The Geopolitics of Lower Oil Prices

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Impact of Lower Oil Prices

Lower Prices Encourage Demand and Discourage Supply

Generally:
- Stimulates Economic Activity in Net Importing Countries
- Hampers Economic Activity Net Exporting Countries

Country Impact may be Offset by:
- Importers may also Produce Crude Oil
- Exporters have different fiscal condition
- Strength of Dollar
- Role of Subsidies in domestic market
- Policies Promoting Conservation, Alternatives
Latin America at Risk

- Mexico, Brazil, Colombia production expansion at risk in low price environment
- Venezuela, Ecuador political regimes at risk in a low price environment
Russian Growth Cannot Offset Mature Field Decline

- Sanctions and low oil prices push back time frame for East Siberia and Arctic development
- Meanwhile European Demand is Falling and Russian is Pivoting to Asia
Middle East: Decades of Instability

- Iran vs Saudi Arabia
- Shia vs. Sunni
- ISIS vs Governing Regimes
- Civil War in Syria
- Civil War in Yemen

<table>
<thead>
<tr>
<th>Country</th>
<th>Capital Reserves $B</th>
<th># years of oil export revenues</th>
<th>Oil export revenues per capita $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>714</td>
<td>2.9</td>
<td>8,302</td>
</tr>
<tr>
<td>Kuwait</td>
<td>31</td>
<td>0.4</td>
<td>24,566</td>
</tr>
<tr>
<td>UAE</td>
<td>76</td>
<td>1.0</td>
<td>8,300</td>
</tr>
<tr>
<td>Iran</td>
<td>68</td>
<td>1.7</td>
<td>507</td>
</tr>
<tr>
<td>Iraq</td>
<td>63</td>
<td>0.7</td>
<td>2,575</td>
</tr>
</tbody>
</table>

Sources: IMF, EIA
South China Sea: Flashpoint

- Potential for Conflict at Sea
- U.S. Migrating from Engagement to Containment
The higher price case results in 2-3 million barrels per day of increased production.

Source: EIA, Annual Energy Outlook 2015
Oil Supply Comes in Many Forms

### Sources of Oil Supply in the Global Market

#### Annual Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Refinery Throughput</th>
<th>Processing gain</th>
<th>Alternative fuels</th>
<th>Non-Opec NGL supply (exc ethane)</th>
<th>Opec NGL supply (exc ethane)</th>
<th>Ethane (N. America, Europe)</th>
<th>Total Product Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2,000</td>
<td>(200)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>1,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>1,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>1,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>1,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### Global Oil Balance with Outlook to 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>OECD Sub-Total</th>
<th>OECD</th>
<th>FSU</th>
<th>Africa</th>
<th>Latin America</th>
<th>Middle East</th>
<th>China</th>
<th>Other Asia</th>
<th>Other non-OPEC</th>
<th>Other Supply</th>
<th>Non-OPEC Oil Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>15.9</td>
<td>13.4</td>
<td>1.9</td>
<td>4.1</td>
<td>1.3</td>
<td>4.2</td>
<td>3.1</td>
<td>0.1</td>
<td>0.1</td>
<td>2.7</td>
<td>57.1</td>
</tr>
<tr>
<td>2015</td>
<td>16.4</td>
<td>13.5</td>
<td>1.9</td>
<td>4.3</td>
<td>1.2</td>
<td>4.3</td>
<td>3.1</td>
<td>0.1</td>
<td>0.1</td>
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<td>16.2</td>
<td>13.4</td>
<td>1.9</td>
<td>4.4</td>
<td>1.3</td>
<td>4.3</td>
<td>3.2</td>
<td>0.2</td>
<td>0.2</td>
<td>2.8</td>
<td>57.9</td>
</tr>
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<td>2017</td>
<td>16.4</td>
<td>13.4</td>
<td>1.9</td>
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<td>4.3</td>
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<td>0.2</td>
<td>0.2</td>
<td>2.8</td>
<td>58.3</td>
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<td>2018</td>
<td>16.7</td>
<td>13.4</td>
<td>2.0</td>
<td>4.5</td>
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<td>13.4</td>
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<td>4.5</td>
<td>1.4</td>
<td>4.4</td>
<td>3.2</td>
<td>0.2</td>
<td>0.2</td>
<td>2.9</td>
<td>59.1</td>
</tr>
<tr>
<td>2020</td>
<td>17.3</td>
<td>13.3</td>
<td>2.1</td>
<td>4.6</td>
<td>1.5</td>
<td>4.4</td>
<td>3.2</td>
<td>0.2</td>
<td>0.2</td>
<td>2.9</td>
<td>59.5</td>
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### Call on OPEC

<table>
<thead>
<tr>
<th>Year</th>
<th>Call on OPEC</th>
<th>Actual OPEC</th>
<th>Surplus/Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>29.1</td>
<td>30.2</td>
<td>1.1</td>
</tr>
<tr>
<td>2015</td>
<td>28.9</td>
<td>30.7</td>
<td>1.8</td>
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<tr>
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<td>30.7</td>
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No Room for High Output Scenario
US Remains Dependent on non-Canadian Crude Imports

U.S. Crude Imports by Source with Forecast to 2020 (000 b/d)
Canada’s Trade impacts US Trade
Global Crude Trade Flows are Adjusting

Change in NET Crude Oil Trade Flows
2014 to 2020
million b/d

The Arab Gulf, (Marginal Supplier to the Global Oil Market) gets pushed out of Asia-Pacific?
Has this been a Debate?

Unfettered Markets! Jobs!!

Sell to Canada, Export Condensate, swap with Mexico?

Energy Supply and Distribution Act 2015 (Senator Murkowski and others)

The Secretary (of Energy) shall collaborate with the heads of other Federal Agencies to improve the conceptual development of energy security, (and...)

May consult with allies and key trading partners with respect to energy security issues resulting from changes in the energy marketplace
Energy Security: 1980s and Today?

- Market Context in 1987:
  - Supply Glut, Low Prices
  - US Crude Imports about 30% of oil demand
  - OPEC can influence prices with its production policies
  - Oil is produced in unstable regions – oil import premium paid by U.S. Consumer
  - Significant externalities (environment and military force) not reflected in oil price

February 1987: Factors Affecting Oil and Gas Outlook (NPC)
February 1987: Domestic Petroleum Production and National Security (API)
March 1987: Energy security: A Report to the President (DOE)

Perception in 1987: Imports will grow
Perception in 2015: Imports will fall (but how far and for how long)
Energy Security: 1980s and Today?

Crisis – Supply Disruption – Oil Price Spike

Energy Security: Reduce Vulnerability: Economic and Political Liability to a Change in Volume or Price of Foreign Supply

Vulnerability \( \neq \) Import Dependence

Assess Probability of Significant Disruption And Probability of Price Spike
Policy Responses in 1980s

Short Term Solutions (Emergency Management)
- Strategic reserve
- Sharing
- Fuel-switching
- Demand management
- Military action

Long-term Solutions (Reducing Vulnerability)
- Conservation
- Alternative Fuels
- Address societal cost of oil use (environment)
- Raise Production, Reduce Consumption
- Identify the import premium that reflects the cost of keeping a military force in the PG region
  - Gasoline, btu tax
  - Import Tariff
Debate on the Import Tariff

**Pros**
- Discourage Domestic Consumption
- Encourage Domestic Production
- Encourage alternatives or fuel-switching
- Improve Trade Balance
- Transfer Rent from Exporting Countries to U.S.
- Tariff revenues could be used to offset social costs of oil use
- Reduce Need for Military Presence in Persian Gulf

**Cons**
- Lower GDP by raising cost of fuel
- Drain America First would lead to bigger problems in the future
- Weaken exporting countries, exposing them to instability
- Hurt exporting countries that are allies
Should we Impose an Import Tariff

Pros

• Discourage Domestic Advantage for Exporting Products
• Encourage Domestic Production
• Encourage alternatives or fuel-switching
• Improve Trade Balance
• Transfer Rent from Exporting Countries to U.S.
• Tariff revenues could be used to offset social costs of oil use
• Reduce Need for Military Presence in Persian Gulf
• Help Allies?

Cons

• Lower GDP by raising cost of fuel
• Drain America First would lead to bigger problems in the future
• Weaken exporting countries, exposing them to instability
• Hurt exporting countries that are allies
• Increase Need for Military presence in other parts of the World?
Is the U.S More or Less Vulnerable ...if we can Export Crude?
What is in the best of interests of the United States?

**Short-Term Considerations in an Emergency**

- U.S. producers will directly benefit
- U.S. consumers will confront higher prices
- The President can order U.S. barrels to stay in U.S.
- U.S. purchasing power can secure barrels (at a cost) regardless of trade direction
- Still have SPR and other emergency management

**Long-term Considerations with regard to National Security**

- Is Job Creation Central to our National Security?
- Is GDP Growth Central to our National Security?
- Is there benefit to a slower development of our own reserves (Should we Drain America First)?
- Are we missing an opportunity to reduce our vulnerability by extending our domestic resource and cutting our imports further and longer?
- Should we consider the associated hazards of oil spills, train derailment, gas flaring, land use?
- How do we compare the benefits to producing sector, refining sector, consuming sector?
- Should the U.S. discourage consumption of oil and/or develop alternatives?
- What are implications for our Climate policy or other environmental objectives?
- What is the impact on the U.S. military role in the world?
  - Are we more likely to be pulled into conflict
  - How will this impact U.S. relationship with China
Thank you

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