Feeding the Beast

Posted by Dave Cohen on July 18, 2006 - 6:34pm
Topic: Demand/Consumption
Tags: forward contracts, heavy sour crude, light sweet crude, price exposure, refiners, spot market, supply chain, valero [list all tags]

The title comes from this excellent article from MyWestTexas, Valero trading room grapples with 'Feeding the Beast' (reprinted from the San Antonio Express News):

> On the sprawling trading-room floor at Valero Energy Corporations's headquarters, planners, traders and their bosses grapple every day with a task they call "feeding the beast."
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> Valero's 18 refineries chew through 3.3 million barrels of crude oil a day, oil that the San Antonio-based company buys from around the world.

And today we learn that the US consumption beast is not the only thing Valero is feeding. DoD awards Valero contract to ship jet fuel to Israel.

> The Department of Defense has awarded Valero Energy Corp. a $36.8 million contract to supply military-grade jet fuel to the government of Israel -- the United States' key ally in the Middle East.

How's Valero doing? Let's talk briefly about how this refining and retail company does business under the current oil and gasoline market conditions.

At Valero Energy Corp, they are *energized* about the future. For a summary of their business, Wikipedia has an informative article here. It's the MyWestTexas piece that has the good stuff in it.

- Of the 3.3/mbd of crude oil processed, about 65% is bought under long term contracts. The remaining 35% is bought on the spot market.
- Valero buys 25% of its oil domestically. The rest is purchased from countries all over the world including Mexico, Saudi Arabia, Iraq, Kuwait, Venezuela, Ecuador and several nations in Africa.
- At any given time, Valero has about 200 million barrels of *price exposure*, so "risk management is very important". Also, about 40% of the crude they buy is from "politically unstable nations". So, they must keep abreast of geopolitical events. No doubt this has an impact on the risk management.

- The 3.3 million barrels Valero buys and processes each day represents almost 4% of world production.

Presumably, Valero has no price exposure for oil bought under long term contracts while prices rise (see below) -- only for the 35% spent on the volatile spot market where the price for August (CLQ06.NYM) is $76.14 as of this writing. I don't know how Valero calculates its price exposure but counting both contracts and the spot market, that's an astonishing 60.6 days of supply amounting to 15.23 billion dollars. How do they hedge that risk? I don't know because those kind of details are not available. Buying gold is always a good idea given the geopolitical tensions. But some considerations are offered by Platts in Oil Price Risk Management.

> Meanwhile for upstream producers and refiners [like Valero], these high prices have presented a different kind of dilemma in hedging terms; whether to [1] **sell such apparently high prices** in forward markets whilst they are available, and which may not be able to be achieved indefinitely, or [2] to adjust their expectations to a 'new paradigm' of permanently high oil prices. The condition and capacity of global refining and pipeline infrastructure may have to wait for funds released by collateral sales of forward energy before the necessary refinements and capacity can be undertaken and thus have any effect in adjusting supply better to continuing high demand.

If the importer sells high prices (for oil or refined products like gasoline) as a hedge, they think that prices are abnormally high and will come down. But Valero is *buying* oil in the forward markets; I believe they have adopted strategy #2 in which there is a "new paradigm" of permanently high oil prices and demand remains strong. Common sense tells us that spot purchases leave Valero exposed to price variations. For example, they must manage the risk of a price spike due to an oil shock because they must keep sufficiently high margins to continue upstream purchases in such an event. In this case, the sudden spike is a detrimental price development. On the other hand, forward purchases (contracts) for oil leave Valero protected against *rising prices* (whatever the cause) but leave them exposed to detrimental *lower prices*. This strategy is reflected in their robust 2006 1st quarter earnings report (see below) and is in concert with the oil futures markets, which are in contango. As for their refined products, MyWestTexas says

> Then there's the sell side. Valero's plants churn out more than 1.4 million barrels of gasoline a day and about 1.1 million gallons of products called distillates that include diesel and jet fuel. A significant amount of the product is sold on the spot market, [executive vice president of marketing and supply] Gorder said.

Selling a significant amount of your product on the spot market is consistent with a strategy that views high gasoline prices as here to stay.

I would be remiss if I didn't mention the distinct possibility that should the Israeli conflicts with Hezbollah and Hamas escalate into a war involving Syria and Iran, there might be a spike sending oil prices over $100/barrel or the spike could be weaker. This in turn *could* dampen demand sharply even in the near term and reduce oil prices. I do not know how Valero is hedging against this possibility or if they are. The atmosphere may be tense on Valero's trading-room floor right about now. No one really knows how high prices must go before Americans cut their consumption significantly. In any case, to hurt Valero prices would have to drop somewhere below today's levels. This kind of price swing appears unlikely. The volatility will depend on the demand elasticity among other things. My view, and it could very well be Valero's as well, is that US transportation fuel demand has little elasticity. People who have some slack will forego other discretionary spending before they cut back on their vehicle miles traveled. Not the Cable TV though!

Using the forward purchase contracts is paying off for Valero as we see from this 1st quarter summary -- Valero Energy Corporation Reports First Quarter Earnings.

> "The second quarter is off to an outstanding start. Gulf Coast gasoline and diesel margins are at record levels for April. The forward curve is showing these record margins continuing through the summer. Sour crude oil discounts also remain terrific with the heavy Maya crude oil discount averaging more than $14 per barrel for April and medium sour crude oils, such as Mars, averaging more than $6 per barrel discount. **Given that 60 percent of our feedstocks are purchased at [forward] discounts to benchmark sweet crude oil prices, these discounts play a significant role in our earnings. With our leverage to these outstanding product margins and sour crude oil discounts, the second quarter is shaping up to be the highest earnings quarter in Valero's history**.
>
> "Looking at refining fundamentals for the rest of the year, we feel very confident that the refining environment will remain strong. **The combination of growing refined product demand, despite higher price levels globally, and regulatory pressures on supply should support continued strength in refined product margins. Sour crude oil discounts should continue to be wide due to ample supplies of sour grades and higher demand for sweet crudes as refiners try to meet lower sulfur specifications and increase yields of high-value clean products**," [Valero CEO Bill] Klesse said.
>
> Regarding the company's cash flow, capital spending for the first quarter was approximately $975 million, of which $200 million was for turnaround expenditures. For the year, the company anticipates capital spending of approximately $3.5 billion. In addition, **the company paid off $221 million of long-term debt and purchased 10.7 million shares of its common stock during the first quarter**.

The discrepancy between 60% and 65% as quoted above may be significant but I don't know the reason for it. I'm not sure what "regulatory pressures on supply" means in this context. Regarding paying off debt and repurchasing their common stock, I need only point out that Valero is bullish on Valero.

The point is simply this. Despite some volatility, prices continue to go up. US demand remains strong in the face of rising prices and heavy sour crude discounts are large. As Klesse says above, that is an economic environment in which Valero thrives. Since prices continue to rise and costs are passed on immediately, "gasoline and diesel margins are at record levels" as of April and forecast to stay strong all summer. Moreover, sour and medium sour discounts continue to be strong. Why? Because there is a glut (from MSN Money) of heavy sour crude on the market. This makes perfect sense.

> Here's the crux of the problem for gasoline consumers and oil companies: There's just not enough light sweet crude to meet demand. And, while there's plenty of heavy sour crude, a barrel of heavy sour crude yields about a third less gasoline than does a barrel of sweet light crude. That's if you can refine it to begin with...

> How big a glut? A big, big one, judging by the price of light sweet and heavy sour crude. At the end of June, Nigerian Bonny Light, one of most sought-after grades of light sweet crude, was selling on the spot market for $71.65 a barrel, while Saudi Arabian Heavy sold for $58.70 a barrel, according to the U.S. Energy Information Administration. That's a spread of almost $13 a barrel, way above the $5 a barrel historical average for the spread between light sweet and heavy sour grades.

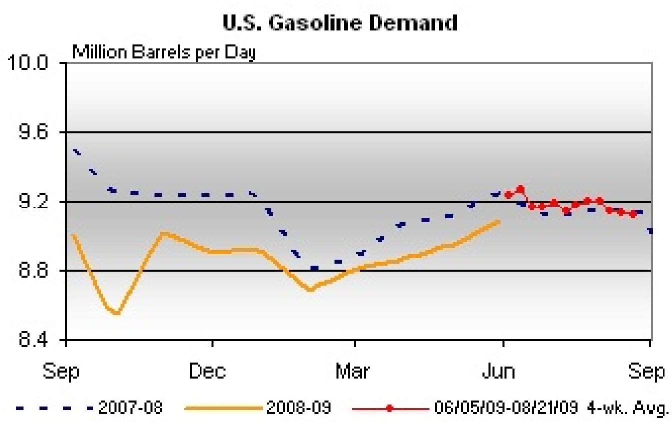
This represents a profit opportunity for Valero since they can handle the heavy sour crude refining whereas some foreign refiners can not.

> Refineries that can turn heavy sour crude into gasoline aren't evenly distributed around the world. Europe and the United States have more than their share. About 60% of the crude refined in 2005 by Valero Energy (VLO, news, msgs), for example, was heavy sour crude.

The MSN Money analyst Jim Jubak lists Valero as his top stock pick, noting that "Valero swallowed Premcor, another specialist in refining heavy sour crude, in 2005 to become the leading heavy sour-oil pure play". Refining on Wall Street? Valero's current profits and rosy outlook is also consistent with investment in new capacity -- see Refinery bottleneck to ease (from the CS Monitor) in which we learn that

> Among those who have announced expansions are **Valero, adding an additional 400,000 barrels per day**, and Chevron and ExxonMobil, each adding 75,000 barrels per day. Suncor, Motiva, and Citgo also have expansion plans.

So, Valero continues to feed the beast and light sweet crude production has peaked for the time being, probably forever. Prices are volatile but continue to go up. American gasoline demand has not slackened much -- it is still growing.



From the EIA. See here

Selling jet fuel to Israel can't hurt prices any. Valero is prospering and bullish on future oil prices because the beast is never satiated.