



HORNSBY & COMPANY, INC.

www.hornsbyco.com

Energy Risk  
Management Services

---

International Petroleum Analysis

July 19, 2007

## World Petroleum Perspectives Monthly Review and Outlook

### Summary

Since our last report, the prompt NYMEX crude oil contract has risen by some \$6.00 per barrel. As we have anticipated, crude oil has assumed relative price leadership at the expense of products. In the visible U.S. market traders and funds realize that the odds now favor gasoline inventories to be adequate for the summer driving season. At the same time, stock declines in PAD II combined with the expectation of further total U.S. crude inventory declines as refinery runs recover have helped account for the gains. In addition, large managed funds have continued to increase their net length, compounding the price move. An added feature at the margin has been the IEA, who continues to warn that if OPEC does not raise output in the second half of the year the market will witness an unprecedented decline in global crude oil stocks. In examining the latest IEA outlook, however, the burden of proof is clearly on the IEA. Given the relatively tepid rate of growth in world oil demand in the first half of the year, the Agency's forecast implies a major acceleration in demand growth for the remainder of 2007, which shows no signs of materializing.

On the supply front, we continue to believe that if the crude oil is needed, OPEC, particularly Saudi Arabia, will supply incremental barrels, but refiners simply do not need the crude at this time. Stocks are in surplus in the United States and more than ample in Japan. While European crude oil inventories have declined, weakening refining margins have led to lower runs and a reduction in requirements. Nonetheless, at the present time the market remains in a bullish mode. With regard to our own outlook, we have made little revision to our balances from our last report, and by year end we anticipate the global stock position to reflect more ample products and reduced crude supplies. For the year as a whole, we anticipate a minimal net stock change. In terms of price, because of the willingness of funds to continue to buy despite record net length, it would appear that third quarter WTI will average somewhat above our Base Case. For the fourth quarter, however, at this point we see no reason for revision, and anticipate an average for the period under \$70.00 per barrel.

---

+ World oil demand in 2008 is expected to gain by 1.1%, or some 945 MB/D.

+ Non-OPEC supply next year is forecast to increase by only 780 MB/D.

+ WTI is expected to average about \$60.00 per barrel in 2008, marginally lower than our estimate for 2007.

---

## Viewpoint

Since the publication of our last monthly report, the prompt NYMEX crude oil contract has risen by some \$6.00 per barrel, from \$69.00 to around \$75.00 per barrel.

As we have long anticipated, crude oil has assumed relative price leadership during the summer at the expense of refined products, particularly gasoline.

In the visible and influential U.S. market traders and funds now realize that the odds favor gasoline inventories to be adequate for the summer driving season, despite the slow recovery of refinery operations.

At the same time, crude oil inventory declines in PAD II combined with the expectation of a further total U.S. crude inventory erosion as refinery runs recover have helped account for the gains. This expectation is embedded in the market despite the fact that U.S. crude oil stocks continue to lie at the highest levels this decade.

In addition, since our last report large managed funds have continued to increase their net length, compounding the price move. For example, from June 26 through July 19 through July 10, large CFTC-reporting managed funds increased their futures-only net length by 45,123 contracts, corresponding to a \$5.04 per barrel price gain.

Looking at the fund influence over a broader time period, from February 20 through July 10, actively-managed, CFTC-reporting net length increased by a full 104,425 contracts.

Over the same time period the prompt NYMEX crude contract rose from \$58.07 per barrel to \$72.81 per barrel, a gain of \$14.74 per barrel. This implies a \$1.41 per barrel rise in price for each 10,000 contract gain in net length, falling within the parameters established last year when the overall relationships were quite strong.

An added feature at the margin encouraging some buying has been the IEA, who continues to warn that if OPEC does not raise output in the second half of the year the market will witness an unprecedented decline in global oil stocks during the third quarter.

In reviewing the latest IEA outlook, however, the burden of proof is clearly on the IEA, as it has been all year. Given the relatively weak rate of growth in world oil demand in the first half of the year, the Agency's forecast implies a major acceleration in demand growth for the remainder of 2007, which clearly shows no signs of materializing at this point.

Specifically, the IEA is looking for third quarter world oil demand to rise by 2.5%, followed by a gain in the fourth quarter of 2.9%. In contrast, by almost any measurement first half world oil demand has increased by an average of less than 1.0%.

On the supply front, we continue to believe that if the crude oil is needed, OPEC, particularly Saudi Arabia, will supply incremental barrels, but refiners simply do not need the crude at this time.

Stocks are in surplus in the United States and more than ample in Japan. While European crude oil inventories have declined, weakening refining margins have led to lower runs and a reduction in requirements, and do not reflect any shortages.

Despite underlying global fundamentals, at the present time the market clearly remains in a bullish mode. With regard to our own Base Case balances, we have made little revision to our forecast from our last report. By year end we expect the global stock profile to reflect more ample products and lower crude in inventory compared to current positions. For 2007 as a whole, we anticipate minimal net stock change.

With regard to price, because of the willingness of funds to continue to increase length despite a record such position, it appears that third quarter WTI will average somewhat above our Base Case at about \$69.00 per barrel. For the fourth quarter, however, at this point we see no reason for revision, and anticipate an average for the period under \$70.00 per barrel.

## Global Oil Demand

For 2007, we anticipate that world oil demand will increase by 1.0%, or about 855 MB/D, marking a modest downward revision from our last report due largely to weak second quarter demand in OECD Europe. Total OECD demand is expected to gain minimally this year, more than offset by increases in China, India, OPEC, and other non-OECD countries.

In terms of 2008, we are looking for a rise in global demand of 1.1%, or some 945 MB/D, largely reflecting the assumption of normal first quarter weather and a modest positive consumer response to lower prices. This view is unchanged from our previous assessment.

### United States

Despite the fact that the Department of Energy will likely continue to substantially revise down implied U.S. refined product demand, we believe that U.S. oil demand growth will come in this year at an increase of 1.2%, or about 235 MB/D.

This outlook for the year as whole compares to reported, preliminary year-to-date gains of only 1.6%. Our implied second half acceleration largely reflects the assumption of normal fourth quarter weather.

With regard to gasoline the consensus, particularly Wall Street, continues to accept the weekly data at face value and assumes no demand elasticity whatsoever to higher prices.

However, as discussed previously the revised data reveal that exports, largely to Mexico, have been increasing, thus reducing implied domestic demand from the weekly preliminaries where exports are simply extrapolated from previous and lower estimates.

Also, the data from the Department of Transportation clearly reveal that the U.S. consumer *has* responded to higher prices, since total miles driven have declined thus far this year through April. This implies that miles

driven per vehicle have fallen even more, assuming that registrations continue to rise.

Longer term, even assuming gasoline prices decline in 2008, any recovery in miles driven per vehicle should eventually be offset by a small improvement in average fleet fuel efficiency, after calculating the turnover away from large SUVs.

As such, even assuming normal first quarter weather boosting heating oil demand in 2008, we anticipate that total U.S. refined product demand will gain by only 0.5%, or about 110 MB/D.

### Europe

Preliminary second quarter demand estimates for OECD Europe came in even weaker than we had assumed. The decline in gasoline demand virtually across all major countries appears to have accelerated, although clearly the data may be subject to revision.

At the other end of the barrel, heavy fuel oil demand remains quite weak, adversely impacted by ongoing alternative fuel substitution, particularly in France and Italy.

In the middle, German consumers continue to draw on their own heating oil stocks accumulated last fall, and therefore reduce the need for deliveries at the primary level.

Despite the fact that May was warmer than normal, thus reducing heating requirements in any event, the fact that German consumers still retain 53% of their inventory suggests weakness in implied gasoil demand will continue.

For 2007 as a whole, we forecast OECD oil demand to decline by 1.5%, or some 180 MB/D versus last year, a modest downward revision from last month. For next year we are looking for OECD Europe oil demand to fall once again, but by only 0.4%, or about 40-45 MB/D.

## Japan and South Korea

Japan oil demand continues weak, with preliminary data revealing a second quarter decline on the order of 2.0%. Most products impacted the fall, with gasoline continuing weak reflecting conservation, the move to smaller autos and the maturation of the population.

Relatively mild temperatures reduced the demand for kerosene, while heavy fuel oil demand was also adversely impacted by ongoing alternative fuel substitution.

The recent earthquake brings into play the likelihood that in the second half of the year heavy fuel oil demand may steady or even recover modestly as a result of the shutdown of nuclear facilities. We estimate that incremental heavy fuel oil demand as a result of the move could rise by 200 MB/D, which would be at least partially offset by ongoing substitution elsewhere.

We have taken this impact into account, and for 2007 we estimate a decline in Japan oil demand of 1.2%, or about 60 MB/D, virtually unchanged from last month as the impact of nuclear plant shutdowns about offsets a weaker than expected second quarter. For next year we are looking for Japan oil demand to decline once again, but by only 0.5%, or some 25 MB/D as the pace of substitution is expected to moderate.

Once again South Korea lies in contrast to Japan, with second quarter estimated oil demand positively impacted by relatively strong gains in gasoline and naphtha demand as petrochemical feedstock, and to a lesser extent by increases from the middle and bottom of the barrel.

We might expect some moderation in diesel demand growth over the next few months, however, in response to the recent diesel fuel tax hike. For 2007 we anticipate South Korea oil demand to increase by 2.4%, or about 45 MB/D, with a slight moderation in 2008 demand growth to 2.3%.

## Non-OECD

Recent economic data out of China continue to paint a robust picture, which continues to translate into higher implied oil demand. Relatively strong consumption growth has been experienced virtually across the entire barrel, with particular strength lying with naphtha as petrochemical feedstock, jet and kerosene demand as well as other products such as lubes closely linked to real GDP.

For 2007 we anticipate China implied demand to increase by 4.5%, or some 275 MB/D, while next year moderating to a gain of 4.1%.

Elsewhere, India oil demand remains relatively strong thus far this year, although demand faltered in May versus the prior year based on preliminary data.

We suspect, however, that the adverse comparisons for the month relative to strength for the previous four months of 2007 may reflect stock building in May of 2006, particularly those products most sensitive to economic growth. Of a more lasting nature may be current declines in naphtha demand due to the long-expected rise in natural gas availability.

Elsewhere, as discussed in previous reports OPEC oil demand continues to register among the strongest rates of growth within the non-OECD group of countries, with our outlook expecting a rise in demand for OPEC members in the aggregate to reach almost 6.0% this year, with a similar forecast gain for 2008. Within OPEC, low double-digit rates of oil demand growth realized by Arabian Gulf countries is partially offset by declines in Indonesia.

For the non-OECD group overall, we expect oil demand to increase by 1.9%, or about 725 MB/D this year. For 2008 we anticipate a gain in oil demand exceeding 2.0%, or some 795 MB/D, largely reflecting a moderation in oil demand declines in Indonesia and other non-OECD Asian countries such as Thailand and Taiwan.

## Non-OPEC

As we have fully anticipated, the IEA has reduced its expectations for 2007 non-OPEC supply growth ever since the beginning of the year. Taking the Agency's latest estimates into account, the IEA has cut its outlook for this year literally in half since their January report.

Whereas for most of the year their 2007 non-OPEC supply growth has exceeded our own, it now falls well below our forecast at +600 MB/D due to major cuts for North America and Europe for the second half of the year reflecting a "methodology change".

However, we see no need to modify our view, and we expect non-OPEC supply to increase this year by 930 MB/D. Recent data generally tend to support our view, with pluses and minuses made to estimates for Europe and Latin America.

The largest single increase in supply is accounted for by the FSU, as one would expect, at +670+ MB/D, or some 72% of our forecast total. Canada and Brazil together account for another +205 MB/D or 22% of our total rise. The remaining 6% reflects increases in Africa and Asia, modestly offsetting declines elsewhere, largely Mexico and the North Sea.

For 2008, we anticipate a rise in non-OPEC supply of 780 MB/D, marking a deceleration from this year's expectations and once again lying below the IEA estimate of +1.0 MMB/D.

We expect that FSU supply growth will moderate to 525 MB/D next year, with declines continuing in Mexico and the North Sea. Production in both Brazil and Canada is expected to continue to rise, although at more moderate rates compared to our expectations for 2007.

## OPEC and Inventory

Our customary table below lays out our estimates of OPEC "10" production for

## Global Oil Supply

August, reflecting little change from July. The IEA, the U.S. government and most analysts continue to point to OPEC production "restraint", but knowing the commercial world as we do OPEC's stagnant production levels reflect a lack of incremental refiner crude oil needs thus far this summer.

<b>OPEC "10"</b>			
<b>Targeted Qatar "Quotas"</b>			
<b>v.</b>			
<b>Estimated August Production</b>			
<b>(MB/D)</b>			
	<b>"Quota"</b>	<b>Production</b>	<b>Prod. Vs. "Quota"</b>
Algeria	1,316	1,340	+24
Indonesia	844	850	+6
Iran	3,699	3,720	+21
Kuwait	2,410	2,450	+40
Libya	1,651	1,730	+79
Nigeria	2,105	2,015	-90
Qatar	798	800	+2
S. Arabia	8,707	8,600	-107
UAE	2,467	2,495	+28
Venezuela	2,408	2,410	+2
<b>Total</b>	<b>26,405</b>	<b>26,410</b>	<b>+5</b>

OECD crude oil inventories stand at the highest levels this decade. The United States is in clear surplus as a result of extended refinery downtime. Crude stocks in Japan are ample.

Inventories are now lower in Europe, but this reflects the refiners' concerted efforts to work down stocks anticipating run cutbacks in response to declining refining margins.

We would urge the consensus to listen to Saudi oil minister Ali Naimi when he stated recently that there is no incremental need in the market right now, and Saudi Aramco is not willing to float cargoes without buyers.

Later in the year and as our balances reflect, we expect the demand for, and the supply of, Saudi crude oil to rise from current levels, thus avoiding the unprecedented third

quarter stock draw that the IEA has been worried about.

Otherwise, we see no change in Iraq, and second quarter production turned out to average even less than we had assumed. Angola continues to rise broadly on track. Putting the demand and supply side together for 2007, we anticipate little net global stock change for the year.

Year end usable commercial inventories are expected to stand at about the same level as end 2006 on a days supply basis, with more products and less crude in storage relative to the current position.

For 2008, with once again little net stock change for the year, our balances suggest that OPEC “10” crude oil deliveries will average about 26.853 MMB/D, marking a mere 40 MB/D increase from our estimate for 2007.

The minimal gain reflects rising Angolan production and our assumption that Iraq production will increase marginally from 2007, although we concede that if we are wrong production is likely to be lower rather than higher.

The seasonality within our outlook suggests that first quarter Saudi deliveries will decline to average only 8.2 MMB/D, some 400 MB/D lower than the first quarter of this year.

Our call last autumn for lower first quarter Saudi nominations was on the mark, and we envision an even deeper reduction for the first quarter of 2008 before recovering back to 9.0 MMB/D in the second half of next year.

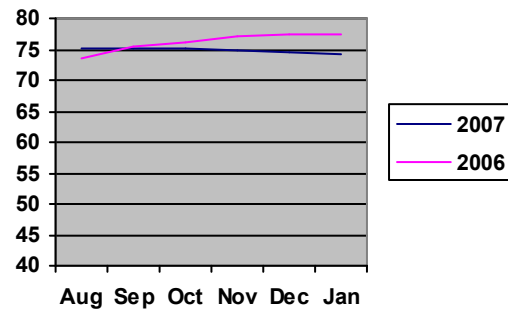
### Implications for Price

As we issue this report, the prompt NYMEX crude oil contract is attempting to stabilize above \$75.00 per barrel. As previously discussed, recent data reveal that large funds that report to the CFTC hold the largest net long position in history.

This is not to say that these funds cannot increase their net length. There is unlimited open interest on the NYMEX and, it would appear, unlimited risk capital.

As our table below reveals, with the exception of the prompt month the market has moved into modest backwardation, which also may encourage some incremental buying by passive longs who believe there is a chance they may be able to avoid the adverse impact of the “negative roll”.

### Current Six-Month NYMEX Crude Oil Term Structure 2007 vs. 2006



However, we believe that the current “composition” of crude oil prices according to our “layered” pricing models is somewhat different this year, with a higher proportion of financial fund buying relative to underlying fundamental strength accounting for roughly the same price.

For example, once again on July 10 of this year when the prompt NYMEX crude oil contract settled at \$72.81 per barrel, CFTC-reporting managed funds held record net length totaling 112,287 contracts.

On July 11 of last year, the equivalent CFTC data point, the crude contract settled at \$74.16 per barrel, but funds held net length of only 57,766 contracts, roughly one half the current level.

Once again as we have emphasized as we look at these numbers, there is never a perfectly consistent relationship. Nonetheless, we recall last year that crude oil prices reached settlement peaks of around \$77.00 per barrel on July 14 and August 7 before declining. If there happens to be some catalyst leading funds to liquidate this time around, the velocity of the price drop could be greater.

What could possibly be a catalyst for a price decline? An Iran more amenable to nuclear negotiation and/or a recovery in Nigeria clearly could fit the requirements, but we do not sense these scenarios are likely over the near term.

Perhaps the one we have the greatest confidence in, right or wrong, is what we believe will be coming out of the IEA down the road. By any measure world oil demand rose by less than 1.0% in the first half of the year, with second quarter OECD Europe oil demand extremely weak as we discussed previously, so weather was not the only factor.

As we mentioned earlier, the latest IEA forecast implies a recovery in third and fourth quarter demand growth rates to 2.5% and 2.9%, respectively.

Although clearly anything can happen, we do not believe the IEA scenario carries a high probability, and thus down the road we would look for substantial downward demand revisions, accompanied by the Agency's acknowledgement that OPEC will supply incremental barrels as needed.

We do not believe the IEA carries much clout in the market on its own given its past track record of significant revisions virtually every month.

However, if over time traders and funds feel more comfortable with the supply situation, the IEA revisions will be used as another rationale to liquidate.

Having said this, however, the manner in which prices have moved thus far in the third quarter, essentially replicating for the time being last year's experience, suggests that our Base Case WTI outlook for the current period is likely somewhat conservative.

However, we are not inclined to extrapolate from current levels for the quarter as a whole given our concerns about the proportion of speculative money influencing prices.

On balance, we now believe a third quarter WTI average of \$69.00 per barrel is more appropriate, marginally below last year's third quarter average. For the fourth quarter, however, we are retaining our Base Case of \$63.00 per barrel.

Thus, for 2007 as a whole we expect a WTI average of a bit under \$64.00 per barrel, implying a \$1.00 per barrel upward revision from last month's report.

For 2008, at this point we see no need for revision, and we look for a \$60.00 per barrel average. Although our fundamental balances remain largely constructive relative to history, we believe that a somewhat less bullish psychology combined with an early-year exit of passive length will work the average modestly below our expectations for 2007.

**Actual and Forecast Prompt NYMEX  
Crude Oil Prices By Quarter**

	<b>2007</b>	<b>2008</b>
<b>Q1</b>	<b>\$58.24</b>	<b>\$56.00</b>
<b>Q2</b>	<b>\$64.85</b>	<b>\$64.00</b>
<b>Q3</b>	<b>\$69.00</b>	<b>\$62.00</b>
<b>Q4</b>	<b>\$63.00</b>	<b>\$58.00</b>
<b>Yr.</b>	<b>\$63.77</b>	<b>\$60.00</b>

July 19, 2007

Table 1  
OECD Oil Demand  
(Thousands of Barrels Daily)

BASE CASE 7/19/07	Q1	Q2E	Q3E	Q4E	2007E	% Chng 07/06	Q1E	Q2E	Q3E	Q4E	2008E	% Chng 08/07
<b>DEMAND</b>												
United States	20468	20800	21024	20856	20787	1.2	20668	20862	21076	20981	20897	0.5
Motor Gasoline	9028	9437	9529	9279	9318	1.0	9025	9449	9466	9260	9300	-0.2
Jet Fuel	1569	1655	1707	1699	1657	2.3	1608	1697	1749	1741	1699	2.5
Distillate	4399	4199	4189	4428	4304	3.1	4524	4192	4199	4468	4346	1.0
Residual	763	658	668	587	669	-0.1	778	672	681	598	682	2.0
Other	4709	4850	4931	4864	4839	-0.4	4733	4853	4981	4913	4870	0.6
Canada	2200	2093	2131	2092	2129	2.1	2277	2107	2154	2114	2163	1.6
Naphtha	73	72	68	77	73	1.0	74	72	69	78	73	1.0
LPG	219	271	223	137	213	1.3	217	280	225	139	215	1.3
Gasoline	731	750	814	779	769	2.2	742	762	826	791	780	1.5
Kerosene	80	79	90	80	82	1.0	81	79	91	81	83	1.0
Gasoil/Diesel	675	485	501	592	563	4.0	742	475	506	599	581	3.1
Fuel Oil	138	96	85	131	112	0.0	141	94	84	128	112	-0.8
Other	283	341	349	295	317	0.5	280	344	352	298	319	0.6
Mexico	1992	1996	2010	2026	2006	1.5	2011	2016	2030	2046	2026	1.0
United Kingdom	1518	1414	1398	1577	1477	0.0	1518	1416	1399	1580	1478	0.1
Naphtha	84	74	60	89	77	1.0	85	75	61	90	78	1.0
LPG	133	132	113	131	127	1.0	134	134	114	132	128	1.0
Gasoline	446	399	404	415	416	-2.3	437	391	396	407	408	-2.0
Kerosene	247	201	218	214	220	0.8	248	202	220	215	221	0.5
Gasoil/Diesel	364	471	460	571	467	1.0	369	477	465	578	472	1.2
Fuel Oil	147	43	37	52	70	0.7	147	43	37	52	70	0.0
Other	96	93	105	104	99	1.0	97	94	106	105	100	1.1
France	1751	1588	1802	1616	1689	-1.2	1741	1579	1792	1625	1684	-0.3
Naphtha	167	144	223	249	196	1.0	169	146	225	252	198	1.0
LPG	163	94	76	130	116	1.0	164	95	77	131	117	1.0
Gasoline	212	280	242	184	229	-3.4	207	273	236	179	224	-2.5
Kerosene	95	111	121	87	104	1.1	96	112	122	88	104	0.8
Gasoil/Diesel	955	752	935	784	856	-1.6	945	744	925	792	852	-0.5
Fuel Oil	91	92	63	81	82	-3.2	92	93	63	82	83	1.0
Other	68	115	143	100	106	0.0	69	116	143	100	107	0.5
Italy	1587	1557	1516	1514	1544	-3.1	1563	1510	1490	1487	1513	-2.0
Naphtha	68	78	47	37	57	1.0	68	78	47	38	58	1.0
LPG	147	98	104	145	123	1.0	149	99	105	146	125	1.0
Gasoline	353	323	332	307	329	-3.5	346	316	326	301	322	-2.0
Kerosene	66	73	76	63	70	1.1	67	73	77	64	70	0.8
Gasoil/Diesel	585	482	592	565	556	0.9	591	487	598	570	562	1.0
Fuel Oil	228	402	240	255	281	-13.9	201	354	211	225	248	-12.0
Other	140	102	125	142	127	0.9	141	103	126	143	128	1.0
Germany	2312	2287	2371	2543	2378	-2.8	2347	2282	2373	2544	2386	0.3
Naphtha	256	224	217	251	237	1.1	260	227	219	254	240	1.1
LPG	135	135	117	114	125	1.1	137	136	118	115	127	1.1
Gasoline	548	600	532	577	564	-3.0	539	591	524	569	556	-1.5
Kerosene	97	139	144	121	125	1.0	99	140	145	122	126	1.0
Gasoil/Diesel	1091	925	1050	1210	1069	-4.9	1124	927	1052	1213	1079	0.9
Fuel Oil	69	80	115	98	91	-1.7	70	76	116	99	90	-0.4
Other	116	184	196	171	167	0.8	117	186	198	173	168	1.0
Austria	229	216	240	292	244	-0.5	224	218	242	296	245	0.4
Belgium	438	429	398	468	433	-1.7	433	425	394	468	430	-0.7
Denmark	217	192	196	205	202	-0.3	215	190	198	209	203	0.2
Finland	224	217	215	211	217	-0.4	222	219	217	214	218	0.6
Greece	307	265	284	347	301	-1.3	304	263	281	344	298	-1.0
Iceland	12	15	25	24	19	1.5	12	16	26	25	20	2.0
Ireland	123	113	123	133	123	0.4	125	115	125	135	125	1.1
Luxembourg	51	47	46	45	47	1.5	52	48	47	46	48	2.0
Netherlands	432	406	411	414	416	-1.8	428	402	407	409	412	-1.0
Norway	189	186	192	203	193	0.8	192	188	194	205	195	1.1
Portugal	193	280	264	286	256	0.4	195	283	266	289	258	1.0
Spain	924	793	1003	937	915	-2.0	915	777	983	928	901	-1.5
Sweden	381	333	309	320	336	-1.3	378	330	306	316	332	-1.0
Switzerland	280	273	288	348	297	-0.4	275	271	282	355	296	-0.6
Turkey	576	481	635	560	563	-0.3	564	481	633	565	561	-0.3
OECD Europe	11745	11093	11717	12043	11650	-1.5	11702	11010	11656	12041	11602	-0.4
Japan	5561	4337	4331	5041	4817	-1.2	5479	4305	4332	5058	4794	-0.5
Naphtha	665	570	571	779	646	1.5	673	579	580	790	655	1.4
LPG	895	615	569	695	694	1.5	918	624	575	702	705	1.6
Gasoline	995	960	934	933	955	-1.8	975	940	924	923	941	-1.5
Kerosene	1006	448	364	646	616	1.3	1036	455	370	656	629	2.1
Gasoil/Diesel	1206	1080	1054	1280	1155	-1.3	1145	1069	1064	1293	1143	-1.0
Fuel Oil	320	315	449	319	351	-8.0	304	299	436	310	337	-3.9
Other	198	175	208	223	201	-0.3	194	174	209	225	200	-0.3
Direct Crude	277	175	181	165	199	-9.6	235	166	173	158	183	-8.0
South Korea	2137	1974	1845	1971	1982	2.4	2201	2023	1882	2001	2027	2.3
Australia	869	829	830	881	852	1.0	882	837	843	890	863	1.2
New Zealand	105	107	105	113	107	0.4	106	108	105	113	108	0.5
Total OECD	45076	43229	43992	45022	44330	0.3	45326	43268	44078	45244	44479	0.3

Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading. Hornsby & Company, Inc. and W.H. Brown may, from time to time, have positions in the futures market relative to these recommendations.

Table 2  
World Oil Demand  
(Thousands of Barrels Daily)

BASE CASE 7/19/07											% Chng	
	Q1	Q2E	Q3E	Q4E	2007E	07/06	Q1E	Q2E	Q3E	Q4E	2008E	08/07
DEMAND												
United States	20468	20800	21024	20856	20787	1.2	20668	20862	21076	20981	20897	0.5
Canada	2200	2093	2131	2092	2129	2.1	2277	2107	2154	2114	2163	1.6
Mexico	1992	1996	2010	2026	2006	1.5	2011	2016	2030	2046	2026	1.0
United Kingdom	1518	1414	1398	1577	1477	0.0	1518	1416	1399	1580	1478	0.1
France	1751	1588	1802	1616	1689	-1.2	1741	1579	1792	1625	1684	-0.3
Italy	1587	1557	1516	1514	1544	-3.1	1563	1510	1490	1487	1513	-2.0
Germany	2312	2287	2371	2543	2378	-2.8	2347	2282	2373	2544	2386	0.3
Austria	229	216	240	292	244	-0.5	224	218	242	296	245	0.4
Belgium	438	429	398	468	433	-1.7	433	425	394	468	430	-0.7
Denmark	217	192	196	205	202	-0.3	215	190	198	209	203	0.2
Finland	224	217	215	211	217	-0.4	222	219	217	214	218	0.6
Greece	307	265	284	347	301	-1.3	304	263	281	344	298	-1.0
Iceland	12	15	25	24	19	1.5	12	16	26	25	20	2.0
Ireland	123	113	123	133	123	0.4	125	115	125	135	125	1.1
Luxembourg	51	47	46	45	47	1.5	52	48	47	46	48	2.0
Netherlands	432	406	411	414	416	-1.8	428	402	407	409	412	-1.0
Norway	189	186	192	203	193	0.8	192	188	194	205	195	1.1
Portugal	193	280	264	286	256	0.4	195	283	266	289	258	1.0
Spain	924	793	1003	937	915	-2.0	915	777	983	928	901	-1.5
Sweden	381	333	309	320	336	-1.3	378	330	306	316	332	-1.0
Switzerland	280	273	288	348	297	-0.4	275	271	282	355	296	-0.6
Turkey	576	481	635	560	563	-0.3	564	481	633	565	561	-0.3
OECD Europe	11745	11093	11717	12043	11650	-1.5	11702	11010	11656	12041	11602	-0.4
Japan	5561	4337	4331	5041	4817	-1.2	5479	4305	4332	5058	4794	-0.5
South Korea	2137	1974	1845	1971	1982	2.4	2201	2023	1882	2001	2027	2.3
Australia	869	829	830	881	852	1.0	882	837	843	890	863	1.2
New Zealand	105	107	105	113	107	0.4	106	108	105	113	108	0.5
Total OECD	45076	43229	43992	45022	44330	0.3	45326	43268	44078	45244	44479	0.3
Non-OECD	37517	38765	39074	37741	38274	1.9	38267	39570	39958	38484	39070	2.1
FSU	4216	3188	3047	3781	3558	-1.4	4174	3156	3001	3705	3509	-1.4
Non-OECD Europe	2536	2383	2411	2547	2469	-0.6	2519	2367	2396	2531	2453	-0.6
China	5223	7617	7459	5268	6392	4.5	5458	7921	7758	5479	6654	4.1
OPEC	7396	6845	7294	7322	7214	5.7	7845	7247	7721	7743	7639	5.9
Argentina	484	526	507	544	515	0.1	486	528	509	546	517	0.4
Brazil	1881	2149	2209	2203	2110	0.2	1900	2138	2231	2225	2123	0.6
Other L. A.	1499	1587	1737	1816	1660	0.8	1514	1603	1771	1834	1681	1.3
Egypt	558	569	569	575	568	2.5	569	583	583	589	581	2.4
South Africa	451	484	499	510	486	2.0	460	496	509	521	496	2.1
Other Africa	1056	1101	1158	1169	1121	1.6	1075	1118	1180	1188	1140	1.7
Non-OPEC M. E.	634	621	635	639	632	2.2	653	634	648	651	647	2.3
India	2187	2181	2112	2164	2161	3.3	2230	2227	2156	2209	2206	2.1
Other Asia	4066	4148	4044	3821	4020	-0.9	4025	4135	4068	3844	4018	0.0
Int. Bunkers	2056	2073	2071	2069	2067	-0.5	2047	2070	2068	2068	2063	-0.2
Refinery F/L	3275	3294	3321	3314	3301	0.9	3311	3346	3358	3351	3341	1.2
Grand Total Demand	82593	81993	83067	82763	82604	1.0	83594	82838	84037	83728	83549	1.1

Note: Demand by country is shown on an "inland" basis, i.e., excluding bunkers and refinery fuel/loss.

Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading. Hornsby & Company, Inc. and W.H. Brown may, from time to time, have positions in the futures market relative to these recommendations.

Table 3  
World Oil Supply  
(Thousands of Barrels Daily)

BASE CASE 7/19/07												% Chng 08/07
	Q1	Q2E	Q3E	Q4E	2007E	% Chng 07/06	Q1E	Q2E	Q3E	Q4E	2008E	
Grand Total Demand	82593	81993	83067	82763	82604	1.0	83594	82838	84037	83728	83549	1.1
Inventory Change	-722	351	-36	93	-78		-812	803	-81	43	-12	
SUPPLY	81871	82344	83030	82856	82526	0.9	82782	83641	83956	83770	83537	1.2
United States	5174	5251	5273	5295	5248	2.2	5323	5317	5310	5303	5313	1.2
United Kingdom	1580	1605	1270	1491	1486	-1.1	1580	1557	1282	1446	1466	-1.3
Norway	2455	2165	2289	2392	2325	-3.1	2455	2143	2243	2344	2297	-1.2
Denmark	385	380	385	390	385	0.0	385	380	385	390	385	0.0
Netherlands	52	51	53	54	53	0.0	52	51	53	54	53	0.0
Other OECD Europe	460	460	460	460	460	0.0	460	460	460	460	460	0.0
Non-OECD Europe	305	305	305	305	305	0.0	305	305	305	305	305	0.0
Mexico	3150	3105	3100	3105	3115	-4.5	3087	3043	3038	3043	3053	-2.0
Canada	2675	2505	2740	2740	2665	5.1	2745	2745	2765	2765	2755	3.4
Argentina	670	660	665	670	666	0.6	670	670	670	670	670	0.6
Brazil	1835	1805	1900	1915	1864	4.1	1915	1920	1925	1925	1921	3.1
Colombia	520	515	515	520	518	-1.8	520	520	515	520	519	0.2
Ecuador	365	365	365	365	365	1.4	365	365	365	365	365	0.0
Peru	105	105	105	105	105	0.0	105	105	105	105	105	0.0
Trinidad & Tobago	130	130	135	130	131	5.0	130	130	135	130	131	0.0
Other L. A.	75	80	80	80	79	17.8	75	80	80	80	79	0.0
Bahrain	37	37	38	38	38	0.0	37	37	38	38	38	0.0
Oman	720	705	720	725	718	-3.8	730	725	725	730	728	1.4
Syria	400	395	405	405	401	-0.3	405	405	405	405	405	0.9
Other Middle East	365	365	365	65	290	-19.4	365	365	365	65	290	0.0
Congo	195	195	195	195	195	0.6	195	195	195	195	195	0.0
Egypt	625	630	630	635	630	-1.4	635	630	630	635	633	0.4
Gabon	265	265	265	265	265	-1.9	265	265	265	265	265	0.0
Tunisia	130	130	125	125	128	0.0	130	130	125	125	128	0.0
Other Africa	365	375	380	380	375	8.7	365	375	380	380	375	0.0
Australia	475	505	500	505	496	11.1	505	505	500	500	503	1.3
India	685	680	690	690	686	3.3	690	690	690	690	690	0.5
Malaysia	720	700	720	720	715	-3.4	720	720	720	720	720	0.7
Brunei	135	135	130	130	133	0.0	135	135	130	130	133	0.0
Other Asia/Pacific	585	605	605	610	601	2.3	610	610	615	615	613	1.9
FSU	11492	11750	11795	11584	11655	6.1	12010	12279	12326	12105	12180	4.5
China	3745	3765	3760	3750	3755	2.3	3750	3750	3750	3750	3750	-0.1
NGL	4818	4814	4864	4918	4854	1.3	4879	4876	4928	4983	4916	1.3
Ref. Gain/Other	1858	1845	1869	1862	1859	1.0	1881	1864	1891	1884	1880	1.1
Non-Conventional	1160	1165	1171	1185	1170	2.0	1189	1194	1200	1215	1199	2.5
Total Non-OPEC	48711	48548	48868	48804	48733	1.9	49667	49541	49515	49335	49514	1.6
OPEC SUPPLY	33160	33796	34163	34052	33793	-0.5	33114	34100	34441	34435	34023	0.7
OPEC NGL	1710	1750	1760	1760	1745	5.4	1765	1765	1765	1765	1765	1.1
OPEC CONDENSATE	1695	1725	1725	1725	1718	3.9	1725	1725	1725	1725	1725	0.4
OPEC CRUDE SALES	29755	30321	30678	30567	30330	-1.0	29624	30610	30951	30945	30533	0.7
Saudi Arabia	8600	8750	8875	8800	8756	-4.0	8200	8800	9000	9000	8750	-0.1
Iran	3750	3901	3893	3692	3809	1.2	3639	3705	3756	3725	3706	-2.7
Iraq	1905	2005	2025	2025	1990	3.1	2025	2025	2025	2025	2025	1.8
Kuwait	2300	2500	2525	2525	2463	2.5	2300	2525	2550	2550	2481	0.8
Qatar	800	810	810	810	808	-0.3	810	810	810	810	810	0.3
UAE	2410	2475	2475	2480	2460	0.6	2410	2450	2480	2480	2455	-0.2
Algeria	1315	1325	1325	1330	1324	-1.2	1330	1335	1335	1335	1334	0.8
Angola	1565	1615	1635	1645	1615	11.8	1645	1655	1660	1660	1655	2.5
Nigeria	2125	2005	2175	2310	2154	-5.0	2310	2350	2375	2400	2359	9.5
Libya	1700	1700	1700	1700	1700	3.4	1705	1710	1715	1715	1711	0.7
Venezuela	2415	2375	2380	2390	2390	-6.9	2390	2390	2390	2390	2390	0.0
Indonesia	870	860	860	860	863	-5.3	860	855	855	855	856	-0.7
Inventory Change	-722	351	-36	93	-78		-812	803	-81	43	-12	
Assumed Inventory Position(c)												
Days Supply of MOV	50	50	50	49	49		49	49	49	49	49	
Days Supply of UC	15	15	15	15	15		15	15	15	15	15	
Days Supply of MOV+	65	65	65	65	65		64	64	64	65	65	
Days Supply of S/C	14	14	14	14	14		14	14	14	14	14	

a) OPEC supply measured on a delivered sales basis, i.e. accounting for tanker transit and storage time lag, plus net producer stock change.

b) Includes share of Neutral Zone, shared equally.

c) MOV: Minimum Operating Volume; UC: Usable Commercial; S/C: Strategic/Compulsory.

Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading. Hornsby & Company, Inc. and W.H. Brown may, from time to time, have positions in the futures market relative to these recommendations.