Looking Ahead - The Weekly Petroleum Inventory Reports

Posted by Nate Hagens on September 17, 2008 - 10:22am
Topic: Supply/Production
Tags: doe, eia, hurricanes, ridiculously cheap rbob prices, shut-in production, twip, vlcc [list all tags]

VLCC Tanker - capable of transporting 2 million barrels

Tomorrow at 10:30 EDT we will get our first official report of crude/product inventories since Hurricane Ike and second since Hurricane Gustav. Below the fold are some brief thoughts on what has transpired in the past week, followed by an open thread.

Despite long lines and empty pumps at many gas stations across the country, and considerably high cash prices, gasoline demand likely fell week over week. This from today's Mastercard analysis (which is often more reliable than the DOE/API reports which are based on 'interpolated' demand):

> **U.S. Gasoline Demand Falls for 21st Week, MasterCard Says**
> By Barbara Powell
>
> Sept. 16 (Bloomberg) -- U.S. gasoline demand dropped 3.1 percent last week, the 21st consecutive decline, as bad weather reduced driving east of the Mississippi River, a MasterCard Inc. report today showed.
>
> Motorists bought an average 9.25 million barrels of gasoline a day in the week ended Sept. 12, down from 9.542 million a year earlier, MasterCard, the second-biggest credit-card company, said
> in its weekly SpendingPulse report. Fuel consumption was 0.6 percent higher than the prior week
> and was down 2.6 percent for the year, the report showed.
>
> Gasoline demand this year peaked at 9.65 million barrels a day in the week ended Aug. 1, 5.9 percent below the 2007 maximum of 10.25 million barrels in the week ended Aug. 17. The last time fuel use increased from a year earlier was the week ended April 18.
>
> The national average pump price for regular gasoline was $3.66 a gallon, unchanged from the prior week. The price touched a record $4.10 the week ended July 18 and is up 23 percent this
> year.

Below is the Bloomberg survey of analyst’s expectations for tomorrow’s DOE and API oil and product inventory reports:

Expectations

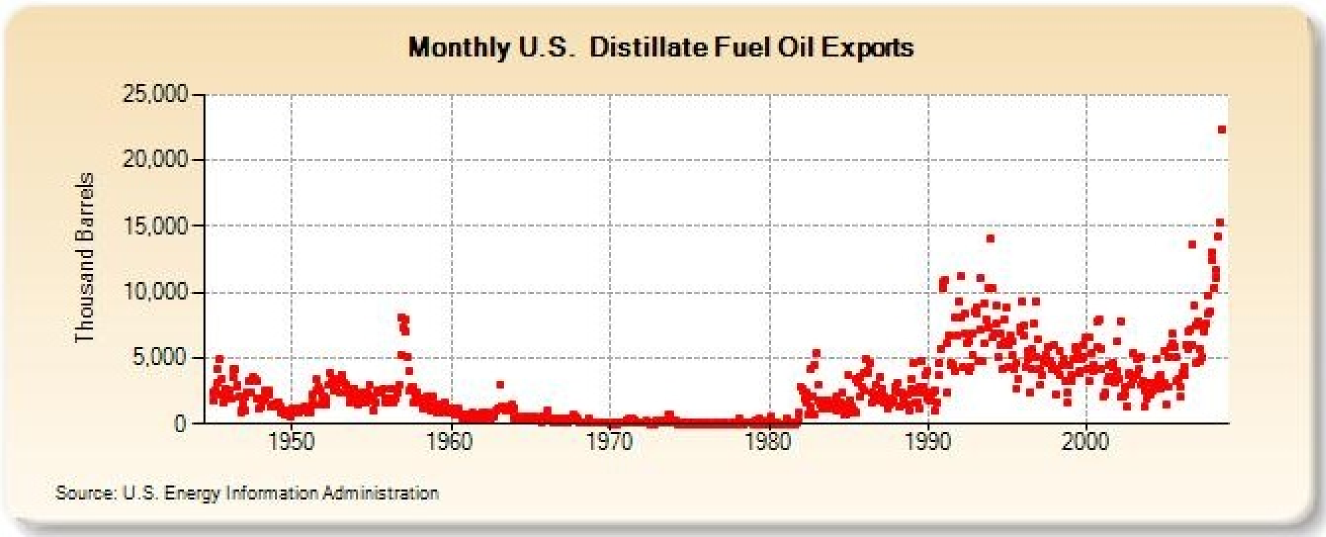
Crude oil: Down 3.4 million barrels
Motor gas: Down 3.5 million barrels
Distillates: Down 1.8 million barrels
Complex: Down 8.7 million barrels

Just as we are not weather/hurricane forecasters on theoildrum, neither are we price forecasters, other than in the context of longer term impacts on energy policy. Still, with shut-in production, and refinery shutdowns that may take a week or longer to restart due to lack of power, it is puzzling why distillate (diesel) and RBOB(reformulated gasoline) have exhibited the following chart:

Energy equities sold down sharply this morning. However, after the fed declined to spend one of its remaining bullets (by not cutting rates), the energy complex had a strong finish, outperforming most other stock sectors even with crude oil down over $3. This marks 3 days in 4 when the major energy stocks had strong positive finishes, despite the fact that oil futures were down every day and indeed 11 of the past 12 trading sessions. This divergence, at least in the past, has signalled a near-term bottom in the commodities.

Distillate (input for both diesel and heating oil) was down only 2.5 cents but RBOB (gasoline) was down 12 cents. Three things impact the price of futures: 1)supply of gasoline, 2)demand for gasoline, 3)supply/demand imbalance of futures contracts. The aggregate of these 3 forces have caused a 40% drop in gasoline futures prices since June, commensurate with the drop in crude oil.

Like many (but not all) of you, I have been struggling to understand how RBOB could be down so much with prices at the pump higher and refinery shut downs. One possibility is that we are receiving as-yet-unreported gasoline tanker shipments from overseas to compensate for our downtime. A more likely explanation however, is that gas station owners have been receiving less gas. Given a choice to buy cash gasoline at $1+ above futures and thus risk getting accused of price-gouging, it would be rational instead to buy smaller amounts of product (intentionally or otherwise) and ration/shut pumps down so as to not lose money. (the station owners would then lose money by selling fewer cupcakes and beef jerky etc. as gasoline is essentially a loss leader). So given the Mastercard report above, it is possible that gasoline stations are restricting how much they sell while at the same time showing a higher price. This dynamic would show up nationally as gas pumps being empty at sky high prices, but actually less 'demand' than the prior week or YoY comparisons. (**Note this may be one example of where 'demand' exceeds 'consumption'.**)



US Monthly Fuel Oil exports Source - EIA

Diesel (distillate) is another story - we are a LARGE exporter of diesel and increasingly so - One could surmise, (based on todays trading n=1), that the price elasticity of diesel is much lower than that for gasoline, and a good deal of this comes from abroad, meaning that distillate crack spreads should recover sooner than RBOB.

There also may be quite a bit of volatility following the next few weeks of DOE inventory reports depending on the timing of tanker shipments. 1 VLCC tanker can hold 2 million barrels (about 15% of our daily imports) - whether one tanker is counted this week or next is the kind of thing that has large potential to swing the weekly numbers. One thing I will note - if RBOB prices are 'correct' and gasoline demand is really going to continue to drop, then some retail and gas-station stocks are about to see less traffic, which has economic implications.

Note: This is not my area of expertise but like many of you I am looking for possible explanations for the 30-40% gap between cash gasoline and futures other than 'large hedge fund liquidations'. (Though I have been told that AIG had massive short-oil swap vs long oil futures positions and it's possible this has been being unwound throughout the past couple weeks - if true, then tonights rumoured 80% buyout by the Fed to loan AIG $85 billion might stem the fall of oil futures..) If any TODers are crude product traders at the NYMEX or gas station owners, could you please comment below on your interpretation of recent events or email me at njhagens@gmail.com if you would be willing to write a short guest post)

thanks to energy analyst Daniel Burke at Johnson Rice for some of the data in this post

update 10:35 EDT

Summary of Weekly Petroleum Data for the Week Ending September 12, 2008

U.S. crude oil refinery inputs averaged 13.2 million barrels per day during the week ending September 12, down 246 thousand barrels per day from the previous week's average. Refineries operated at 77.4 percent of their operable capacity last week. Gasoline production fell last week, averaging 8.3 million barrels per day. Distillate fuel production decreased last week, averaging 3.8 million barrels per day.

U.S. crude oil imports averaged 8.5 million barrels per day last week, down 71 thousand barrels per day from the previous week. Over the last four weeks, crude oil imports have averaged 9.2 million barrels per day, 1.1 million barrels per day below the same four-week period last year. Total motor gasoline imports (including both finished gasoline and gasoline blending components) last week averaged nearly 1.0 million barrels per day. Distillate fuel imports averaged 131 thousand barrels per day last week.

U.S. commercial crude oil inventories (excluding those in the Strategic Petroleum Reserve) decreased by 6.3 million barrels from the previous week. At 291.7 million barrels, U.S. crude oil inventories are in the lower half of the average range for this time of year. Total motor gasoline inventories decreased by 3.3 million barrels last week, and are below the lower boundary of the average range. Both finished gasoline inventories and gasoline blending components inventories decreased last week. Distillate fuel inventories decreased by 0.9 million barrels, and are in the middle of the average range for this time of year. Propane/propylene inventories increased by 1.0 million barrels last week but remain below the lower limit of the average range. Total commercial petroleum inventories decreased by 11.9 million barrels last week, and are at the lower boundary of the average range for this time of year.

Total products supplied over the last four-week period has averaged about 19.9 million barrels per day, down by 4.4 percent compared to the similar period last year. Over the last four weeks, motor gasoline demand has averaged 9.2 million barrels per day, down by 2.6 percent from the same period last year. Distillate fuel demand has averaged 4.0 million barrels per day over the last four weeks, down by 2.7 percent from the same period last year. Jet fuel demand is 7.6 percent lower over the last four weeks compared to the same four-week period last year.