

OIL AND TROUBLED ECONOMIC WATERS

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“Caught up in a whirlwind can’t catch my breath
Knee deep in hot water broke out in a cold sweat
Can’t catch a turtle in this rat race
Feels like I’m losin’ time at a breakneck pace”. “Tightrope”, a song by Stevie Ray Vaughan and Double Trouble

CONCLUSION

Petroleum prices will remain in a sideways to down trend. At least in the OECD, industry inventory in days coverage terms is currently higher than average. Due to renewed economic weakness and still relatively lofty oil prices, petroleum demand for the balance of 2011 and calendar 2012 probably will be less than many believe. Thus days coverage in the petroleum world probably will remain adequate for some time.

Petroleum remains partially hostage to variables of and trends and levels in key equity, currency, and interest rate (and other commodity) battlefields. Equity declines seem to be intertwining with those in the petroleum complex. Consumer balance sheets and incomes in the United States and many other nations remain under pressure. Substantial fiscal deficits (US, several European nations, perhaps Japan) undermine stock marketplace strength. A weak US dollar has convinced many that equities as well as petroleum prices should inevitably keep climbing, or at least stay high. However, a very (especially) weak US dollar situation- which seems to be emerging these days- may coincide with both feeble stocks and falling petroleum prices.

Petroleum bulls underline that if the economic recovery retains strength, supplies could get fairly tight unless OPEC raises its production quite a bit. Admittedly, as the Libyan situation shows, there’s always a chance that some event will significantly interrupt supplies. Some petroleum players therefore prefer to keep a handful of extra inventory around “just-in-case”. Alternative investment by noncommercial players has not evaporated. Some observers have faith that if the American economy weakens substantially, the Fed will engage in a third wave of quantitative easing (money printing) which would rally petroleum prices in nominal terms.

SUFFICIENT SUPPLIES

Days coverage measures indicate generally sufficient inventories, at least in the OECD. Take the United States marketplace as a guideline, employing Energy Information Administration (EIA) data. In days coverage terms over the 1996-2010 era, America’s overall petroleum inventories (industry only, crude and products combined) average 52.2 days at end July (inventories divided by monthly demand). For the week ending 7/29/11, coverage of 57.7 days is 5.5 days above average. The situation is not much tighter than July 2010’s 58.4 days. The record low for July was 47.0 days in 2004; 60.4 in 2009’s 60.4 days represents the crest.

Sustained high oil prices and still-wounded household balance sheets have sliced US petroleum demand. This helps to ensure adequate petroleum inventories. The most recent four weeks US consumption slid two percent versus the prior year period (with gasoline down 3.6pc). The

nation's calendar year 2011 to date total products supplied is down .8pc relative to the prior year period.

What about US days coverage looking forward? In the absence of a major supply cut from a key oil producer, they seem at least adequate. The end August average for crude and products combined is 51.3 days, with end September 53.3 days. The US average monthly days coverage, based on the entire calendar year (all calendar months combined, 1996-2010) is about 51.4 days.

According to the International Energy Agency (IEA), May 2011 OECD industry stocks equaled 58.6 days of forward coverage (IEA; 7/13/11 "Oil Market Report". 8/10/11 next issue). Though below the flood of 61 days at the end of both first and second quarter 2009 (and around the time of major lows in petroleum prices and equity marketplaces), the May 2011 levels are around four days above normal. Also, OPEC arguably prefers OECD commercial inventory levels at around 53 to 55 days.

The US is not the entire OECD, but its inventory trends probably roughly parallel those of the entire group. US end May coverage (5/27/11 week: EIA statistics) was 56.8 days. That of end June (7/1/11 week) was 56.1 days. As end July's level was about 57.7 days. Thus overall OECD industry stocks at present probably are somewhat above average, and certainly well above danger levels. European estimates (Euroilstock) tend to confirm this. Crude oil plus feedstocks at end June 2011 of 43.7 days are about four days above average, and close to the 44.7 end June 2009 record high for that month.

ENOUGH IS ENOUGH?

Some petroleum firms nowadays want to hold more inventory "just-in-case". In a variety of ways, people ponder factors such as recent Middle Eastern turmoil (and not only the Libyan supply interruption). They are concerned about the Iranian nuclear situation, fear Iraqi stability as the US reduces its military presence, worry about demonstrations in Saudi Arabian oil producing fields, observe the ongoing impasse between Israel and Palestine (United Nations may address the Palestinian statehood issue in September), and are uneasy about Nigerian supplies. Such troubling thoughts shift many away from the "just-in-time" inventory method which ruled the industry since around the mid-1990s. However, a four or five day coverage cushion relative to the 1996-2010 average probably is sufficient, and arguably rather high.

Also, the OECD of course is not the whole world. China and other developing nations may not possess as much petroleum inventory as they desire, whether in commercial or strategic stockpiles. Hence one should be cautious in regard to worldwide supply sufficiency opinions.

Alternative investment in commodities also has reduced industry days coverage ("free/readily available supply"). Gurus debate how much.

AS THE WORLD TURNS (SUPPLY/DEMAND, CONTINUED)

Let's scan the petroleum supply/demand horizon for the next year and a half. Obviously much can change, whether for the worldwide economy, OPEC production, non-OPEC output, and so on. One can choreograph numerous scenes, but picture two. The first is one of continued

moderate economic growth. The second reflects slower worldwide growth, perhaps even recessions in some key consuming nations.

First, review the more bullish scenario. The IEA forecasts (July 2011 “Oil Market Report”, Table 1) worldwide second half 2011 demand around 90.5 million barrels a day. That gives a second half 2011 call on OPEC crude oil of 31.0 million barrels per day (3Q11 call on OPEC 31.3mmbd, 4Q11 30.6mmbd). The IEA says June 2011 OPEC crude oil production is 30.0mmbd (including Iraq). Perhaps OPEC output will increase. But some secondary sources place June and July 2011 production lower. Anyway, at 30.0mmbd, there will be a one million barrel per day worldwide stock draw over second half calendar 2011 relative to 31.0mmbd demand. Assume second half 2011 equals 180 days. The 180 million barrel level equals about two days of second half global consumption.

However, reduce the 180mm barrel level to account for the IEA’s 60 million barrel release from strategic stocks (announced 6/23/11). So 120 million barrels equals a cut in days coverage of about 1.3 days ($120.0/90.5$) versus second half 2011 demand.

What about 2012? The IEA predicts calendar year demand of 91.0mmbd, about evenly split between the OECD and non-OECD nations. The call on OPEC is 30.7mmbd. Maybe Saudi Arabia will boost its output cautiously (so long as they have faith in sufficient worldwide economic growth). The monarchy and their allies want higher oil prices to sustain a spending spree aimed at ensuring a relatively content population. Though Saudi Arabia and others may increase their production relative to current levels, assume OPEC produces 30.0mmbd over this year. Inventories will drain by about 256 million barrels ($365*.7$), or about 2.8 days relative to 2012 demand.

Combine the second half and calendar year inventory draws of 376 million barrels (120mm plus 256mm). Relative to calendar year 2012 demand, that reduces inventory coverage by a bit over four days. Extend the IEA’s end May 2011 OECD inventory estimate to end June 2011; then subtract about four days ($376/91.0$). This would make OECD industry days coverage around 54.5 days at year end 2012. This would be about normal relative to long run levels. However, given just-in-case concerns and buy-and-hold investment enthusiasm (and assuming at least fair worldwide economic growth), the situation would be somewhat tight in days coverage terms.

However, an alternative and somewhat more bearish scenario probably is more likely. Note recent declines in equity benchmarks such as the S+P 500. For the United States, consumer net worth remains significantly under the pre-worldwide economic crisis heights. Consumer confidence is weak. Unemployment remains high. The real estate sector has improved little if at all in recent months. In America, Europe, and Japan, worries about fiscal deficits persist. Sustained high petroleum prices have consequences, right? American oil consumption has been edging lower. And even allowing for dollar depreciation over the past several months (or longer), oil prices remain rather elevated for non-US players. Perhaps non-OECD petroleum demand will meet current bullish forecasts. However, in the globalized economy, and especially if OECD growth slows to a trickle or declines, non-OECD petroleum consumption may increase more slowly than many predict.

Suppose worldwide demand relative to the July IEA 2011 prediction falls one percent in second half 2011 and calendar year 2012. That would reduce second half demand to around 89.6 million barrels a day ($90.5*.99$). This still would exceed first half 2011 demand of 88.7mmbd and

calendar year 2010 demand of 88.3mmbd. However, it would erode the second half call on OPEC crude oil from 31.0mmbd to 30.1mmbd. Assuming OPEC production of 30.0mmbd, there would be no significant stock draws ($180 \times .1$ is only 18mm barrels) and inventories (especially in the OECD) would remain ample. Besides, if one includes the 60 million barrel IEA strategic stock release, industry stocks may build slightly.

Imagine second half 2012 worldwide consumption fell only .5pc relative to the July IEA viewpoint. Then worldwide demand would be around 90.0mmbd, about 400mmbd less than now estimated. The call on OPEC would be about 30.6mmbd, so inventories would decline about 108mm barrels ($180 \times .6$) before factoring in the strategic stockpile release of 60mmbd. A 48mmbd drop is merely half a day of second half consumption, so end 2011 OECD inventories probably still would be more than adequate.

Suppose calendar 2012 consumption drops one percent relative to the current soothsaying. It thus falls to 90.1mmbd from 91.0mmbd. This still represents flat demand relative to the 90.0mm for second half 2011 (derived from the .5pc downward adjustment in the preceding paragraph). Thus the estimated call on OPEC crude oil for calendar 2012 would plummet from 30.7mmbd to 29.8mmbd. With production around 30.0mmbd, there would be a slight stock build. If demand slipped only .5pc lower versus the July 2011 IEA weathervane, calendar 2012 would evidence a small worldwide inventory decline. The back of the envelope math: $91.0\text{mmbd} \times .995$ is about 90.5mmbd, or down about .5mmbd. That reduces the call on OPEC from 30.7mmbd to 30.2mmbd, not far from alleged current OPEC crude oil output levels.

Are these downward revisions of one percent (or half of one percent) reasonable? Yes. Remember a couple of years ago during the worldwide economic crisis. Worldwide petroleum consumption fell in absolute terms, by one million barrels per day (about 1.2 percent), from calendar 2008 to calendar 2009.

The IEA recently decided against opening its oil floodgates again (Financial Times, 7/22/11, p22). However, its June 2011 release announcement reveals more than an effort to make up for the fall in Libyan production and a desire to give time for other OPEC members to jump up their output. As OECD inventories were at least sufficient in days coverage terms relative to long run historical levels, the dramatic IEA action displays willingness to employ inventory releases as a weapon against “too high” oil prices and inflationary trends. June’s strategic supply decision also manifests hostility to allegedly excessive noncommercial buying (whether by speculators or so-called investors). Thus a return of prices (Brent/North Sea crude oil is a good benchmark) to around their mid-spring highs could generate a further stockpile release (especially if it coincided with more signs of economic weakness). The Brent high of 6/15/11, not long before the announcement, was \$121.5 (about five or six dollars under its April 2011 pinnacles). US election year 2012 politics could encourage this policy.

THE PETROLEUM COMPLEX

Petroleum voyagers have commented on how greatly in recent months Brent/North Sea crude oil prices have exceeded NYMEX crude oil ones (WTI at Cushing, Oklahoma is the key NYMEX grade). Many factors influence this spread (including concerns about Libyan output), but the crucial reason for the substantial Brent premium derives from different supply trends. Declining European crude oil production (much of which is North Sea) contrasts with rising North American output (particularly in the central region). According to the IEA, OECD European

crude oil supply was 4.8mmbd in 2008. By 2010, it had fallen to 4.2mmbd. The estimate for both 2011 and 2012 is 4.1mmbd. North America produced 13.3mmbd in 2008, but it leaped to 14.1mmbd in 2010. The 2011 level is forecast at 14.2mmbd, with 14.4mmbd for 2012. In addition, North Sea crude is produced offshore, where storage is relatively limited; storage space in Cushing has grown substantially in the past few years.

However, important marketplace trend changes in Brent/North Sea crude oil continue to occur at or around the same time as those in NYMEX crude oil. The recent initial high in Brent (nearest futures continuation) was 4/11/11 at just over \$127 per barrel, with a second top on 4/28/11 at \$126.7. NYMEX crude (nearest futures continuation) peaked not long afterwards, on 5/2/11 at almost \$115. Incidentally, 5/2/11 was the day when Osama bin Laden was killed. Compare the time of the prior year's interim top for NYMEX crude: 5/3/10 at about \$87.2. Note also the high in the OPEC crude oil basket was 4/28/11 at \$120.9.

Moreover, highs in the key US Gulf Coast refined product benchmarks also occurred around the times of these various crude oil summits. USGC regular gasoline's high was 5/10/11 at about \$3.433 per gallon; USGC diesel's top was 4/8/11 at \$3.277 per gallon. Thus one should continue to monitor various members of the petroleum complex to confirm a trend change for the entire complex.

Several days after the IEA stockpile release announcement, these various benchmarks all floated higher around the same time in late June 2011. For example, Brent reached a low of \$102.3 on 6/27/11 (about a twenty percent fall from its April height). The OPEC crude oil basket that day reached a depth of \$101.6, with USGC regular gasoline's one a bit earlier, on 6/24/11 at \$2.564.

As many clairvoyants focus on Brent, what are some marketplace levels to watch over the near term? The 12700 highs around April obviously matter. A five percent move over this gives about 13340. Since around 12100 apparently helped to spark a petroleum release by policy sentinels, monitor this. Chartists should recall the 8/21/08 level of just under 12100, just before the acceleration of the worldwide economic crisis and major declines in petroleum and equities. The final run up in Brent to its 7/11/08 plateau of 14750 (which bordered in time the S+P 500's final peak at 1440 on 5/19/08) began from 6/5/08's 12130. Compare 2011's rapid advance to its spring peaks after breaching the 2/24/11 interim high about 11980.

A ten percent dip from 12700 gives 11430, a 20pc fall 10160, a 33pc tumble 8465. Keep in mind the 5/3/10 top about 8960 (a few months before the Federal Reserve unveiled its latest round of quantitative easing). QE2's money printing waterfall helped Brent/NSea to bottom at 7175 (8/25/10) and 8245 (11/23/10; a fifty percent rally from that is 12365).

SOME PETROLEUM COMPLEXITIES (FINANCIAL CONTEXTS)

“When large sums of money are concerned there is seldom much of personal indignation between man and man. The loss of fifty pounds or of a few hundreds may create personal wrath;- but fifty thousand require equanimity.” Anthony Trollope, “The Way We Live Now” (1875)

Petroleum trends and levels are not divorced from equity, currency, and debt marketplaces (and those of other commodities). Let's focus a moment on US equities.

In recent years, significant (especially major) trends in the petroleum complex (and commodities “in general”) have roughly tracked those of the S+P 500. Stock rallies have paralleled bull moves in petroleum. Recall the major bottom in the S+P 500 on 3/6/09, just after the major trough in the broad GSCI at 306 on 2/19/09 (Brent low 12/24/08 at 3620). Brent made lows on 8/25/11 at 7175 and 11/23/10 near 8245, as the Fed unveiled its newest money printing round. The S+P 500 made noteworthy lows on 8/27/10 at 1040 and 11/30/10 at 1174.

Bearish stock marketplaces often are discovered alongside similar collapses in oil. Thus further declines in the S+P 500 probably will occur with a bear trend in petroleum. In addition to the 2008 nosedives, compare the timing S+P 500’s interim top on 4/26/10 at 1220 with Brent’s 5/3/10 high of 8960. The S+P 500’s peak of 5/2/11 around 1371 corresponds with the April 2011 (Brent), 5/2/11 (NYMEX crude), and other highs in the petroleum complex. Compare the timing of highs in the broad GSCI on 4/11/11 and 5/2/11 around 762. See too the highs in the Goldman Sachs Agriculture Index (3/4/11 at 571; 4/8/11 at 567), the London Metal Exchange Index (base metals; 2/4/11 at 4478 and 4/8/11 at 4469), and silver (4/25/11 at 4980).

Of course a petroleum “event risk” such as a new major petroleum supply interruption could ignite a petroleum rally and accelerate a stock marketplace decline.

Quantitative easing aims to spark economic growth and repair (at least in nominal terms) consumer balance sheets. It also battles to create sufficient (but not too much) inflation. The S+P 500 advance up to the early May 2011 high significantly rebuilt household net worth, though it did not bring it back to pre-crisis levels. Indeed the stock rally played the key role in that partial restoration. But the S+P 500 has retreated since early May. Suppose the economy begins to slow substantially. What will happen to corporate profits? Anyway, suppose that equity prices sag further to reflect this economic weakness. Will consumer spending retrench further?

What are key S+P 500 levels that may induce Fed captains to embark on a new round of quantitative easing (QE3) or other creative accommodative measures? Since petroleum trends have tended to track those of equities, petroleum players should assess these probabilities. Intervention around S+P 500 near 1200 is unlikely, for the 4/26/10 top (support) of 1220 would not be decisively smashed. Since many marketplace generals define a bear marketplace as being a 20 percent decline from a peak, around 1100 in the S+P 500 (1371*.8) may inspire the Fed to ease yet again. Or, it may wait for a challenge of the summer 2010 bottoms over 1000 (7/1/10 at 1011, 8/27/10 at 1040; a 50pc rally from the 3/6/09 S+P low at 667 gives 1000).

Some refer to oil as “black gold”. To many people, gold has long been a sensible supplement to (diversification from) securities ownership. However, especially these days, gold is more “currency like” and more a “store of value” (especially as an alternative to the US dollar or as a substitute for currencies in general) than are petroleum and most other commodities.

Nevertheless, many see commodities as an asset class. In any event, net noncommercial buying (and especially buying and holding for the long run by alternative investors) has helped to rally and sustain petroleum prices. The CFTC’s Commitments of Traders data for the NYMEX petroleum complex (crude oil, heating oil, and RBOB benchmark contracts; futures and options combined) provides a window on the importance of noncommercial players. At around the time of recent crude oil peaks in Brent/NYMEX crude oil/OPEC basket, the NYMEX noncommercial gross long positions achieved all-time records. They reached about 575,000 contracts on 4/5/11,

with 570m on 4/26/11. Those two weeks also had record net long noncommercial positions; 4/5/11 had 426,000 contracts, 4/26/11 about 422m. As a percentage of total open interest, the net noncommercial long position for the NYMEX petroleum complex was about 11.5 percent each of these weeks (3/29/11 was almost 11.6pc). This percentage was the highest since June 2004.

By 6/28/11, a few days after the IEA's strategic release (and alongside lower prices), gross noncommercial longs were 438m, net longs 249m, with the net longs 7.5 pc of total open interest (a still high percentage by historical standards). As of 8/2/11, they were higher; gross noncommercial longs were 477m, net longs 286m; with net noncommercial length about 8.6pc.

Incidentally, these 2011 highs for noncommercial in the NYMEX petroleum complex exceed those reached during the 2008 petroleum top era. In 2008, as petroleum (and equity) prices collapsed, noncommercial substantially slashed their length. If petroleum prices fall dramatically, will similar noncommercial liquidation reflect (encourage) that decline?

In the past several years from the standpoint of important trends, a popular chant has been that a strong US dollar equals weak stocks, with a weak US dollar making for strong stocks. However, one should consider whether a very ("excessively") weak dollar may occur alongside (help to precipitate) falling equity marketplaces.

The broad real trade-weighted US dollar achieved a new all-time low (monthly average) in July 2011 at about 80.6, several points under the major support around 84.0.

A weak US dollar may help to boost nominal prices of stocks and commodities, but this does not necessarily occur forever. Although the broad real trade-weighted dollar has been edging lower, equities have diverged to some extent from the so-called historic pattern; a feebler dollar now is alongside weak stocks. The nominal trade-weighted dollar (which has daily data, though it is released only once a week) achieved a minor low on 5/2/11 at 94.06 (the day of the S+P 500 high near 1371), but then ebbed down to 93.95 on 7/26/11 (7/29/11's is 94.20).

In this context of stock and foreign exchange trends, also think of cross rates versus the greenback involving the Euro FX, Swiss Franc, Japanese Yen, Chinese renminbi, or various "commodity currencies" such as the Australian and Canadian dollars.

Most people view petroleum prices only from the US dollar perspective. However, using the OPEC basket as a benchmark, briefly look at crude oil prices in terms of other currencies. Admittedly the Euro FX is a popular one. It made a high versus the US dollar at 1.4940 on 5/4/11, and remains fairly firm at around 1.4400. But let's focus on the Swiss Franc and Japanese Yen, as these have been especially strong lately.

The high for the OPEC basket in Swiss Franc terms was SF109.4/barrel on 4/8/11 (about twenty days before that of the basket in dollar terms). The OPEC basket in SF terms rallied during the QE2 period from a low of SF71.9/barrel (8/24/10). Yet what seems especially important is that the OPEC basket in Swiss Franc terms at its late June 2011 and recent levels around SF85.1/barrel are beneath the 5/4/10 high of SF92.5/barrel (keep in mind the timing and level of the S+P 500 high around that May 2010 date). Does this hint not only at the relative power of the Swiss Franc, but also of declining petroleum demand (or high petroleum supply relative to demand)?

The Yen story for the OPEC basket resembles that of the Swiss. During QE2, it rallied from 8/24/10's Yen 5860/barrel to its recent high on 4/8/11 at around Yen 10200/barrel. The recent OPEC basket low around Y8220/barrel (6/27/11) is rather close to the 5/3/10 high of Y7990. This likewise hints at declining petroleum demand (or more than adequate supplies). Also, keep in mind that many Asian currencies have been advancing against the dollar since March 2009. If the dollar price for the OPEC basket were falling toward or beneath its 5/3/10 peak of about \$84.4 per barrel, what would many people be saying regarding supply/demand?