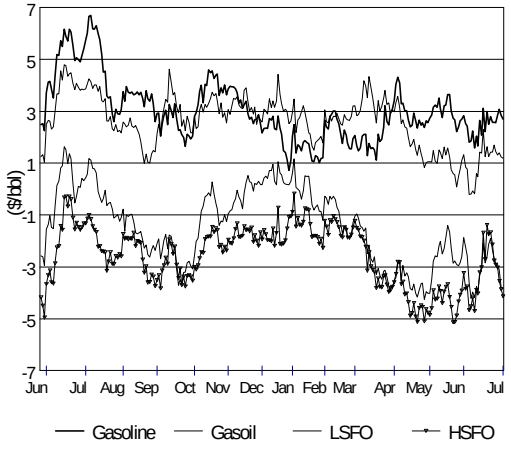
Europe

Refinery run cuts are starting to lift European product prices. **Fuel oil** has led the rally in product prices. Prices have surged on strong demand for Mediterranean Bunker and NW European electric utility demand. **Diesel** fuel availability in Northwest Europe was particularly hard hit by refinery cuts. **Gasoline** prices soared at the end of the month, undermining transatlantic arbitrage opportunities. Although European markets have recently been flooded with Russian product imports, a number of buyers were left scrambling to cover their physical positions at month end. The increase in product prices, unfortunately, has yet to work its way into improved refining margins. The good news is that product prices moved in concert with crude oil prices and that refinery run cuts started working off the huge product overhang.

Rotterdam Product Prices



Rotterdam Product Spreads to Brent

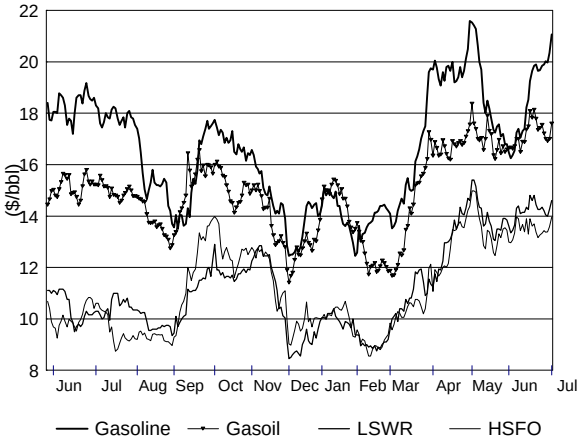


Rotterdam and Mediterranean product prices followed similar trends over the course of the month. They both started the month on a down cycle and ended the month of June at 12 month period highs. Fuel oil was the big winner in average monthly product prices, gaining some 15.4% and 7.5% for heavy product in Rotterdam and the Mediterranean respectively. **Gasoi**l prices reflected strength in southern Europe, increasing 8.3% over May levels. Stronger European demand for **jet fuel** strengthened prices in both markets despite NATO cancelling **kerosene** tenders now that the intense air conflict over the Balkans has abated. **Naphtha** showed the least resiliency followed by gasoline prices. Gasoline prices, however, rebounded in the last part of the month as cuts in crude runs shortened the market.

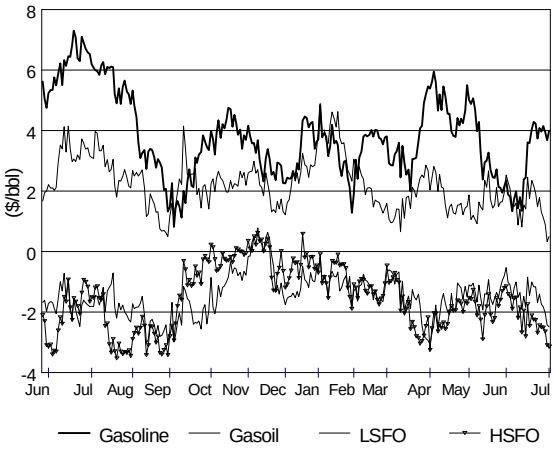
Asia-Pacific

Refinery maintenance, improving regional demand and voluntary cuts in crude runs resulted in month-on-month increases in most oil products across Asia. Generally, product prices tracked crude oil prices to their highest annual levels. **Jet fuel** prices faired particular well, increasing 5.6% in Singapore over the course of the month. Indonesia, India and the US West Coast in particular supported **kerosene** demand. Asian **naphtha** prices rose by a mere 1.5% and the prices of heavier fuels, **high sulphur fuel oil** (HSFO) and **low sulphur waxy residue** (LSWR) stagnated. **Gasoline** prices were buoyed later in the month by demand from Japan and the US West Coast. Uncertainty over China's potential ban on **fuel oil** exports created uncertainty in this segment of the market. Gasoil prices rose by a modest 1.2% on the back of strong electricity demand in south Korea. Although cuts in refinery runs are starting to have their desired effect on product stocks, warnings persist that Asian refiners may have to cut further in support of refinery margins.

Singapore Product Prices



Singapore Product Spreads to Dubai



End-User Product Prices

June lacked any consistent pattern in mid-month end-user product price changes. **Gasoline** prices increased in some markets, notably the US and Germany, and receded in the UK and Canada. US gasoline prices reflected increased end-user demand and ongoing refinery problems, especially on the West Coast. **Diesel** price changes in June were similarly mixed. Prices in Germany increased by nearly 5%, while declining in Italy by almost 2%. Domestic **heating oil** prices mirrored the diesel trend, up 6% in Germany, down by over 4% in the UK. In a similar fashion, **industrial fuel oil** prices increased by more than 9% in France, while declining in all other European countries. On balance, Germany experienced the highest level of end-user product price increases. It would appear that refinery run cuts are starting to have an effect on end-user product prices.

Mid-Month End-User Product Price Changes
June 1999 versus May 1999
Local Currency Including Taxes

	Gasoline[1]	Automotive Diesel[3]	Domestic Heating Oil	HFO for Industry[5]
US	-2.5%[2]	- 0.4%[2]	n.a.	n.a.
Canada	1.8%	0.2%	n.a.	n.a.
France	0.4%	0.0%	0.0%	9.1%
Germany	2.7%	4.7%	6.0%	-1.3%
Italy	-0.3%	-1.8%	-1.1%	0.0%
Spain	0.8%	-1.3%	0.4%	-3.7%
UK	-0.4%	-0.3%	-4.1%	-3.4%
Japan	0.0%	0.0%	0.0%[4]	0.0%

1 premium leaded gasoline for France, Italy, Spain, the UK; regular unleaded gasoline for Canada, Germany, Japan and the US
2 estimated
3 VAT excluded where it is refundable: Heavy Fuel Oil for Industry, Automotive Diesel for Industry
4 kerosene
5 high sulphur fuel oil price for France, Spain, the UK and Japan; low sulphur fuel oil price for Germany and Italy - details are shown in Table 9 at the back of the Report

Refining Margins in June

June refining margins remained relatively steady from the previous month as crude and product prices moved in tandem, but at historically low levels. Margins in all four refining centres declined with the US Gulf Coast experiencing the steepest declines. Hydroskimming margins hovered in negative territory while cracking margins yielded some positive, albeit still quite disappointing, results. Reductions in throughput failed to achieve their desired effect on margins as high levels of product imports, particularly from Russia, prevented product stocks from falling in line with run cuts.

Margins in **Northwest Europe** remained relatively flat in June despite reductions in crude runs. As calculated in this Report, average monthly Brent hydroskimming margins declined by 7 cents per barrel to a negative $1 per barrel. Following a similar pattern, Brent cracking margins declined by 8 cents per barrel to a negative 2 cents per barrel. The positive news for refiners is that both sets of margins improved on a forward weekly basis. Meanwhile, refiners in the **Mediterranean** enjoyed better margins than their Northwest European counterparts, reflecting continued weakness in Russian Urals and Iraqi Kirkuk crude prices relative to Brent. The June monthly averages remained essentially unchanged at -$0.18 per barrel for hydroskimming and $0.84 per barrel for cracking. Nonetheless, with the declines in the second half of May, monthly average Mediterranean margins deteriorated in June.

US Gulf Coast cracking margins averaged just under $1 per barrel for Brent and were slightly negative for WTI in June, reductions of 6 cents per barrel each over the previous month. WTI cracking margins reflected the ongoing tightness in the mid-continent market constrained by pipeline capacity. Positive news for refiners came from week-to-week improvements in both WTI and Brent margins, ending the month at $0.22 and $1.28 per barrel respectively.

Singapore margins followed a similar trend to the other markets in June. Hydroskimming margins declined by 5 cents per barrel, averaging a negative 52 cents per barrel. Cracking margins declined by 7 cents per barrel, averaging a 59 cents per barrel. Both hydroskimming and cracking margins deteriorated over the course of the month, reflecting stronger crude prices associated with Middle East production cuts.

For the purposes of this Report, refining margins are calculated on the basis of an "average"refinery running a "typical" crude slate in a specific refining centre. Consequently, reported margins serve only as a proxy of profitability for a given refining centre. No attempt is made to model, or otherwise comment upon, the relative economics of specific refineries running unique crude slates producing custom product slates.

Refining Margins in Major Refining Centres
(monthly and weekly averages, $/bbl)

	Apr	May	Jun	*Change*	Week Ending: 28 May	04 Jun	11 Jun	18 Jun	25 Jun	02 Jul
NW Europe										
Brent (Hydroskimming)	-1.09	-0.92	-1.00	*-0.07*	-1.30	-1.20	-1.78	-0.56	-0.63	-0.88
Brent (Cracking)	-0.03	0.05	-0.02	*-0.08*	-0.38	-0.28	-0.73	0.43	0.27	0.18
Mediterranean										
Urals (Hydroskimming)	-0.21	-0.11	-0.18	*-0.06*	-0.73	-0.34	-0.87	0.24	0.21	-0.29
Urals (Cracking)	0.80	0.90	0.84	*-0.06*	0.24	+0.63	0.24	1.28	1.15	0.79
US Gulf Coast										
Brent (Cracking)	1.74	1.40	0.98	*-0.41*	1.23	1.10	0.48	1.07	1.12	1.28
WTI (Cracking)	1.01	0.12	-0.04	*-0.16*	0.12	-0.09	-0.27	-0.09	0.14	0.22
Singapore										
Dubai (Hydroskimming)	-0.28	-0.47	-0.52	*-0.05*	-0.43	-0.40	-0.70	-0.36	-0.39	-0.91
Dubai (Cracking)	1.04	0.66	0.59	*-0.07*	0.48	0.47	0.13	0.86	0.96	0.40

OECD Refinery Throughputs in May

Aggregate refinery throughputs of **OECD** countries in May decreased by 1.04 mb/d from April levels. Crude throughputs in Europe and the US decreased by similar amounts of about 180 kb/d while Pacific OECD countries decreased by 900 kb/d. Among member countries, Canada posted the largest gain, at 210 kb/d, while Korea recorded the largest decline, at 470 kb/d. Preliminary data suggest that refinery utilisation rates in OECD countries averaged 88% in May, a decline of 3.0 percentage points from the previous year.

North American throughputs increased slightly by 41 kb/d from April to 17.5 mb/d. The size of this increase is atypical as North American refiners usually increase crude runs substantially over the summer months to meet higher gasoline consumption. US throughput, in particular, declined by 180 kb/d. The US Gulf and West Coasts were subject to a number of unscheduled maintenance problems which help to explain the unseasonal 93% US utilisation rate. Canadian throughput increased by 210 kb/d to 1.4 mb/d while Mexican throughput remained relatively unchanged at 1.1 mb/d.

Refinery Crude Throughputs and Utilisation in OECD Countries

	million barrels per day					*change from May 98*		utilisation rate[2]	
	Jan	Feb	Mar	Apr	May[1]	*mb/d*	%	May 99	May 98
OECD Europe[3]	14.19	13.65	13.54	13.50	13.32	-0.381	97.2	91.2%	93.8%
France	1.77	1.67	1.58	1.70	1.82	-0.098	94.9	104.7%	110.4%
Germany	2.26	2.18	2.22	2.04	2.06	-0.169	92.4	91.2%	98.7%
Italy	1.93	1.73	1.64	1.74	1.78	0.085	105.0	87.8%	83.7%
Netherlands	1.19	1.14	1.13	1.17	1.16	0.047	104.2	95.9%	92.0%
Spain	1.28	1.25	1.23	1.24	1.23	0.094	108.2	96.8%	89.5%
UK	1.83	1.84	1.78	1.63	1.58	-0.227	87.4	90.7%	103.7%
US	14.64	14.59	14.66	15.19	15.01	-0.243	98.4	92.7%	96.8%
Canada	1.52	1.44	1.49	1.20	1.40	0.087	106.6	76.0%	71.3%
Mexico	1.24	1.17	1.17	1.11	1.11	-0.204	84.5	71.7%	84.9%
Japan	4.44	4.57	4.42	4.29	3.88	0.221	106.0	72.2%	68.6%
Korea	2.53	2.52	2.50	2.46	1.99	-0.324	86.0	80.8%	93.9%
Australia/New Zealand	0.85	0.87	0.81	0.83	0.82	-0.046	94.7	98.7%	104.3%
OECD Total[4]	39.41	38.81	38.58	38.58	37.54	-0.891	97.7	87.6%	90.6%

1 estimate
2 based on crude throughput and current operable refining capacity
3 includes Czech Republic, Hungary and Poland
4 includes Czech Republic, Hungary, Poland, Mexico and Korea

Estimated May throughputs for **European** OECD countries decreased slightly by 180 kb/d to 13.32 mb/d. Following normal seasonal patterns, throughputs declined in most countries except Germany, Italy and France. France posted an increase in May of 120 kb/d. Overall, European throughput levels were down 381 kb/d from the previous year and the utilisation rate decreased by 2.6 percentage points to 91%.

Pacific thoughputs declined by 900 kb/d. Japanese throughputs averaged 3.9 mb/d, a decrease of 410 kb/d from April levels. Korean thoughputs declined by 472 mb/d in May to average 1.99 mb/d. These declines are in line with seasonal patterns. May Japanese and Korean utilisation rates were 72% and 81% respectively, significantly below average OECD utilisation levels.

Refinery throughputs in **June** are thought to have decreased in Japan but to have increased in Europe and the US. US weekly statistics suggest that US throughput levels averaged 15.1 mb/d for the week ending 25 June.

Downstream Industry Developments

The tide of mega-merger in the oil industry is still going strong. In a surprise development, TotalFina made a tender offer for French sister company Elf Aquitaine on 5 July, offering to swap four shares of TotalFina stock for every three Elf shares in a deal worth over $40 billion. This came just a few days after the official start of the new company TotalFina and Elf's losing out to Norsk Hydro in its attempt to acquire Saga Petroleum of Norway. If realized, the merger would create the world's fourth largest oil company after the pending Exxon-Mobil, R/D Shell and pending BP Amoco-Arco. Regulatory approvals are myriad with approval needed from several French Government agencies and the French Government still holds a "golden share" in the two formerly Government-owned oil companies. The merger offers some interesting geographical diversity.

Amid continuing retail sales competition and heavy losses in the last financial year, Japan's Showa Shell, a subsidiary of Royal/Dutch Shell, signed a 10-year product distribution agreement with Esso Sekiyu and General Sekiyu (two companies in the Esso group in Japan). The three companies will supply each other with gasoline and middle distillates from their refineries and storage facilities. The companies aim to reduce distribution costs through the tie-up.

Indian Oil Corporation (IOC) and Abu Dhabi National Oil Company (ADNOC) were reportedly having talks regarding a grassroots refinery in southern India. The plant would be built at Nagapatnam in the southern Indian state of Tamil Nadu, with a capacity of 180 kb/d. IOC and ADNOC would each hold a 26% stake. In 1998, India imported a 86 kb/d of crude from Abu Dhabi, most of which was Upper Zakum grade. Meanwhile, Oman Oil was reportedly in talks to buy a stake in Essar Oil's Vadinar refinery. Essar Oil needs a partner to complete its half-built 200 kb/d refinery. Oman's crude exports to India have been insignificant, with most of the regional interest in Omani crude coming from China.

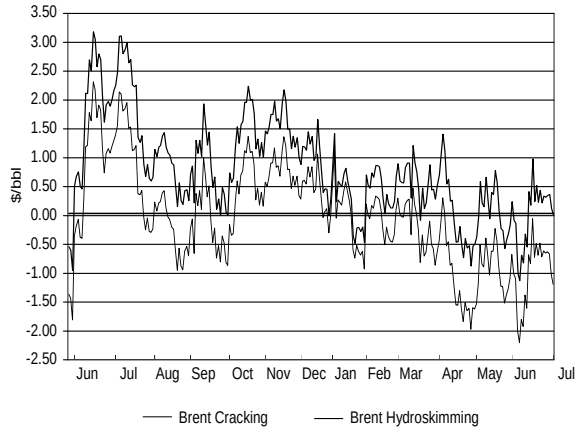
Iraq reportedly completed repairs to the Basra refinery, which was damaged by bombings last December. The plant is currently running at 140 kb/d. It was also reported that Iraq completed a new 10 kb/d topping refinery, which would be commissioned within the next few months.

On 10 June, Olympic Pipe Line's product pipeline exploded near Bellingham, Washington, killing three people. The line leaked around 100,000 to 300,000 gallons of gasoline and the spilled fuel ignited. Areas of fuel-soaked ground burned for several days. The company shut down the northern half of the line, which shipped products from the refineries in Ferndale, Washington. The line is expected to be out of service until the end of July and is affecting transportation patterns on the West Coast. For instance, Tosco's Avon refinery will be slower incoming back onstream because of inability to move product up into Washington State.

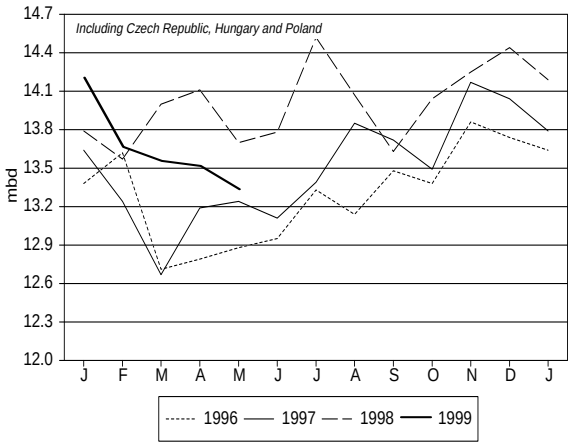
Equilon Enterprises LLC, a refining and marketing joint venture in the US between Shell Oil Co. and Texaco Inc., signed letters of intent to sell two of its refineries. Clark USA Inc. plans to buy Equilon's 290 kb/d plant in Wood River, Illinois, while Frontier Oil Corp. will purchase the 110 kb/d El Dorado refinery in Kansas. In addition, Equilon signed a letter of intent with Clark USA to purchase Clark's 12 product terminals in the Midwest US. The deals represent the very different strategies of the two companies. Equilon is shifting its focus from refining to marketing, while Clark USA is doing the opposite.

Mexico's state-owned Pemex reopened bidding for revamps of two refineries at Tula in the state of Hidalgo, and Salamanca in Guanajuato, after it had voided the original bidding round due to a lack of competitive offers. The deadline for bidding is set for the end of July and a final decision is expected to be announced in late August.

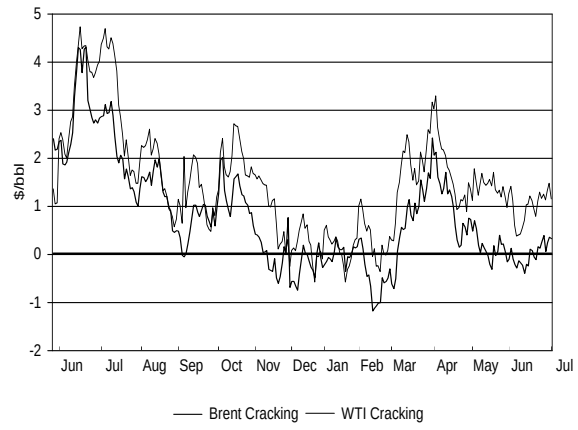
Rotterdam Refining Margins



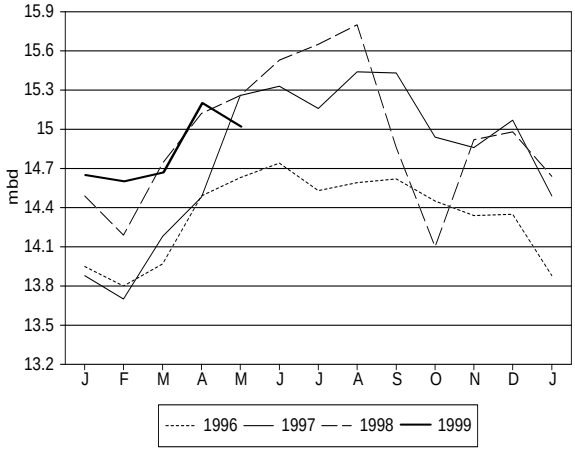
OECD Europe Crude Throughputs



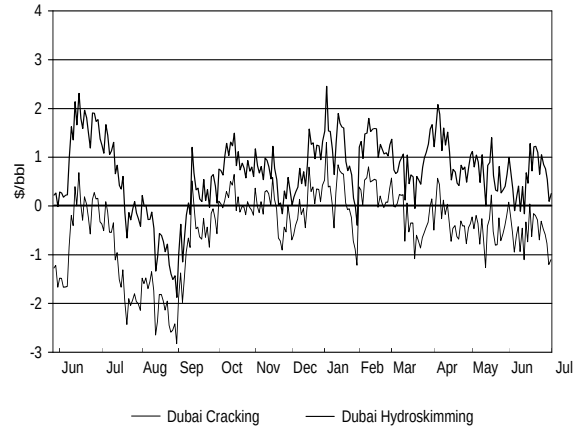
US Gulf Refining Margins



US Crude Throughputs



Singapore Refining Margins



Japan Crude Throughputs