Quarterly Energy Update

Third Quarter 2008

Signs of a Reprieve

After hitting an all-time high (intraday) of $147.27 on July 11, oil prices pulled back, closing at $118.58 on August 6. Prices are now 20 percent below their record high. Even after the recent decline, prices are almost 60 percent above year-ago levels and up around 20 percent year-to-date. The futures market was in backwardation on August 6, with the December 2010 contract closing at $115.95, implying that markets expect the long-term price of oil to be slightly lower.

The most recent drop in oil prices is likely attributable to slowing demand growth, which has been given credence by the appearance of a slowing global economy. Adding to recent downward pressure is the reduction of fuel subsidies given to consumers in the larger emerging nations of China and India, as well as some Middle Eastern countries. Note that subsidies in these nations have not been eliminated but merely reduced, and consumption has not fully adjusted to international oil prices.
A large portion of the increase in world oil consumption has been driven by the larger emerging economies of China and India. For instance, in an attempt to further reduce pollution in advance of the Olympic Games, China switched a large amount of its electricity generation from coal to diesel. China is also thought to have stockpiled oil and diesel in advance of the games to ensure there are no shortages due to the influx of participants and spectators.

Upon completion of the Olympic Games, it is expected that the Chinese will continue to phase out their subsidies, with the goal of eliminating them by the end of 2009. If there is a drop in Chinese demand following the Olympics, there will most likely be further downward pressure on oil prices.

**Diesel Prices Slip**
Diesel prices slid in tandem with oil, but strong demand from China and Europe have helped maintain fairly solid prices. One factor contributing to the strength of diesel is that refineries are configured to produce more gasoline than diesel fuel. This configuration is based on past consumption patterns and is making it difficult to get enough diesel out of each barrel of oil.

**Gasoline Prices Hover at $4 per Gallon**
The nationwide pump price of gasoline has recently hovered around $3.90 per
gallon after peaking at $4.12 in mid-July. Typically the period between Memorial Day and Labor Day are seasonally strong for gasoline prices as many travelers hit the road over the summer months. Although gasoline prices have increased drastically since the beginning of the year, a normal historical relationship with oil prices would make them even higher.

Gasoline prices haven’t kept pace with crude oil because American drivers are consuming less gasoline. Americans drove only 254.6 billion miles in May, compared with 264.3 in 2007, a 3.7 percent decline. Gasoline purchases slipped 2.3 percent.

Gasoline inventories are above seasonal norms, which is depressing refiners’ margins and holding down capacity utilization. Some of the downward pressure is the result of high diesel margins. With diesel in high demand, more barrels of oil have to be processed, which increases gasoline production.

Assuming margins recover and crude oil prices hold steady, the Brown–Virmani model estimates spot gasoline prices at $3.13 per gallon by Labor Day. However, the futures market is not showing a recovery in refiners’ margins and currently projects spot prices at $2.94 by Labor Day. This translates to a national average pump price of about $3.70 per gallon for regular unleaded.
Natural Gas Prices Fall

Natural gas prices have followed oil prices both in their rise and subsequent fall. Though moving with oil, domestic prices remain well below international natural gas prices and any normal parity with oil. This pricing differential is likely to persist because U.S. natural gas production is rising, and there is little opportunity for international arbitrage because the U.S. is not set up to export natural gas in a cost-effective manner.

An old pricing rule used in the oil patch to obtain a low price estimate for natural gas (relative to the price of oil) is the “10:1 rule,” which prices gas at 1/10 the price of oil. The Henry Hub price of natural gas is currently less than 1/10 the price of a barrel of oil and has been for the greater part of a year. There are three primary reasons for this: the U.S. currently has seen increasing inventories over the past five years; the manufacturing sector, traditionally a large consumer of natural gas, has been weak recently; and production has increased considerably.

Looking to the latter half of the year, the Brown–Yücel model looks for seasonal gains in natural gas prices during the winter heating season. Looking longer term, a recovery in U.S. manufacturing should boost demand, as would growth in natural gas use for electricity generation.

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