PETROLEUM OVERVIEW: CROSSCURRENTS AND CROSSROADS
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Two years ago, the European Central Bank President, Jean-Claude Trichet, declared that "predictions of the future prices of commodities are probably the most difficult exercise you can imagine" ("Introductory Remarks with Q&A", 8/7/08)

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CONCLUSION

The worldwide petroleum supply demand situation from the physical standpoint remains bearish. However, considerable inventory oversupply in the OECD (so-called advanced nations) arguably is not mirrored in other regions. Moreover, in recent years price trends in equities and commodities roughly have tracked each other. Low short term interest rates, deficit spending, and money printing have supported equities and thus commodities. Also, relative US dollar weakness has tended to encourage the equity and commodity rallies of recent months. Alternative investment underpins commodity prices, as does some concern about political disruption of petroleum supplies. Yet the worldwide economic crisis that erupted in 2007 is not over.

The worldwide petroleum price trend is sideways. The potential range for the next several months is quite large (NYMEX nearest crude oil futures continuation basis). Assume no unusual weather or political explosions interrupting petroleum output. Sustained high economic growth can spike prices to around 8700/9150. The current situation of sluggish growth, but widespread hope for better times ahead, generates a broad central range of around 7000 to 8000. A weak international economy will bring an assault on the band that begins at 6500 and reaches down to 6000.

The US dollar will continue to depreciate. This mournful decline will test the dollar's broad real trade-weighted all-time lows (1973-present). That challenge will break the current link summarized by the weak US dollar, strong commodities mantra. Sliding equities will undermine commodity prices in general. Mediocre worldwide economic growth, with recessions in some regions, will weaken petroleum prices relative to the interior range of 7000 to 8000. The bottom line: spring 2010 crude oil lows around 6500 will be tested again.

WORLDWIDE SUPPLY AND DEMAND

"For, you see, so many out-of-the-way things had happened lately, that Alice had begun to think that very few things indeed were really impossible." "Alice in Wonderland" (Chapter I "Down the Rabbit Hole"), by Lewis Carroll

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The current global ("overall") physical petroleum supply demand situation will remain unchanged for the next several months.

Probable OPEC crude oil supply will roughly balance anticipated consumption. The International Energy Agency forecasts the call on OPEC crude oil for fourth quarter 2010 at 28.8 million barrels per day (full year 2010 at 28.9mmbd), with 1Q11 at 28.6mmbd and 2Q11 at 29.1mmbd (full year 2011 at 29.2mmbd; September 2011 "Oil Market Report", Table 1).

OPEC's "Monthly Oil Market Report" (September 2010) offers somewhat more bearish numbers. Calendar year 2010's call on OPEC crude is 28.6mmbd, with that of 2011 28.8mmbd (individual quarterly calls for 4Q10 and in 2011 diverge from the IEA's, at times notably).

OPEC probably will continue to produce around 29.0 to 29.2mmbd. The IEA asserts that the first half 2010 average slightly exceeded 29.0mmbd, with July and August 2010 around 29.2mmbd. **OPEC's steady production of recent months alongside its manifest contentment with prices over $70 per barrel (NYMEX nearest futures and North Sea/ICE Brent basis) suggests that its members will not alter their existing production levels soon**. Elevated OECD inventory levels and lingering concerns about worldwide economic growth trouble them, but not sufficiently to induce a policy change. OPEC's "Monthly Oil Market Report" (September 2010, p7) concludes: "As it appears, the main factor driving oil prices is economic sentiment as reflected in equity markets, rather than supply/demand fundamentals."

The IEA predicts OECD demand for 2011 at 45.4mmbd. This slightly ebbs relative to 2010's 45.6mmbd (compare 2009's 45.4mmbd). So how much of an economic recovery is really happening in the so-called advanced nations? Look at US petroleum inventories in days coverage terms in that regard (see the next section below).

Anyway, the IEA states worldwide demand for 2011 will reach 87.9mmbd, a modest rise of 1.5pc versus 2010's 86.6mmbd. In 2007, the year in which economic troubles were unleashed, demand was 86.5mmbd. However, non-OECD consumption in 2011 grows 3.7pc year-on-year to 42.5mmbd. Anticipated 2011 non-OECD consumption is up 14.2pc versus 2007, or 5.3mmbd. China achieves 9.5mmbd for 2011, up .4mmbd relative to 2010, and a great leap upward of 25.0pc from 2007's 7.6mmbd.

End 2Q10 OECD industry stocks were 61 days of forward demand (as was 2Q09's; IEA, Table 5), **far above the 54 days of 2Q07 at the outset of the global economic crisis. End July 2010 levels inched higher to about 61.4 days, "approaching the record level of August 1998". Coverage around 61 days probably exceeds OPEC target stock level for this region by at least six days.**

Note, however, that floating storage of crude and products recently fell to its lowest level since February 2009, with short term crude floating supplies falling 22.0mmbd during August 2010 (IEA, p39).

The IEA wagers on a small increase in total non-OPEC supply from 2010 to 2011, about .3mmbd, or just under .6pc. European OECD supply slips again in 2011, to 4.1mmbd, whereas 2007's was 5.0mmbd. North American OECD supply falls slightly next year- about .2mmbd- to 13.6mmbd, roughly around the average for 2007 and 2008 combined. Total non-OECD supply in 2011 rises 1.7pc versus 2010.

OPEC meets 10/14/10. The International Monetary Fund/World Bank annual meetings are October 8-10, 2010.

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Petroleum marketplace oracles generally confess their knowledge of non-OECD supply demand and inventories generally is less than that of the OECD domain. However, one can conjecture that as developing nations industrialize (at least the net petroleum importers) and become wealthier, they will strive to increase their days coverage of petroleum. And all else equal, the developing nations, as they generally are poorer than OECD ones, probably held lower petroleum inventories prior to their recent several boom years than did the OECD industry group. Admittedly the practical lines between government (strategic) and commercial stocks in these emerging economies are sometimes murky. Nevertheless, suppose that the developing nations collectively wish to add about two days of coverage a year to their inventories, until they are fairly close to Western levels.

Suppose we look at 2009 through 2010, about two years of economic recovery. Consumption for the non-OECD averaged just over 40.0mmbd of non-OECD for those two years combined. That adds up to 160 million barrels. To the extent this incremental inventory is “base load”, some of the alleged overproduction did not result in oversupply.

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Nations such as China have shown signs of acquiring stakes in physical commodity production in recent years. Many factors of course influence such buying decisions. However, so long as these countries have modest growth and faith in very long run worldwide economic gains, some may buy petroleum stakes, which will tend to support petroleum prices to some extent.

AMERICA: STILL BOUNTIFUL SUPPLIES

Based on the US’s Energy Information Administration (EIA) data, **US petroleum industry inventories in days coverage terms indicate noteworthy oversupply** (using actual demand rather than forward consumption) **For the week ending 9/17/10, US total inventories (crude and products combined) coverage is 58.6 days. Though below end September 2009’s very lofty 60.4 days (the record for the 1996-2009 era), it hovers an ample 5.6 days above the end-September average of 53.0 days (1996-2009). Current stocks are around 1998’s 57.6 days.** Total inventories fall an average of 1.7 days from end September to end October.

America’s industry held **crude oil stocks** of over 358mm barrels are plentiful. On 9/17/10, they equal 24.0 days of coverage, 3.6 days above the end September 20.4 day average and (1996-2009) over the record end September level of 23.8 days (2008). Crude stocks typically increase around .8 day from end September to end October.

The 9/17/10 US total motor **gasoline** stock level of 24.8 days (about 226mm barrels) is well above end September 2009’s 24.0 days (2008 was 22.4 days, 2007 21.6 days). US total gasoline stocks at end September average 23.6 days (1996-2009), falling about .8 days by end October.

US **distillate** stocks of just under 175mm barrels represent 45.5 days of coverage. This soars nine days over the 1996-2009 average of 36.5 days. Although current quantities are three days under the end September 1996-2009 record of 48.5 days (2009), it competes with 1998’s 45.2 days. Distillate inventories slide about 2.2 days from end September to end October.

The United States’ September 2011 Short-Term Energy Outlook indicates US **demand** for 2011 at around 19.1mmbd, a meager .7pc climb versus 2010 (2010 is forecast only .9pc up from 2009). However, EIA total products supplied for the four weeks ending 9/17/10 show an increase of 1.6pc versus the prior year period, with calendar 2010 to date marching about two pc higher year on year.

INTERNATIONAL POLITICS and FINANCE

With concerns about international political unrest and related supply disruptions, and some signs of economic revival, has there been a shift (even in the OECD industry group) to greater desired stock holdings to satisfy “just-in-time” inventory holdings? Is there a bit more of a “just-in-case” attitude?

What might nations pay for petroleum and other commodity security? Picture the official foreign exchange reserve holdings of China and many other nations. Imagine those in comparison to, say, the value of all US industry crude oil inventories in primary storage (around 358mm barrels) at $70 per barrel. The mark-to-market value of US crude oil stocks of around $25.1 billion looks rather small.

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Lets' quickly review several worrisome arenas. Though these districts probably will not result in a notable supply interruption in the near term, it is not inconceivable that problems affecting petroleum playgrounds may erupt (at least for a brief time) at some point in the next few years. The Iranian nuclear problem continues. However, there will not be any escalation in military terms for at least several months given the recent passage of the UN sanctions package (wait for results) and the US election cycle. The Iraqi legislative impasse continues- six months after the March 2010 election. However, the political situation there has not worsened appreciably, and petroleum production has remained steady. The Middle East Israel/Palestine negotiations are not likely to make much progress soon. Nigeria holds its presidential election in mid-January. North Korea continues to be a wild card, though unlikely to be played.

FINANCIAL FLEXIBILITY

"Houston, we've had a problem." James Lovell, Apollo 13 astronaut en route to the Moon (1970; frequently misquoted as "Houston, we have a problem.")

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We all recall the fiendish global economic crisis that emerged in 2007. Numerous central banks (notably the Federal Reserve and their brethren), finance ministries, and politicians assembled a trinity of very low nominal interest rates, deficit spending/fiscal stimulus packages, and money printing to save the international economy.

Though real GDP increases are great, they obviously are harder to generate and sustain than nominal GDP ones. And nominal GDP growth is better than nothing. This determined effort to support the economy and banking system and heal injured consumer balance sheets tends to boost nominal corporate profits, which in turn tends to rally equity prices.

Unfortunately, the crisis has not disappeared. Regulators and politicians (and consumers) are crusading to maintain GDP growth and will continue to vigorously do so. If things are so great, why keep nominal interest rates around zero and talk about additional measures to stimulate growth? The Federal Reserve's hints regarding another round of money printing (quantitative easing) are symptomatic. The Fed (9/21/10) repeats its chant regarding the likelihood of "exceptionally low levels for the federal funds rate for an extended period." Moreover, it now adds a lively new stanza. The Fed is "prepared to provide additional accommodation if needed to support the economic recovery and to return inflation, over time, to levels consistent with its mandate."

Goldilocks, Green Shoots, and the US Dollar" (9/7/10) notes: "Another very general guideline for the past few years relates to dollar movements in light of those in stocks and commodities. A strong US dollar has been tied to weak commodity and equity prices. A weaker dollar associates with a rally in stocks and commodities." The broad real trade-weighted dollar made a high at 97.1 in March 2009 as stocks hit bottom that month. As stocks gained traction and rallied, the TWD declined to 87.5 by April 2010."

Another big round of quantitative easing (money printing) probably would boost the economy temporarily and provide support for nominal oil prices in general. However, such willingness to risk higher inflation (including higher energy prices) and a weaker dollar does not mandate either bull equity or petroleum moves. Focus on equities. The experience of Japan in recent decades, as well as that of the US during the 1970s, warns against excessive bullish optimism, even for nominal asset prices.

In the US and elsewhere, low nominal short-term government (and many other) interest rates inspire many financial pilgrims to embark on quests for "yield" (return) elsewhere. Hence the attraction of buying one or more commodities (whether agricultural, base metals, gold, or energy) finds parallels in the lure of high dividend paying equities and infatuation with high-yield (low grade) corporate debt.

Real economic growth in much of the world at best will be fair. In an environment in which petroleum inventories are more than adequate (at least in the OECD), this hints that petroleum prices will not easily break out of a very broad sideways trend.

Also, renewed or further signs of economic weakness-may have to appear to induce action by financial guardians rather than suggestions and speeches. Picture a fall in the S+P 500 to around 1000, further declines in consumer confidence measures, or relative weakness in corporate profits.

Money printing is not the only source of economic demand. For petroleum, much depends on the US dollar. If inflation picks up, and especially if that appears alongside dollar weakness, how long will the Fed be able to keep short term government interest rates exceptionally low in nominal terms? What about longer term government securities (including states and municipalities), or the corporate sector?

"Goldilocks, Green Shoots, and the US Dollar" (9/7/10) notes: **"Over the next several months, the world increasingly will worry about American economic sluggishness (or even decay). The globe will focus more and more on America's deficit problems rather than those elsewhere. In this process, the all-time dollar lows in the broad real trade-weighted dollar eventually will be challenged.**

The dollar currently is relatively weak from the long run perspective. July 2010's 88.7 (the most recent monthly average) is only modestly above all-time lows around 84.0 (84.3 in April 2008, about 84.0 in July 1995 and 84.1 in October 1978)." The August TWD is 88.0.

The "Goldilocks" essay continues: "note the S+P 500's recent top around 1220 occurred on 4/26/10- the time of the April 2010 TWD low, with the high in the broad GSCI not long afterward (556 on 5/3/10)…. For the near term, this existing pattern will continue. So emerging dollar weakness will initially encourage rallies in equities and commodities. **However, as the trade-weighted dollar substantially challenges its historic lows near 84.0, the so-called current rules of the game will change. That chapter in the dollar's dive will occur alongside weakness in stocks and commodities. "**

<u>TECHNICAL TWISTS</u>

"I don't really want to stop the show
But I thought you might like to know
That the singer's going to sing a song
And he wants you all to sing along." The Beatles, "Sgt. Pepper's Lonely Hearts Club Band"

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Watch interrelations between time and price across various marketplaces. NYMEX crude oil (nearest futures continuation) achieved its 5/3/10 high at 8715 not long after the S+P 500's high on 4/26/10 at 1220. Note the tops in the XOI oil and gas equity index (4/26/10 at 1135) and the OSX drilling index (4/26/10 around 229). Another pointer: see the S+P 500 minor high of 8/9/10 at 1129, briefly preceded by NYMEX crude oil's second high 8297 on 8/4/10.

Key near term NYMEX crude oil (nearest futures continuation) price levels:

***<u>8700 to 9150</u>**: **This range is consistent with belief that a moderate worldwide economic recovery will be sustained**. Recall the 8715 high (5/3/10). 9150 is a five percent move above that. Around 8700 is the average of two mean plus one standard deviation statistics from crucial starting dates; since the 7/11/08 all time high at 14727, the M+one SD is 9235; that since the major low on 12/19/08 is 8167 (9235 plus 8167)/2). The mean plus one SD since the start of the "alternative investment in commodities era"- assumed as the date of the major low at 789 in the S+P 500 on 3/12/03- is 8750. Also, 8985 is a 50pc retracement of the collapse from the all time high of 14727 on 7/11/08 to the 12/19/08 low at 3240.

*8165 to 8300: The mean plus one SD since the 12/19/08 bottom is about 8165. 8280 is a five pc fall from 8715). Minor high reached just under 8300 on 8/4/10.

***<u>7000 to 8000</u>**: **OPEC's probable preferred level for now. This scenario is living in the notorious "current uncertain world", with some happy economic "green shoots" alongside ominous "headwinds".** Around 7365 is half the all-time high of 14727 on 7/11/08. 7235 is the mean since the all-time peak.

*6815: The mean since the 12/19/08 trough.

***<u>6000 to 6500</u>**. **Assuming glimmers of economic strength persist, OPEC probably will talk of production cuts if prices threaten 6000**. Recall the 6424 low on 5/20/10. Twice the 12/19/08 low of 3240 is 6480. 6370 is the mean since the beginning of the "alternative investment in commodities era".

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Take a look at the **NYMEX petroleum complex Commitments of Traders** (futures and options combined). Sometimes a "high" net noncommercial long position (NCL) as a percentage of total open interest occurs around the time of notable marketplace highs. That was the case for the 5/4/10 net NCL's 8.51pc (the prior week was 8.52pc). Though not record net NCL pc, it is elevated. Marketplace size and trading patterns and volume influences opinions as to whether open interest and positions are large or not. However, based on history for the past several years, the 5/4/10 gross NCL position is very large, at over 456,000 contracts, as is the net NCL of over 306m contracts. In absolute contract open interest terms, I believe these are records. The 9/21/10 net NCL level was about 199m contracts, or 5.94pc of total open interest. These are slightly high, but not unusual.

Alternative investment (net buying and holding for some version of the long run) in energy commodities reduces "free supply", although wizards can debate how much. Alternative investment thus is relevant to days coverage statistics and opinions whether inventories are "really" high, normal, or low.

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Alternative investment in commodities generally has reduced backwardation and increased contango in NYMEX crude oil futures. From the start of trading in early 1983 until the stock marketplace low in March 2003, first less second month NYMEX crude oil (nearest less second futures, continuation basis, daily settlements) was about 19 cents backwardation. Since that March 2003 S+P 500 low up until the present, a contango tendency prevails, with a mean contango about 53 cents. Since the 12/19/08 depth in nearest futures crude oil, first month has averaged about 135 under second month.