Business Forecasting Roundtable

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Wachovia Securities

Miller COLLEGE OF BUSINESS
U.S. Economic Update
Gary Santoni, Professor Emeritus
# U.S. Economy in 2008

<table>
<thead>
<tr>
<th></th>
<th>2007 Avg.</th>
<th>TIME SERIES FORECAST 2008</th>
<th>CONSENSUS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
</tr>
<tr>
<td>Real GDP Growth</td>
<td>2.5</td>
<td>2.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Inflation</td>
<td>2.6</td>
<td>2.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Unempl. Rate</td>
<td>4.6</td>
<td>5.1</td>
<td>5.2</td>
</tr>
<tr>
<td>10-year T-Bond</td>
<td>4.6</td>
<td>4.8</td>
<td>4.8</td>
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</tbody>
</table>
Crude Oil Prices

Crude Oil Prices

2007 Dollars

- OPEC 10% Quota Increase
- Asian Economy Crisis
- PDVSA Strike
- Iraq War
- Asian Growth
- Weaker Dollar
- Series of OPEC Cuts
- 4.2 Million Barrels
- Iranian Revolution
- Suez Crisis
- Yom Kippur War
- Oil Embargo
- Gulf War
- U.S. Price Controls
- 9/11

2006 $/Barrel

1947 - May 2008

- U.S. 1st Purchase Price (Wellhead)
- "World Price" *
- Avg U.S. $24.98
- Avg World $27.00
- Median U.S. & World $19.04

Crude Oil Output and Proved Reserves

Output
Mil of Bls per day

Reserves
Bil of bls

Years

Output

RESERVES

60 65 70 75 80 85 90 95 00 05

20 40 60 80 100 1200 1400

OUTPUT

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### Average Annual % Change

**Output, Reserves and Prices**

**1960-2007**

<table>
<thead>
<tr>
<th></th>
<th>World Output</th>
<th>World Reserves</th>
<th>World Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average</strong></td>
<td>2.68</td>
<td>3.07</td>
<td>2.93</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>8.70</td>
<td>12.99</td>
<td>89.91</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>-6.40</td>
<td>-2.43</td>
<td>-64.24</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>4.18</td>
<td>3.70</td>
<td>23.19</td>
</tr>
</tbody>
</table>
World Market for Crude Oil

Price

Quantity

P_0
P_1
Q_0
Q_1
S_0
D_0
D_1
World Market for Crude Oil

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P_0$</td>
<td>$Q_0$</td>
</tr>
<tr>
<td>$P_1$</td>
<td>$Q_1$</td>
</tr>
</tbody>
</table>

The graph shows the supply and demand for crude oil. The supply curve is $S_0$, and the demand curves are $D_0$ and $D_1$. The initial equilibrium is at $Q_0$ and $P_0$. An increase in demand shifts the demand curve to $D_1$, leading to a new equilibrium at $Q_1$ and a higher price $P_1$.
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