Lipow Oil Associates, LLC

April 11, 2010

Oil Market Trends and Their Impact on Terminals

The last 24 months have seen its share of volatility in the crude oil markets. From just over $150 per barrel two years ago, to almost $50 last July and back up to $80 today, the crude oil market makes the Coney Island Rollercoaster look boring.

There were both fundamental factors and financial factors that contributed to the oil price volatility: Supply and Demand, hedge funds, exchange traded funds and speculators all had a part. The demand for terminal storage was also influenced by many of these same factors. As one looks ahead, the only thing that is certain is continued price volatility.

These factors ultimately made their impact on the liquid terminal industry. Economic growth worldwide led to a construction boom throughout the logistics and distribution system. The structure of the crude oil futures market provided an incentive for trading companies to enter the storage market as had never been seen before. The subsequent economic slowdown brought "alternative" terminals to market. Excess oil tankers became floating storage while refinery shutdowns added terminal capacity not previously available to third parties. Will these trends continue?

The oil market 2003-2006:

Before looking ahead, one should take a moment and look to the past and flash back to 2003. Crude oil prices were languishing around $30 per barrel in the futures markets. The price of crude oil in the nearest month contract was higher than that in the subsequent month contract. This market structure condition is known as backwardation. It is often times seen when the physical availability of a commodity is tight and consumers are will to pay higher prices in the near term in order to secure supply. Crude oil prices began their steady move up.

As world oil demand grew, demand for tankage in the wold wide distribution system increased. But another trend was also emerging.

The Crude Oil Contango Building Boom

By early 2005 crude oil was priced around $42 per barrel. The economy around the world was growing. Prices steadily climbed higher reaching $50 in February, $60 in July $70 in April 2006 and over $75 by early July. But a funny thing happened on the way up. The structure of the market moved into what is called contango. The price of oil in the nearest month contract is cheaper than the subsequent month. Oil prices were reaching record highs while the market expected even higher prices in the future. This is not what one might expect if oil availability was constrained. Prices should be higher in the near term.

2217 Robinhood Street, Houston, Texas, 77005
713-524-7528

In spite of more than adequate oil supply, the market was very optimistic for growing oil demand.

The difference in price between the first two futures months began to regularly exceed $1 per barrel in 2006. This was a traders dream. Buy crude, store it, sell it and collect money. The only thing in the way of a big payday was finding a tank to store the oil. The terminal tank construction boom was born. Traders needed tanks to play the contango, and terminal operators were all too happy to build tanks in return for a long term lease commitment. Cushing OK is the delivery point for the NYMEX crude oil futures contract. As a result, traders want, and terminal companies built tankage in this location. Approximately 25 million barrels of tankage has been constructed in Cushing since 2007.

The Petroleum Product Contango Building Boom

The contango market structure was not only confined to crude oil. Petroleum products experienced the same phenomena. Traders looked to expand their contango opportunities in the product markets with the construction of product tankage in trading locations. The delivery point for NYMEX products is New York Harbor. Not only has demand for tankage in this location has increased resulting in the construction of 4 to 5 million barrels of tankage, but so have lease rates now between 75 and 95 cents per barrel per month.

Another significant trading location in the Antwerp-Rotterdam-Amsterdam area, also known as ARA. The Intercontinental Exchange or ICE is another futures exchange where gasoil is traded. ARA is the delivery point on the futures contract. Over 10 million barrels of storage has been constructed in this area since 2007.

Traders Acquire Assets

As economic growth continued from 2006-2007, oil demand increased as well. Tankage was built to accommodate this growth along the logistics and distribution system. Traders were making money and in addition to the contango play, needed tanks in the major trading hubs in order to take advantage of opportunities in the physical oil market. Instead of just leasing tankage, traders began to acquire assets.

As previously mentioned, Cushing OK is not only the NYMEX delivery location for the crude oil contract; it is a major interchange of crude oil pipelines in the United States. As such, traders want tankage. Vitol recently acquired the Semgroup public entity renaming it Blue Knight.

The ARA location is also seeing a similar trend. Vitol owns storage in Amsterdam and Rotterdam while Mercuria recently purchased the Nafta BV terminal in Antwerp. The Noble group is part of a group planning to construct a new facility in Botlek Rotterdam .

While petroleum product demand has been stagnant in the US, growth continues in Asia and the Arabian Gulf. In both regions, traders have entered the liquid terminals market.

2217 Robinhood Street, Houston, Texas, 77005
713-524-7528

The major trading location in Asia is Singapore (and across the straits in Malaysia). Over 20 million barrels of storage have been constructed since 2007. Both Vitol and Trafigura are involved in major construction projects while Hin Leong is the majority owner of the over 14 million barrel Universal terminal in Singapore.

The major trading location in the Arabian Gulf is the United Arab Emirates and most notably Fujairah. Chemoil, Trafigura and Vitol all have equity stakes in terminal operations and Aurora Petroleum recently announce the construction of a brand new facility.

Master Limited Partnerships Enter the Trading Market

While traders were seeking equity interest in terminals, terminal operators, many of them Master Limited Partnerships, were seeking to take advantage of the physical market opportunities by utilizing their own assets. Nowhere is this trend more evident than in the United States.

Plains All American Pipeline has for many years taken advantage of their crude oil leasing and gathering system, but recently has been growing their presence in refined fuels. Buckeye Pipeline purchased Farm and Home a northeast product retailer. Enterprise Products has hired petroleum products traders which now complement their crude oil operations than were acquired from the TEPPCO merger.

Clearly, the lines are blurring between traders and terminal operators as each expand their footprint into the others business.

The Economic Slowdown of 2008-2009

In November 2007, the International Energy Agency projected 2007 oil demand to be 86 million barrels per day, growing to 87.7 million barrels per day in 2008. To accommodate this growth, more oil tankers had to be built to carry the oil between the producer and consumer and more refining capacity had to be constructed to turn the oil into products.

However as the world experienced an economic slowdown in 2008, demand for oil fell. Brand new tankers, which had been built to meet the world's insatiable appetite for oil, were no longer needed. The cost to charter a vessel dropped. Meanwhile, the oil futures market went into a contango structure sometimes exceeding $5 per barrel per month. Storing oil on tankers became an economically viable option. These storage tanks, steering wheels and propellers could load crude oil (or more notably distillate) and just sit, awaiting orders for discharge. These "storage tanks" had ultimate flexibility. They could go to any continent. At the peak, it is estimated that over 100 million barrels of floating storage was in distillate service with another 50 million barrels in crude oil service.

The economic slowdown had a deleterious effect on refining margins. New Asian refining capacity in excess of 1.5 million barrels per day came on line in 2008-2009.

Refining margins were squeezed and several shut down. Refineries that shut down can become storage terminals. They have many tanks, and generally have the inbound and outbound pipeline and dock infrastructure. Petroplus Teeside, Total Dunkirk and Shell Montreal can now compete with existing terminals for business.

Where we are today and what might the future hold

To quote Yogi Berra, its déjà vu all over again in the crude oil market. After weathering a significant economic downturn, the world economy appears to be growing again. Crude oil prices have rebounded to $85 and as of mid April 2009, the contango is approximately 90 cents per barrel in the first two months.

The oil market will continue to be affected by both fundamental factors and financial factors. Fundamentally, one should look to Asia for demand growth. It is expected that Chinese and India oil demand to reach 9.0 and 3.3 million barrels per day respectively in 2010, compared to fairly stagnant demand in the United States of 19 million barrels per day.

Lipow Oil Associates is expecting crude oil prices to reach $90-95 per barrel by the end of 2010. A stabilizing economy is helping demand, while production declines around the world, most notably Mexico, Venezuela and the North Sea are impacting supply.

Financial factors will continue to weigh on the market. Sovereign debt, recently highlighted in Greece, result in reduced government spending and most likely increased taxes, both of which affect consumer spending and demand. This issue is likely to spread to other Eurozone countries and perhaps even to the United States.

Higher government borrowing will ultimately lead to higher interest rates which impact trader costs to buy, store and hold petroleum products. Higher oil prices require more credit lines for financing. Demand for storage continues in the major trading locations since one must be there in order to access the physical oil market. Hedge funds again are present in the commodities market looking for better returns on their money than are available elsewhere.

Liquid terminal operators will continue to benefit as long as a contango market exists and traders are willing to commit to tanks. On the other hand, the availability of vessels to store crude oil and petroleum and refinery conversions to third party terminals will provide new areas of competition to the existing storage infrastructure.