



WACHOVIA

# ECONOMIC COMMENTARY



October 13, 2006

Jason Schenker, Economist

[jason.schenker@wachovia.com](mailto:jason.schenker@wachovia.com)

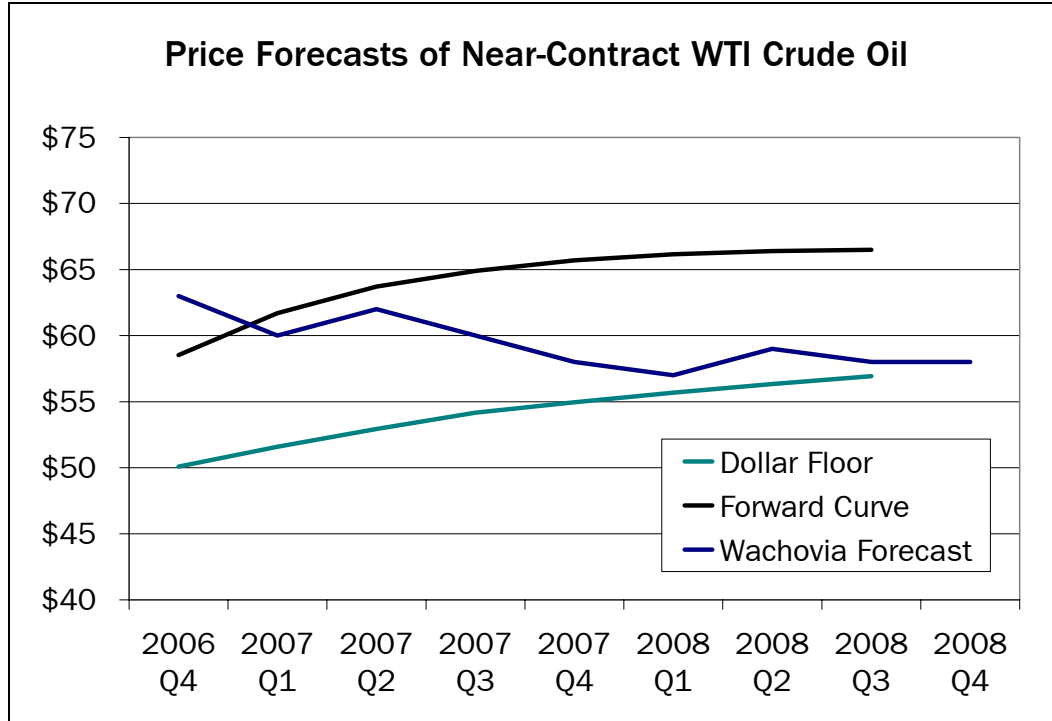
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## Energy Forecast Chartbook – Q4 2006

- In our piece from July entitled *Energy: Iran, Forward Curves and Forecasts* we substituted a standard energy chartbook with a piece focused on the argument that Iran had no intention of cutting oil exports. We made the claim that Iran would become a non-issue, and at that point the price of crude would fall back to the \$55 - \$60 per barrel range ([Exhibit 2](#)). Now, with Iran having faded into the background, the price of oil has indeed retreated to the range we predicted. With the onset of the fourth quarter, we find energy prices facing significant downward pressure. Inventories are high, economic growth is slowing in the U.S. and abroad, the hurricane season was quiet and growth is slowing.
- The biggest change in the energy market has been the nature of the risk premium. The current price of crude is a function of supply and demand dynamics – in the present and in the future. Now, in lieu of a future disruption of supplies from Iran that could push prices to record highs, we now find a market pricing in some downside demand risk stemming from the likelihood of slower growth. We expect an economic soft landing, in which case commodity prices may retain volatility but are likely to move sideways on-trend. If, however, growth slows more rapidly than expected, commodity prices are likely to collapse – with energy prices leading the charge down.
- Because we had anticipated a sharp decline in crude, we have left our forecast for the price of crude relatively unchanged. The forward curve of crude has even fallen to levels that more closely reflect our own forecasts. The dollar-clearing arbitrage level continues to point towards support of crude at the \$50-\$55 per barrel range ([Exhibit 1](#)).
- Central banks all over the world have raised interest rates to stave off inflation ([Exhibit 3](#)). The problem is that higher interest rates engender slower growth. Our forecasts for 2007 show a broad-based slowing of growth and an easing of inflation. ([Exhibit 4](#)). This means that the policy rate moves of various central banks are expected to have had their desired impacts. But, it also means that growth will be slower in 2007 than it was in 2006. Since oil demand and global GDP growth are strongly correlated ([Exhibit 5](#)), it also means that oil demand is likely to slow.
- It is typical during the period of weak, or shoulder, demand in the fall that gasoline prices fall. It is, however, an absolute anomaly, however, how much they have fallen. The lack of a severe hurricane season has made the supply of refined products seem more secure, while the natural drop-off in gasoline demand has pushed down the demand-side of the equation. With wholesale gasoline prices close to \$1.50 per gallon, we find retail gasoline prices also very close to their previous lows of the year back in February ([Exhibit 6](#)).

- Although prices have collapsed recently, the demand dynamics surrounding the plummet in prices is not perennial, but transitory. We expect gasoline demand will rise year-over-year, and that wholesale prices will rise with the on-set of refining ahead of the next peak driving season. Although it is difficult to call the bottom, given the weak gasoline demand dynamics in the winter, it is clear that retail gasoline prices are going to move towards \$2.00 this winter, and perhaps be sub-two dollars in many areas. The concern about high gasoline prices and the move to more fuel efficient vehicles could see some diminution as prices ameliorate. Gasoline prices will not be enough to save the U.S. economy from this slowdown, and the impact to consumers is likely to be marginal. This is especially true since demand is up year-to-date by 0.7 percent. Still, we expect national retail gasoline prices to remain around the \$2.00 to \$2.25 level for most of the winter.
- While gasoline prices may hibernate for the winter before resurging sharply in the spring, heating oil prices have moved lower on a lack of demand that is soon to appear. The on-set of winter, or perhaps even the contract roll that will make the December heating oil contract the near-contract should begin to give this market some legs. Even if crude moves lower, heating oil is likely to move higher. Even if inventories are lush now, winter weather can be a real wild card. Sure, El Nino is poised to allow for a mild winter in the Northeast, but wasn't the 2006 hurricane season supposed to be just as bad as the 2005 season with the potential for a Katrina-Rita redux? We're not likely to put much stock in the forecast for an abnormal anything, but see the likelihood of an average winter to be more likely. As such, we believe that there are upside risks to heating oil prices from current levels. Furthermore, if the winter does turn out to be cold, we see the potential for higher prices in the spring, especially with competing distillate demand coming from the diesel space.
- Gasoline prices, heating oil prices and crude oil prices have plummeted. Only diesel prices haven't fallen as far, or as fast ([Exhibit 7](#)). It's clear that diesel prices are displaying stickiness on the downside, and it has everything to do with the conversion from low sulfur diesel to ultra low sulfur diesel that will be completed by January 1, 2007. This conversion process is no where near complete. Ultra low sulfur diesel inventories have been rising, but low sulfur diesel remains a significant portion of inventory ([Exhibit 8](#)). In other words, there are real concerns about diesel supply. So, even if heating oil and diesel prices have fallen, there is weather cyclicity to the price of heating oil and it is a distillate product, which means that there is a risk of a physical diesel shortage in some areas at the end of the year and through the beginning of 2007. The impact this will have on crude is less clear, but it is extremely likely that as ultra low sulfur diesel demand surges, and heating oil demand peaks, prices of distillate products could spike. Much will depend on the weather, but while retail gasoline moves towards \$2.00 per gallon, retail diesel is likely to move towards \$3.00 per gallon, with even further upside risk at the pump.
- OPEC production has been around 30 million barrels per day for a number of months. Recently, however, the amount produced has been sliding moderately for the past few months ([Exhibit 9](#)). This has been more the result of easing demand, rather than a concerted effort to cut off supplies. At the last OPEC meeting, a production cut was discussed, but no unanimity was reached. Even if there is a meeting, it is not likely to occur before the end of Ramadan on October 23<sup>rd</sup>. Furthermore, even if there were a production cut of one million barrels, it is likely that some members may cheat, of which there is a long tradition. Still, it could give some footing to the market as it heads into the stronger heating oil demand season. Oil prices may be down, but are likely not out. Mother Nature, however, could be a more important market mover than OPEC.
- For the past three weeks, natural gas injections have been below 80 Bcf. Although still decent builds, we have seen the surplus of inventory above the five-year moving average diminish to the lowest level all year - at 11.8 percent ([Exhibit 10](#)). Near-contract prices have moved up with the trading of the November contract and the on-set of somewhat colder weather. Rig counts remain high, but the contango in the winter strip -- with a peak near \$8.00 - shows that risks remain to the upside beyond the shoulder period. Still, we have revised down our forecasts for natural gas prices for the coming year ([Exhibit 11](#)), demand may slacken with slower economic growth, and rig counts remain near record levels.

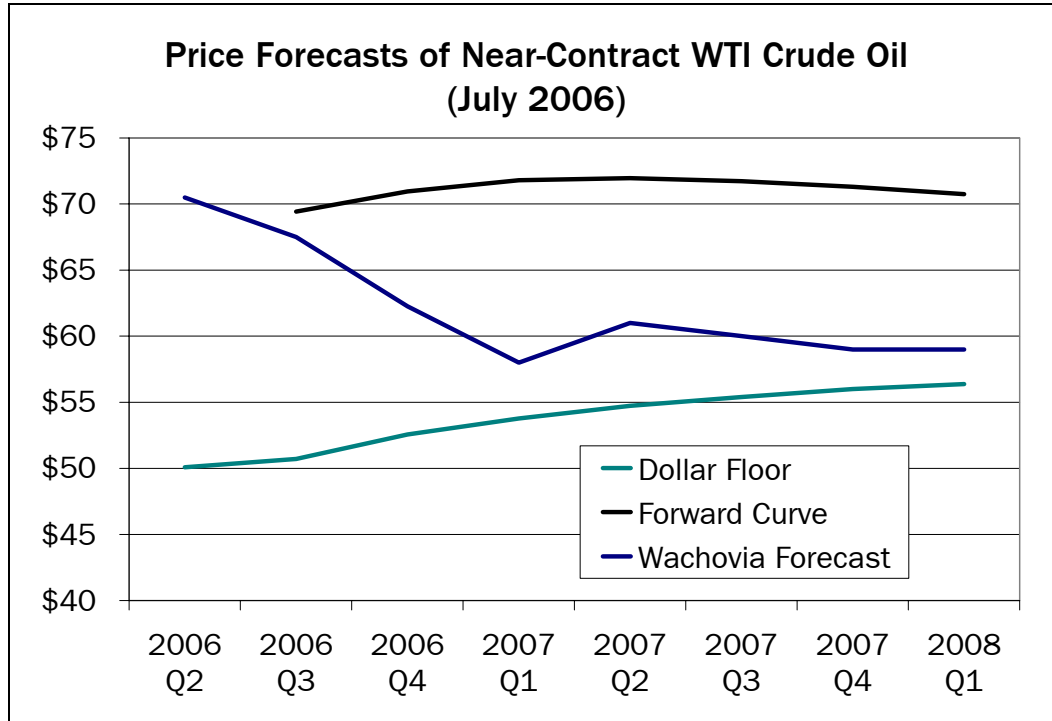
**Exhibit 1**



Source: Bloomberg L.P. and Wachovia Corporation

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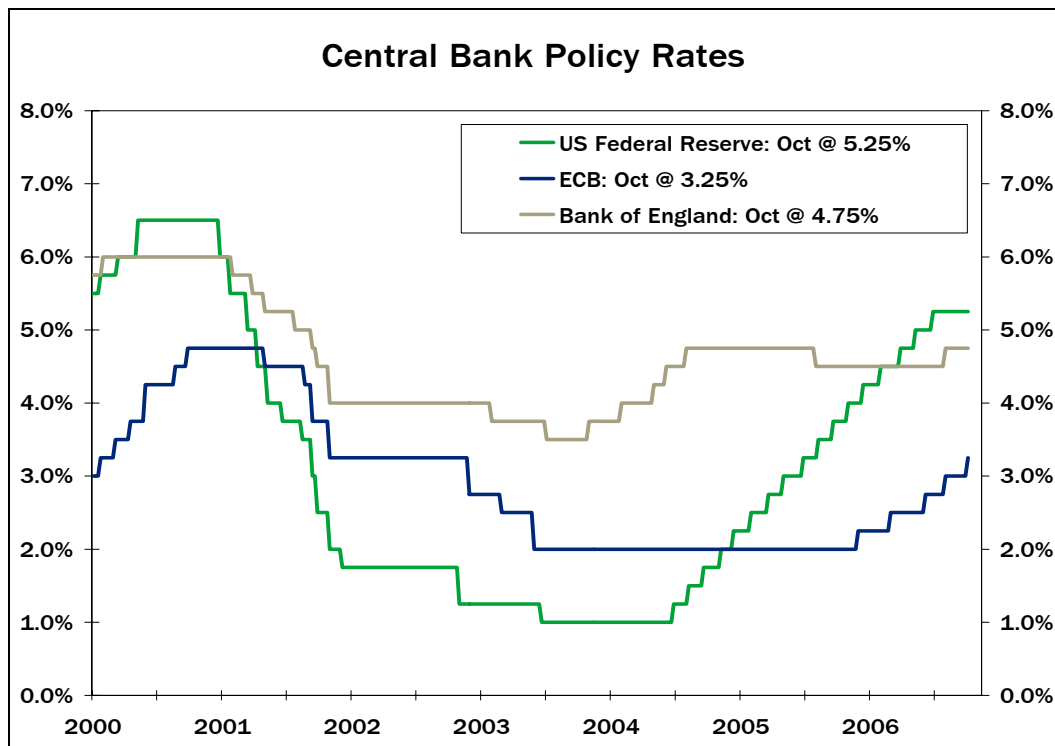
**Exhibit 2**



Source: Bloomberg L.P. and Wachovia Corporation

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Exhibit 3



Source: Bloomberg L.P. and Wachovia Corporation

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Exhibit 4

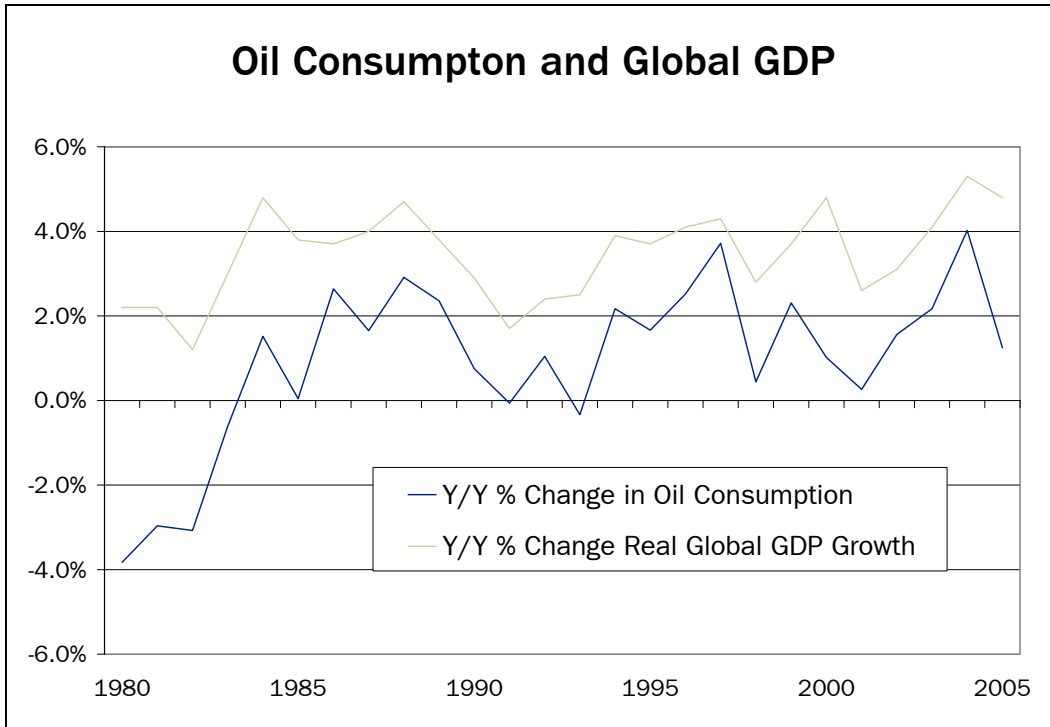
Wachovia International Economic Forecast						
Country	GDP			CPI		
	Year-over-Year Percentage Change			Year-over-Year Percentage Change		
	2006	2007	2008	2006	2007	2008
Global	4.9%	4.1%	3.7%	N/A	N/A	N/A
<b>Major Economies</b>						
United States	3.3%	2.5%	3.2%	3.5%	2.5%	2.6%
Eurozone	2.6%	2.0%	2.0%	2.1%	2.0%	1.9%
Germany	2.4%	1.6%	1.8%	1.7%	1.7%	1.7%
France	2.4%	2.3%	2.0%	2.0%	2.0%	1.8%
Italy	1.8%	1.6%	1.6%	2.0%	1.9%	1.8%
UK	2.5%	2.2%	2.1%	2.3%	1.9%	1.6%
Japan	2.5%	1.9%	1.9%	0.4%	0.5%	0.7%
Canada	2.8%	2.4%	2.4%	2.1%	1.6%	2.2%
<b>Developing Economies</b>						
China	10.7%	9.3%	8.4%	1.4%	2.2%	1.6%
India	8.4%	8.2%	6.8%	5.3%	4.7%	4.5%
Mexico	4.8%	3.2%	3.1%	3.6%	3.6%	2.9%
Brazil	3.0%	3.1%	3.0%	4.2%	3.6%	3.7%

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Source: Global Insight and Wachovia Corporation

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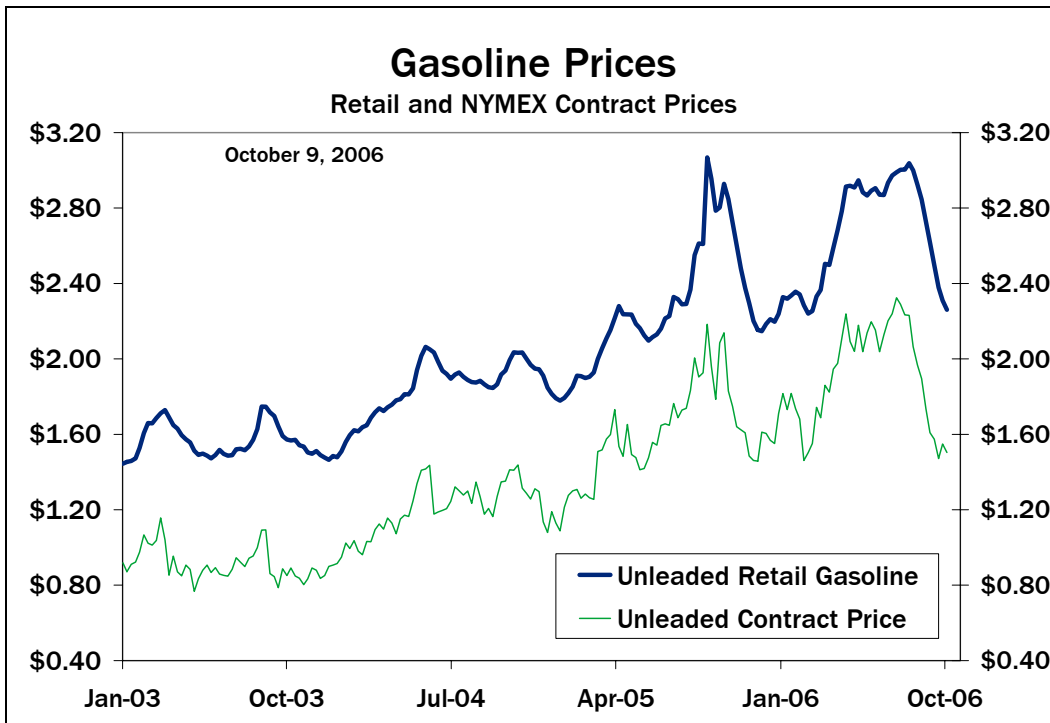
Exhibit 5



Source: Global Insight, the IMF and Wachovia Corporation

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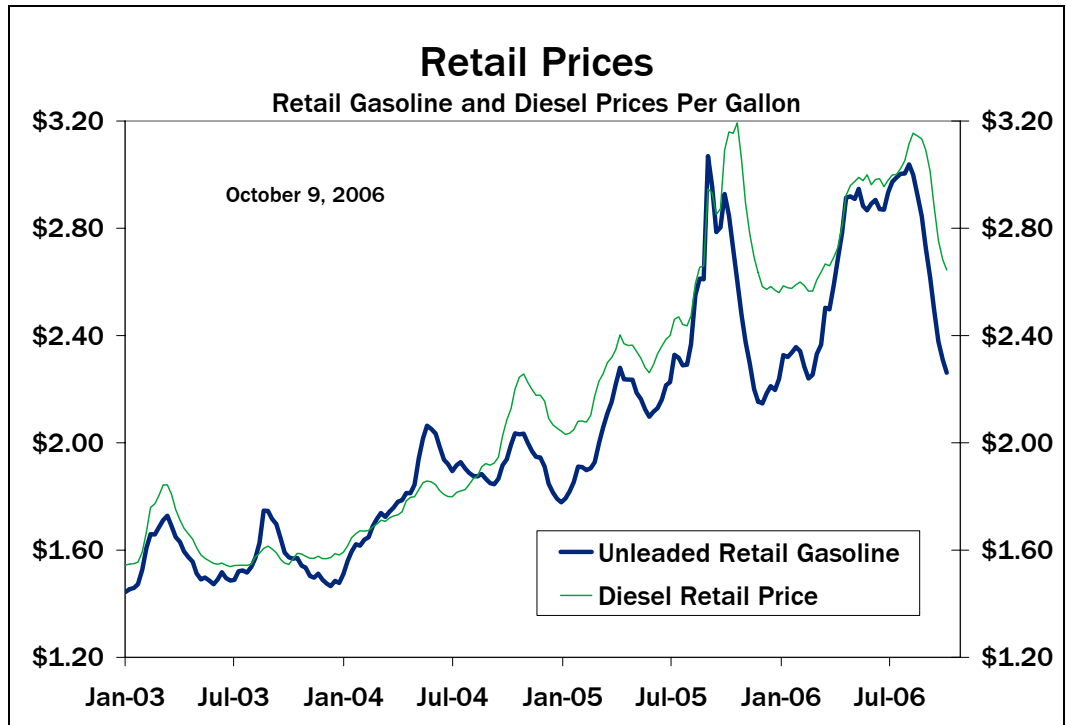
Exhibit 6



Source: Bloomberg L.P. and Wachovia Corporation

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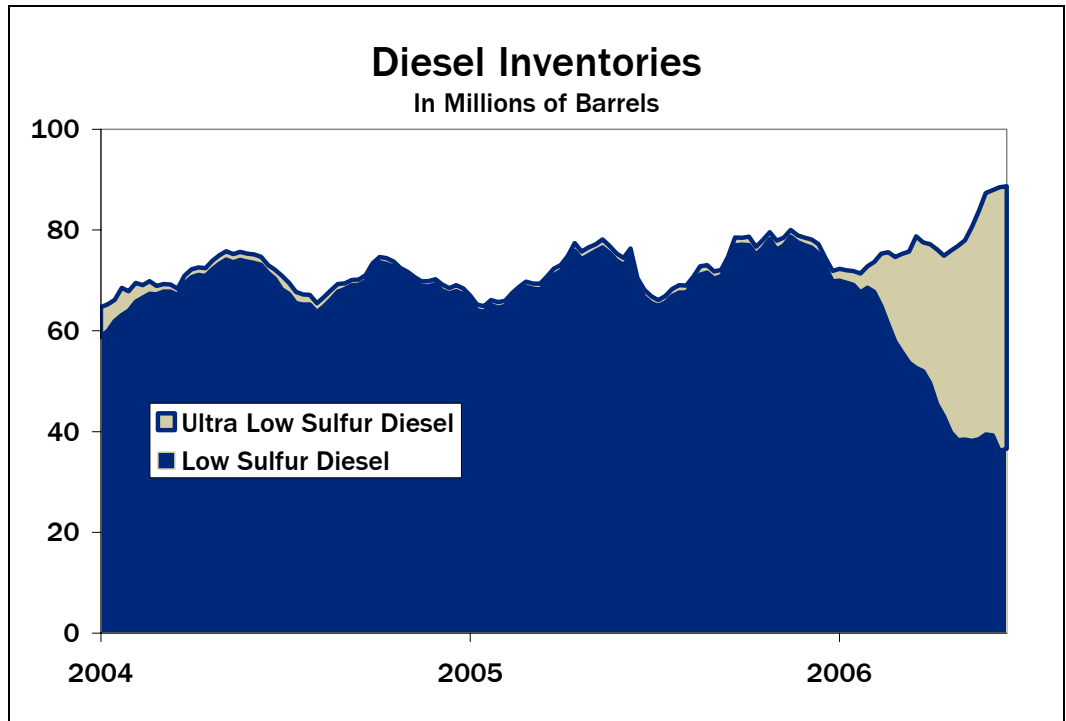
Exhibit 7



Source: Bloomberg L.P. and Wachovia Corporation

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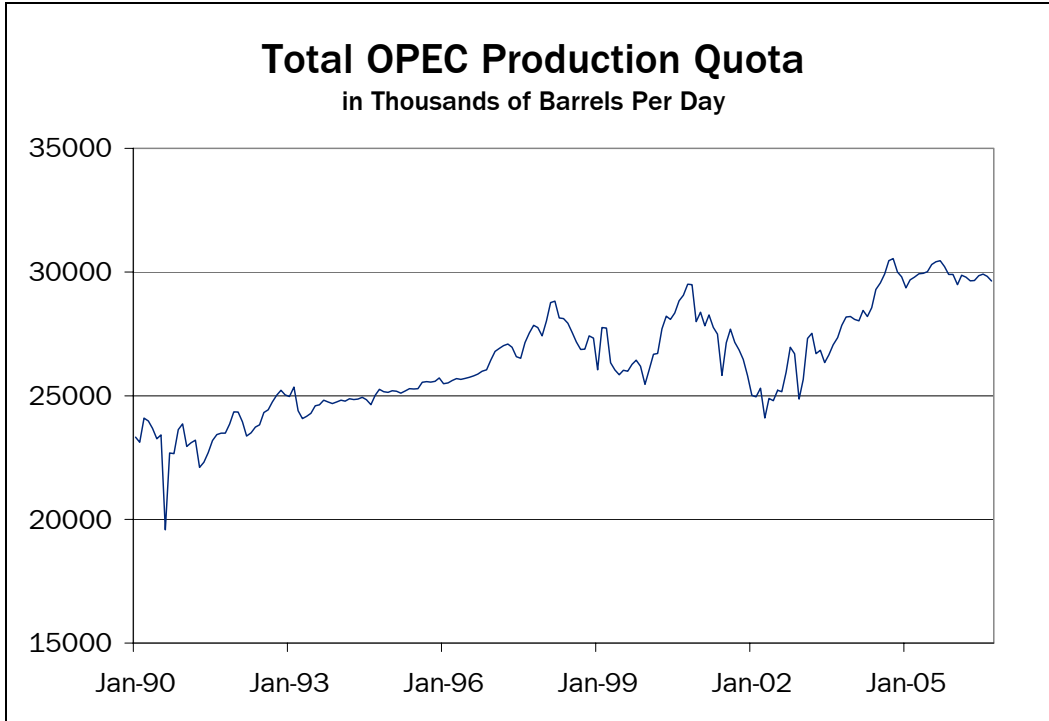
Exhibit 8



Source: Bloomberg L.P. and Wachovia Corporation

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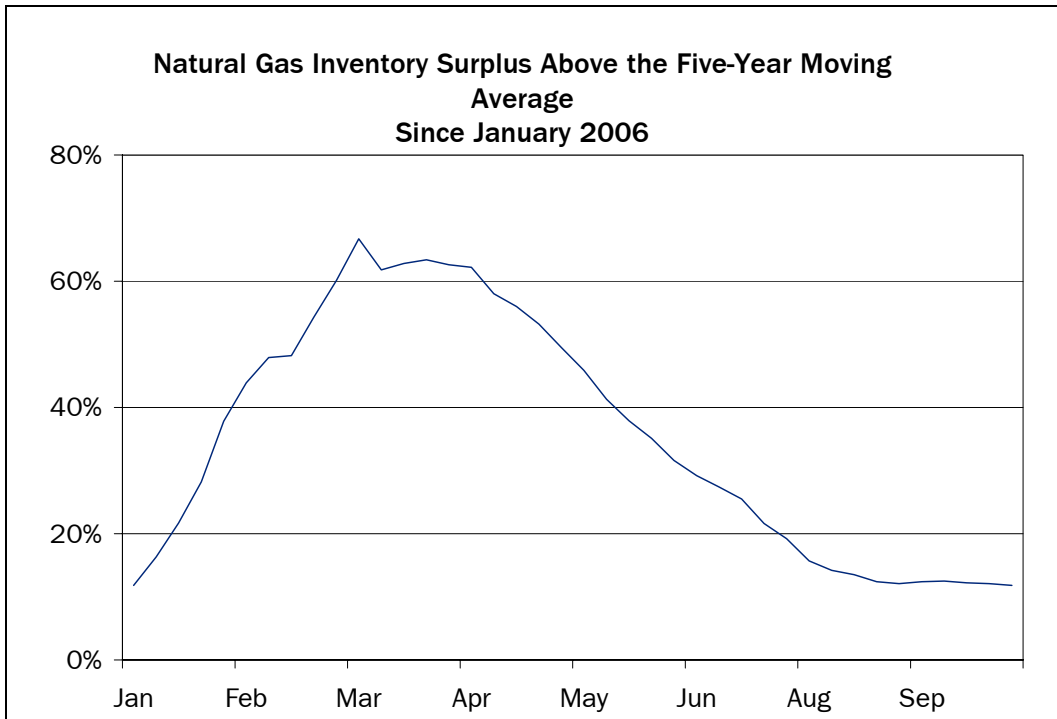
Exhibit 9



Source: Bloomberg L.P. and Wachovia Corporation

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Exhibit 10



Source: Bloomberg L.P. and Wachovia Corporation

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**Exhibit 11**

AVERAGE PRICES												
FORECASTS	2006	2007	2008	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Sweet Crude (Cushing WTI - \$/Bbl)	\$ 66.93	\$ 60.00	\$ 58.00	\$ 63.00	\$ 60.00	\$ 62.00	\$ 60.00	\$ 58.00	\$ 57.00	\$ 59.00	\$ 58.00	\$ 58.00
Brent Crude (\$/Bbl)	\$ 66.45	\$ 58.75	\$ 58.00	\$ 62.00	\$ 58.00	\$ 60.00	\$ 59.00	\$ 58.00	\$ 58.00	\$ 58.00	\$ 58.00	\$ 58.00
Natural Gas (Henry Hub - \$/MMBtu)	\$ 7.12	\$ 7.00	\$ 6.94	\$ 7.75	\$ 7.50	\$ 6.25	\$ 6.50	\$ 7.75	\$ 7.25	\$ 6.25	\$ 6.50	\$ 7.75
BSB Coal (\$/Short Ton)	\$ 51.82	\$ 42.50	\$ 40.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00

Source: Wachovia Corporation

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## Wachovia Corporation Economics Group

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<b>John E. Silvia, Ph.D.</b>	Chief Economist	(704) 374-7034	john.silvia@wachovia.com
<b>Mark Vitner</b>	Senior Economist	(704) 383-5635	mark.vitner@wachovia.com
<b>Jay H. Bryson, Ph.D.</b>	Global Economist	(704) 383-3518	jay.bryson@wachovia.com
<b>Gina Martin, CFA</b>	Financial Economist	(704) 383-6805	gina.martin@wachovia.com
<b>Sam Bullard</b>	Economist	(704) 383-7372	sam.bullard@wachovia.com
<b>Jason Schenker</b>	Economist	(704) 383-3695	jason.schenker@wachovia.com
<b>Huiwen Lai, Ph.D.</b>	Quantitative Analyst	(704) 715-7415	huiwen.lai@wachovia.com
<b>Phillip Neuhart</b>	Economic Analyst	(704) 715-8457	phillip.neuhart@wachovia.com
<b>Adam York</b>	Economic Analyst	(704) 715-9660	adam.york@wachovia.com

*The report, IDs and passwords are available at [www.wachovia.com/economics](http://www.wachovia.com/economics)*

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