



FLASH REPORT

A Tale of Three Markets

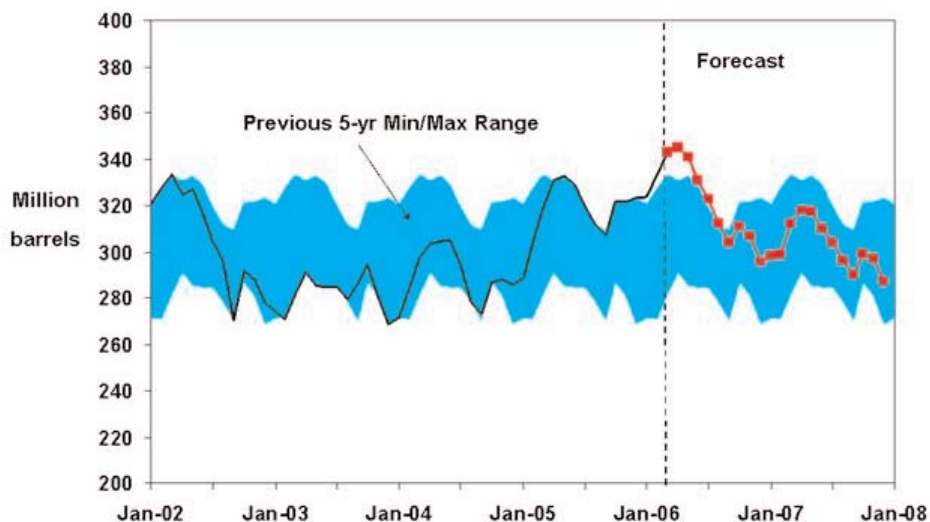
Over the past few years, global energy prices have soared. Everyone from consumers, politicians, investors and the news media have taken notice. Slack had just been developing in the markets because of the warmer than average winter (not just in the US, but in Asia as well) when crude oil and gasoline prices spiked ahead of the “summer driving season.” Crude oil rose 7.2% in April, and over 17% during the first four months of the year. Gasoline prices are up 7.5% and 22% over the same time periods. It seems that the energy markets are predisposed to rally on slightest news. Yet the natural gas market has fallen 9% and 42% respectively. This is highly unusual, as natural gas and oil are historically positively, though not perfectly, correlated.

What we really have is a tale of three markets. They are crude oil, natural gas and refined fuels (primarily gasoline and diesel). These markets often get lumped together and definitely influence each other. Yet they are

distinct markets, with separate demand and, more importantly, separate supply characteristics. Evaluating the differences among these markets provides important information for investors. As the price of energy is becoming a political issue in this election year, lawmakers will consider the information the market provides before enacting policy.

Why have the natural gas and crude oil markets decoupled so violently and why are oil and gasoline prices so high? As with any market, there are always two major considerations: the current supply and demand balances and the market sentiment – another way of saying the market’s expectations involving future supply and demand balances. Current supply conditions are excellent, with crude oil and gasoline inventories at multi year highs (See Chart 1). Granted, demand for oil has been high due to strong global economic growth, particularly in Asia. However, economists had predicted much of

Chart 1: US Crude Oil Inventories



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the Asian economic growth, even if these predictions proved to be too conservative. And demand for energy was lower than expected due to the warm winter.

In contrast to the petroleum markets, the natural gas market has plunged from an all-time high of \$15 per million BTU immediately after last summer's hurricanes to \$6.55 at the end of April. As with crude oil, natural gas supplies are abundant; inventory has been boosted by smaller than normal winter drawdowns due the warm winter. The natural gas infrastructure, more heavily damaged by Katrina and Rita than the oil complex, has essentially recovered though there remains some residual loss of output in the system that is likely to be permanent.

In short, the basic supply and demand situation for both crude oil and natural gas seems to be consistent, yet crude oil is trading near its all time high and natural gas prices have collapsed. Why? Because the expectations for future supply and demand are very different for the two resources. There is a tremendous geopolitical risk premium built into the price of crude oil due to possible supply disruptions. The list of potential problems for the market grows daily. Iraq, a country with large oil reserves, has been unable to significantly increase production due to ongoing conflict. The government of Iran poses a double threat to the market. The first is the potential for them to withhold oil from the market as a negotiating tactic over Iranian nuclear facilities. The second is the fear that Iran would impede shipments of oil from other countries in the Persian Gulf by attempting to close the Straits of Hormuz. Political unrest in Nigeria has already taken several hundred thousand barrels of daily oil production off the market and threatens further reduction. Anti-American sentiment in South America, particularly Venezuela, also threatens to curtail oil production.

The natural gas market has none of these concerns. Almost all natural gas consumed in North America is produced there. Natural gas is also produced all over the continent, from the Gulf of Mexico to the central plains states, up the Rocky Mountains and well into Canada. Therefore, the one significant risk factor in the

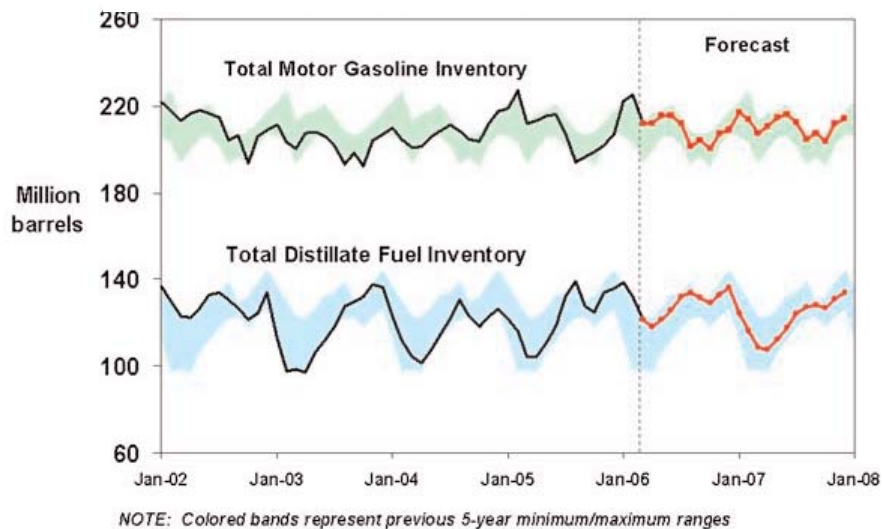
natural gas markets, vulnerability to hurricanes, is somewhat mitigated. Hurricane activity in the Gulf of Mexico can adversely impact the production and distribution of natural gas, but it now appears that last Fall's spike in natural gas prices was an overreaction and was quickly reversed.

Given that the underlying current supply and demand characteristics are similar for each market, investors and economists can make some judgments on the size of the geopolitical risk premium and whether it over- or understates the nature of the risk. Most market participants feel that this risk is adding \$12-\$18/barrel to the price of oil. In fact, the historical relationship between natural gas and oil suggests a risk premium approaching \$20/barrel.

Understanding the nature of the risk premium yields some unsettling news. There is little that political leaders can do about energy prices other than promote world peace. Recently the Bush Administration announced that it would temporarily suspend buying oil for the Strategic Petroleum Reserve (SPR) – the US government's emergency store of oil. Periodically, there has been pressure to sell some of these reserves to reduce the price of oil. The other common governmental solution to high oil prices is the encouragement of new oil production. The most controversial of these is the proposal to allow oil drilling in the Arctic National Wildlife Refuge. Despite tremendous political and media attention, these actions are likely to have minimal impact on the price of oil, because there is no near term shortage of oil. What we have is fear regarding the future of oil production, given that so much of it takes place in increasingly unstable or hostile countries. In contrast, natural gas production takes place in stable regions, with the weather-related caveat mentioned above.

Now that we are approaching summer in North America, the news is dominated by prices in the third energy market, the gasoline market. Gasoline prices have risen dramatically with the price of crude oil. It would appear that, as with crude oil, there are no fundamental issues with supply and demand in the gasoline market (See Chart 2). In reality, there is no such thing as the gasoline market. There are now 18 different

Chart 2: Gasoline and Distillate Inventories



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grades of gasoline sold in this country, differentiated by regions and occasionally by season. That is, different gasolines are sold in the winter and summer in some parts of the US to reduce smog. As a result, a shortage of gasoline in one part of the country cannot always be offset by a surplus in another. Nor can unsold gasoline in one season simply be warehoused to be sold later. In other words, gasoline is not actually a commodity.

There are several other factors creating a shortage of gasoline. It became well documented after last summer's hurricanes that the world, and the US in particular, had not made any significant investment in refining capacity since 1985. The hurricanes damaged several large refineries, though this damage has largely been repaired. Additional refineries are being built in the Middle East and in Indonesia, but they will not be functional for several years. Efforts to build new refineries in the US have been delayed by community opposition, though there are now significant expansion projects at several existing refineries.

Another factor adversely affecting gasoline prices is the change in additives used to increase performance. For several years, MTBE had been added to increase octane levels. It is now believed that MTBE poses a health risk, and is being

replaced by ethanol. Ethanol is made in the US primarily from corn, but can also be derived from sugar cane, switchgrass and other agricultural products. Here too, however, there are shortages, both of the actual product, as well as the infrastructure to transport ethanol and mix it with conventional gasoline.

For consumers of gasoline, this is generally bad news. As investors, however, this lack of refining capacity creates opportunities. There will be additional investment in all aspects of the energy industry, from drilling to transportation, from refining to the increased use of alternative fuels. Over the long run, we believe these opportunities exist irrespective of the price of the underlying commodities. Additional refining capacity will be added to the global energy system whether oil is \$50 or \$70/barrel. This capacity will be added somewhere, either in the US or abroad. High prices will encourage the use of alternative fuels and alternative sources of fuel, even though we believe neither is likely to affect prices much in the short term. Our challenge as investors is to find those sectors that are most likely to be positively impacted by the changes in the energy markets and those companies that will be able to meet future demand. ♦