

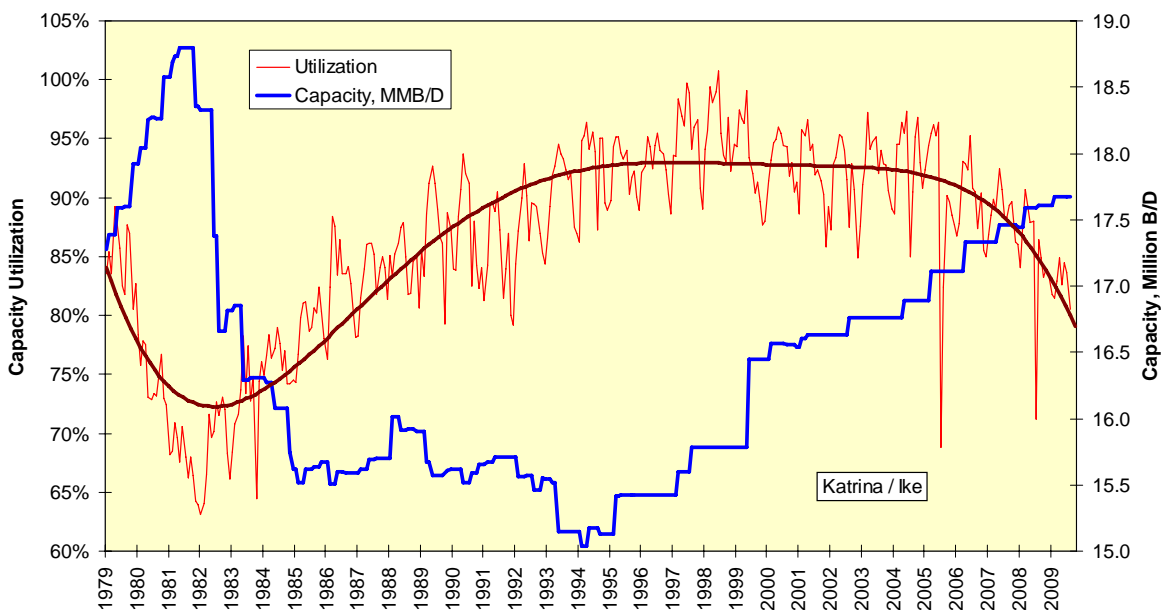
Refiners May Be In For A Ride

They used to refer to savings & loans as a “3-6-3” business: Borrow at 3%, lend at 6% and be on the first tee at 3:00 PM. The idea was mortgage lending was so simple any idiot could do it; perhaps that explains why the business fell apart once the brain scientists and rocket surgeons got involved.

If banking is a throughput business dependent on a process margin of sorts, then so is refining, although no one familiar with the sophistication of modern complex refineries ever would call one of them idiot-proof. But at their most basic, you buy crude oil, process it into refined products for sale and hopefully cover your costs in the process.

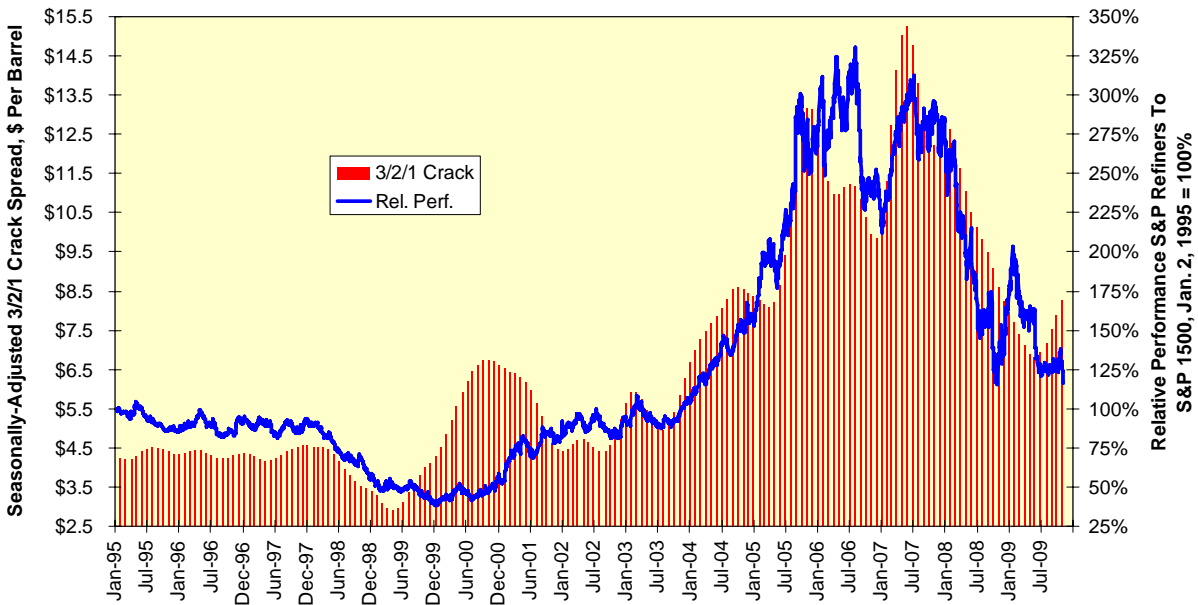
For much of the period following the decontrol of crude oil prices during the first Reagan administration and the closure of inefficient refineries dependent on artificially cheap crude oil feedstocks, refiners enjoyed the returns that accrue to scarce assets. Capacity declined into 1995 and utilization rates actually exceeded 100% of nameplate capacity at certain times.

Not The Scarce Asset It Once Was



If we combine this scarcity with strong and rising demand for refined products in the face of higher prices, we have a real recipe for success. The process margin as measured by the seasonally adjusted 3-2-1 crack spread, three barrels of crude oil refined into two barrels of gasoline and one of heating oil, surged into June 2007; it soon turned lower in the face of crude oil’s explosive rally into July 2008 and declining refined product demand as the recession and \$4 gasoline took hold. The relative performance of the S&P refining index to the S&P Supercomposite essentially rose and fell with this refining margin. The refining index includes Sunoco, Valero, Tesoro, Holly, Frontier Oil and World Fuel Services. Refining is not a 3-6-3 business, but the relative performance of refining stocks could be grasped by the dimmest S&L manager of yore.

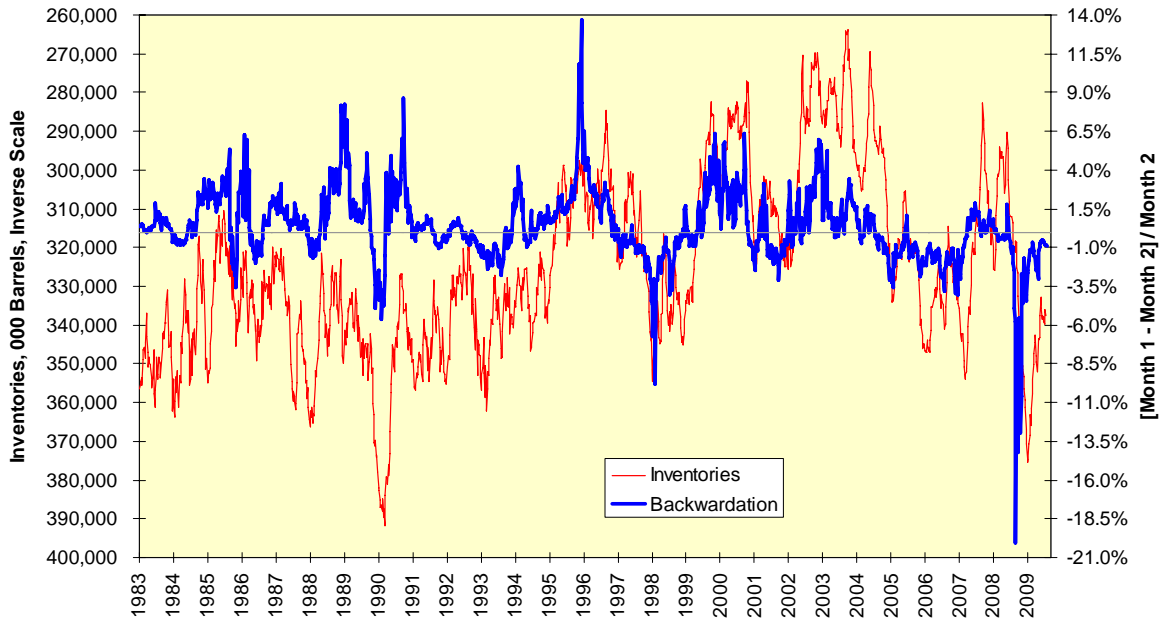
The Rise And Fall Of A Scarce Asset



Where To, Now?

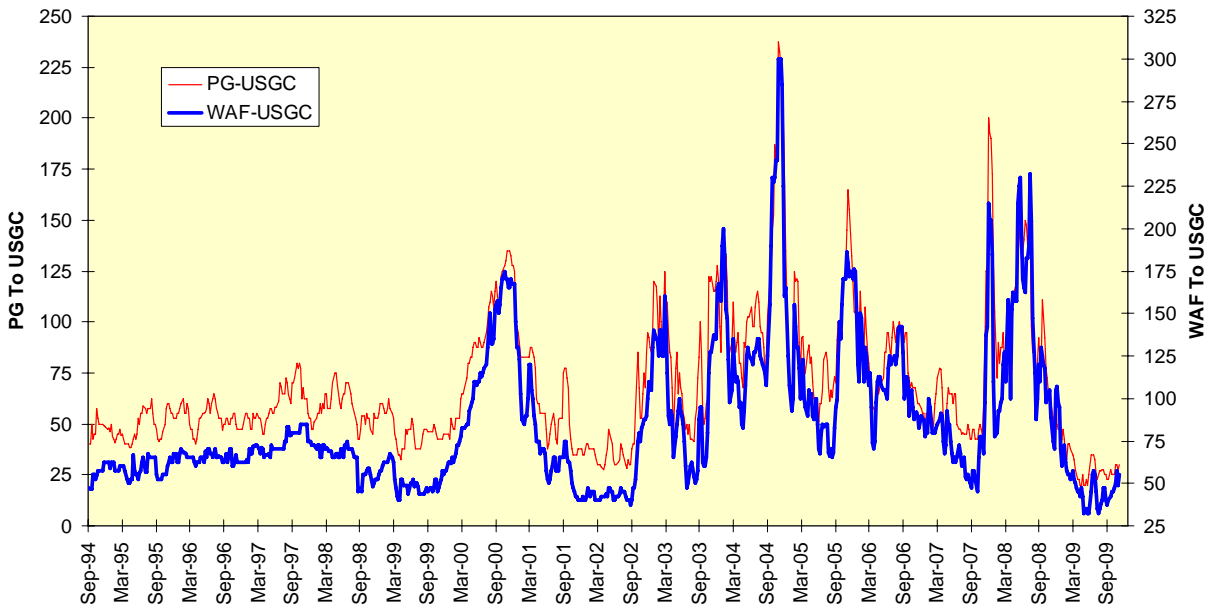
Let's return to a group of indicators introduced separately in this space over the years and collectively by [July 2004](#). First and foremost is the behavior of crude oil inventories and their [links backwards and forwards](#) to the crude oil futures market. As prices have increased since last winter, refiners have found it sensible and logical to draw their inventories down and repurchase the futures contracts sold as a hedge. This effect has been particularly pronounced in 2009 as last winter's contango in their futures market and resulting cash-and-carry storage trade both were one for the ages. Moreover, the trade has a strong self-fulfilling element: The more contango disappears, the greater the incentive to close out the storage trade and supply the refining system via inventories.

Inventories Declined As Contango Disappeared



Not only are domestic inventories being drawn down but refiners do not seem to be nominating many vessels to bring incremental supplies into the key U.S. Gulf Coast (USGC) market. If we look at tanker tariffs from the Persian Gulf and West Africa (PG and WAF) expressed in Worldscale, or percentage of expected normal tariff, we see they plunged into the late summer only to bounce slightly. Tankers represent inventories to arrive, and this means the U.S. supply picture is destined to tighten.

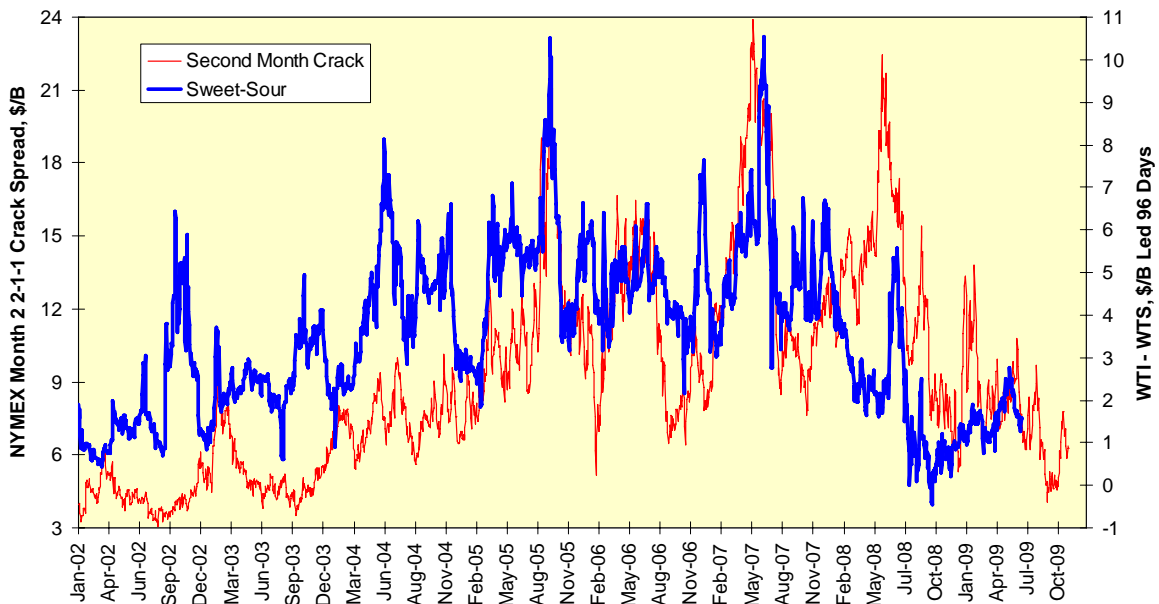
Tanker Rates Expressed In Worldscale



The question then becomes what beyond the mechanics of the cash-and-carry arbitrage trade induced by the presence of long-only commodity funds can lead refiners to start bidding for additional crude oil inventories. The answer, quaint though it may seem to those who believe the entire petroleum market is some sort of plaything, is increased demand for refined products.

This hardly seems to be happening today. As refinery throughput increases, refiners have to bring less efficient units into production capable of processing only the more expensive low-sulfur or “sweet” grades of crude oil. That increases the spread between sweet and high-sulfur or “sour” crude oil. This spread rises and falls with the second-month 2-1-1 crack spread with a 96-day lag. The present downtrend in this crack spread indicates refiners will be shutting marginal sweet crude oil processing units soon.

The Sweet-Sour Spread And Second Month Crack Spread



The U.S. refining industry thus faces two risks going into 2010. The first is poor refining margins and decreased contango will push U.S. inventory levels lower and expose the entire system to a supply shock. Poor refining margins are, by definition, a negative for the relative performance of the refining sector.

The second risk is crude oil demand will grow faster outside of the U.S. than in the U.S. This will put U.S. refiners at a competitive disadvantage in bidding for incremental crude oil cargoes in the Atlantic Basin. If this situation gets bad enough, refiners may have to run the system at a net loss in order to produce enough gasoline to meet U.S. demands. This is hardly a recipe for refiners' success.

The optimal solution would be for U.S. refined product demand to rise without pulling the price of crude oil higher and without foreign refiners gaining a competitive advantage. Some might call this "trading by hope." Refineries are noisy, smelly places where everyone has to work hard for a living. Banks are clean and quiet, and if you mess up badly enough, society pays for your rescue. Maybe those 3-6-3 banks were on to something back in the day.