NEPC MARKET CHATTER

The Rise and Fall (and Rise?) of Oil Prices

In theory, valuing a commodity should be a relatively easy task. Economics 101 taught us that the spot price of a commodity is derived from the available supply and demand for that good. However, theory doesn't always translate into reality as we've seen with the recent sell-off in oil. Predicting global supply and demand really isn't so easy.

In this Market Chatter, we will make you feel like you are back in school with a primer on the current supply/demand inputs that will ultimately determine the price of oil.

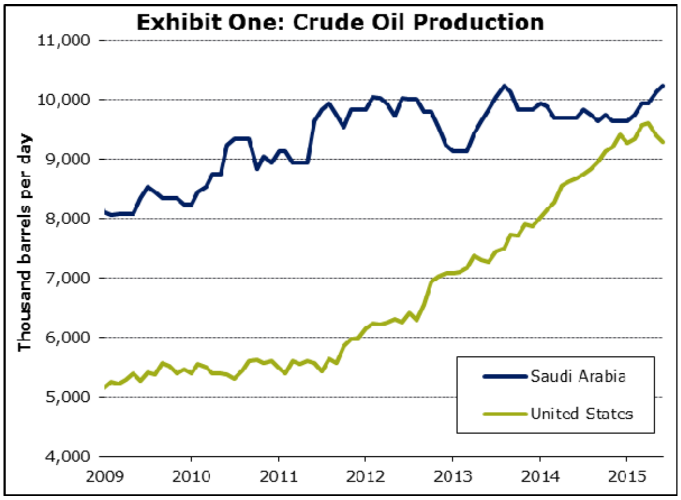
The Supply Side

For many decades, OPEC countries have been the dominant oil producers, accounting for over forty percent of global production (and over 60% of the export market). Within OPEC, Saudi Arabia is, by far, the largest producer, accounting for approximately one third of OPEC's production. Historically, when prices dropped, OPEC (Saudi Arabia) cut production in order to restore prices.

However, over the past five years, global production dynamics have changed. U.S. production almost doubled to nearly 10 million barrels a day due to technological advances in fracking (the "Shale Revolution"). So this time when the price of oil dropped, Saudi Arabia refused to reduce production in hopes of maintaining market share (see Exhibit One). Simply put, Saudi Arabia is hoping that the U.S. flinches first by cutting production and reducing the global oil supply.

With the recent decrease in oil prices, U.S. drilling activity did drop dramatically; however, as Exhibit One shows, production did not immediately decline. Instead, companies focused rigs on their most productive acreage, thereby increasing recovery rates. Further, producers lowered costs by putting pressure on suppliers and service providers, thereby making previously unprofitable wells more economical at $45 a barrel. By reducing the overall costs and improving rig productivity, U.S. oil production continued to increase before finally capitulating in May.

In mid-October, the price of oil was roughly $45 a barrel and at this level it is very likely that U.S. supply will continue to drop. Lower capital expenditures in the short term will result in lower production in the future. Wood Mackenzie, a global energy consultancy group, estimates that about $1.5 trillion in new projects are not viable at current prices and that $220 billion in capex has been cut in 2015 and 2016 relative to pre-oil crash projections. This indicates that increasing the supply of oil in the future will be difficult to achieve given the lack of capital pursuing new investments. Today's investment decisions may make it difficult to meet long-term demand.



Source: EIA; data through June 30, 2015

Despite the US decreasing its overall production rate, the global supply continues to outpace demand. Outside the US, Iran will enter the global market and their impact on energy supply remains to be seen. OPEC is producing at record levels; however, they appear to have little spare capacity to continue to grow production based on analyst estimates. Recent reports reveal that more stable OPEC nations, such as Saudi Arabia, are burning through their cash reserves. This begs the question of how the less wealthy and more unstable nations in OPEC can continue to withstand low oil prices.

The Demand Side

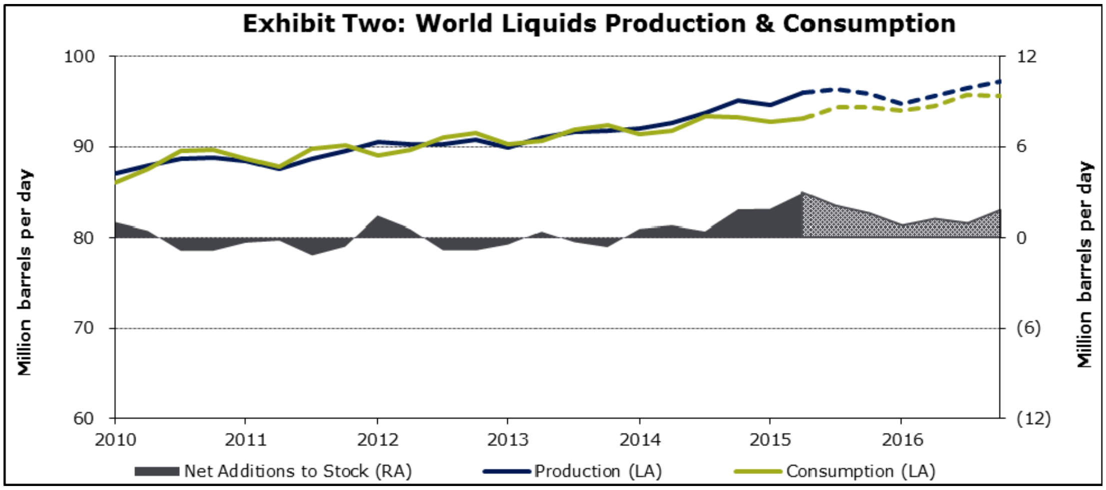
Despite what many think, oil demand is still growing (Exhibit Two). In fact, U.S. demand is growing at the fastest pace in five years. Market sentiment, however, has become sharply negative due to concerns around China and the general health of the global economy. The International Energy Agency (IEA) is still forecasting for an overall increase in the world demand for oil, albeit at a slower pace.

Another potential factor impacting the demand for oil will be US monetary policy. Historically, there has been a negative correlation between the strength of the US Dollar and the price of oil. While there are many reasons for this relationship to exist, the simplest reason is that when the US Dollar rises, foreign entities have less purchasing power therefore decreasing demand for oil. As the US Federal Reserve contemplates raising rates, the knock-on effect could be a strengthening US Dollar ultimately decreasing foreign purchasing power and the price of oil.

What Does the Future Hold for Oil Prices?

Analysis of both supply and demand does not provide any indication that oil is headed to $100 a barrel any time soon. However, our interpretation of the tea leaves indicates that barring a dramatic decline in global demand, the oversupply of crude oil is not sustainable. If the price of oil remains lower through the year, energy producers will be under stress as balance sheets tighten from hedges rolling off, resulting in increased balance sheet exposure to lower oil prices. This would extend the painful market correction. But, excess supply would decrease to meet the global demand as markets ultimately correct themselves.

We believe that markets will ultimately correct themselves leading to a price recovery by 2017. There may continue to be volatility in energy stocks, bonds and in illiquid investments as the supply and demand sides battle it out. The search for an equilibrium supply and demand will lead to opportunities for long-term investors. We will need to take an advanced Economics course to tell you where the price of oil will be in the future!



Source: Bloomberg, IEA; data through June 30, 2015

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