Quarterly Energy Update

First Quarter 2009

Energy Prices Decline Across the Board

The global economic slowdown has led to a precipitous drop in energy prices (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Spot Prices</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 15</td>
<td>Feb. 6</td>
</tr>
<tr>
<td>Oil, West Texas Intermediate (dollars/barrel)</td>
<td>$138.74</td>
</tr>
<tr>
<td>Natural Gas, Henry Hub (dollars/MMBtu)</td>
<td>$11.78</td>
</tr>
<tr>
<td>Gasoline, Regular Grade (dollars/gallon)</td>
<td>$3.23</td>
</tr>
<tr>
<td>Diesel Fuel, NY Harbor (dollars/gallon)</td>
<td>$3.93</td>
</tr>
</tbody>
</table>

Oil prices have fallen from an all-time high of $147 in July to $40 in the first week of February. This decline—now over $100—is the most precipitous fall in recent history (Chart 1). Both natural gas and refined products prices have followed oil down.

World Growth Slows

The OECD nations are in a severe recession, which has stymied oil demand. In addition, China—the largest oil consumer behind the U.S.—saw economic growth slow to 6.8 percent in the fourth quarter. Other emerging economies have come under strain amid the global slowdown. While growth in these...
economies supported high prices in early 2008, their slowdown has precipitated oil price declines. The Energy Information Administration (EIA) now estimates world oil consumption will fall by 1.2 million barrels/day in 2009. This will be the first time since 1982–83 that consumption has dropped for two consecutive years (Chart 2).

The EIA is predicting that production outside of OPEC will grow by 150,000 barrels per day in 2009. In December OPEC cut its production quota by 2.2 million barrels/day in addition to the 1.5 million barrels/day cut in November. Russia also indicated it may pull several hundred thousand barrels/day from the market. Despite the quota reductions, oil fell by $3.54 (8.1 percent) on the December 17 announcement.

Despite current conditions, market participants expect oil prices to rise in the longer term. The futures market is in contango—where current prices are lower than futures prices—with the spread between the front month contract and the Dec 2010 contract over $21. The futures market is predicting that the excess production capacity today will be trimmed and future demand will rebound, resulting in higher prices.

**Gasoline Demand Sharply Lower**
Refined product prices have fallen in tandem with oil (Chart 3). The nationwide average gasoline price is now $1.88, down over 50 percent from the peak in July. Even after the drastic decline in prices, demand continued to drop. In December, gasoline consumption fell by 301,000 barrels/day from the same period last year (−3.2 percent), and in November drivers traveled 12.9 billion fewer miles (−5.3 percent).
Lower gasoline prices are hitting U.S. consumers in the pocketbook, but in a good way. The Energy Information Administration estimates that gasoline prices will average $1.87 in 2009, and consumption is expected to drop from 9 million barrels/day in 2008 to 8.9 million barrels/day in 2009. Based on these estimates American consumers will save over $190 billion on gas in 2009. These are savings derived from gasoline alone; when the overall decline in energy prices is taken into account total savings are estimated at over $300 billion.

**Chart 4**
Natural Gas Prices Reflect Market

Dollars/MMBtu


**Natural Gas Prices No Exception**
Increased supply and lower demand have pushed natural gas prices down (Chart 4). Domestic onshore production increased 9.1 percent in 2008, most of which came from unconventional plays. Lower gas prices have caused drilling to fall, which is seen in the reduced rig count (Chart 5). From its high in September through the first week of February, the total rig count shrunk over 25 percent. Natural gas rigs account for approximately 80 percent of rigs in operation.
Chart 5
U.S. Oil and Gas Rig Counts Declining

—Mine Yücel and Jackson Thies

About the Authors

Yücel is a senior economist and vice president and Thies is a research assistant in the Research Department at the Federal Reserve Bank of Dallas.