Overview and Summary

In December 1998, the price of high-quality crude oil briefly fell below $11 a barrel as financial crises in Asia, Russia, and Brazil dampened demand. Adjusted for inflation, the price was the lowest since 1973. As the world economy recovered and grew, the price of oil rose markedly, peaking at almost $70 per barrel in 2005 before ending the year at $61 per barrel. Today, the price continues to hover at around $65.

This sustained rise in prices has generated hundreds of billions of dollars of extra revenue for oil exporting countries (e.g. the Bank of International Settlements estimates $1.3 trillion to OPEC since end-1998). This Occasional Paper examines the major sources and uses of this windfall and its impact on global imbalances. The paper is not intended to be a comprehensive assessment of the petrodollar phenomenon, but rather to identify issues that warrant further examination. Key findings of our analysis suggest that:

- Some oil exporters are responding to the windfall by increasing reserves, retiring debt, and setting aside money for future generations, measures which should help insulate them from oil price volatility.

- Many countries are also channeling financing to productive investments intended to support growth, in contrast to the last oil boom. However in some cases, domestic spending increases have included hefty public sector wage hikes.

- The complexity and integration of financial markets make it difficult to assess fully where the oil windfall is being invested, though it is clear that domestic equity markets, and, to a lesser extent, real estate markets in the Gulf, are benefiting.

- Oil producers’ current account surpluses have increased already large global imbalances.

- While inflation remains broadly contained in oil-exporting countries with pegged exchange rates, more flexible exchange rates would allow better control over domestic monetary conditions and promote efficient external adjustment.

DISCLAIMER

This is the first in a series of Occasional Papers from the Treasury Department’s Office of International Affairs. These papers will examine international economic issues of current relevance in an effort to identify underlying trends and issues for policymakers. These papers are not statements of U.S. Government, Department of the Treasury, or Administration policy and reflect solely the views of the authors.

* The authors thank their Treasury colleagues, especially Kurt Schuler, for their helpful input and suggestions.
Table 1 lists the 14 countries that exported at least 1 million barrels of oil per day in 2004, led by Saudi Arabia and Russia. These countries account for approximately 46% of global oil production. The data show that oil export revenues for the selected countries increased $410 billion (143%) from 2002 to 2005 and that major exporters increased their holdings of foreign reserves and imports by roughly the same amounts ($266 and $272 billion, respectively). The lag of import growth relative to the pace of revenue increases likely reflects two major factors: 1) conservative oil price assumptions in national budgets (e.g., of about $30-$40 per barrel); and 2) capacity limitations (especially on capital investments). The first reflects a prudent initial response to the uncertainty about the duration of the recent oil price increase and a desire to smooth changes in spending over the medium and long term; the second factor reflects the...
time needed for adequate planning, implementation and oversight of major public and private investments.

Table 1 also illustrates that many governments, including Kuwait, Qatar, Russia, and Saudi Arabia, have used additional oil export revenues to reduce government debt, thereby improving their cash flows going forward by lowering future interest payments. In addition, some countries have also used the additional oil revenue to save for future generations. Norway, for example, set aside $31 billion from end-Q3 2004 to end-Q3 2005, equal to about 11% of GDP in its Government Petroleum Fund (GPF). Russia has more than doubled the size of its stabilization fund since its inception in early 2004, which stood at about $43 billion as of end-2005.

At the same time, strong public pressure to increase wages is proving difficult to resist. In 2005, a number of countries increased public sector wages by double-digit amounts, including Saudi Arabia (15%) and UAE (25% for nationals).

Establishing where oil revenue increases have been invested overseas is more difficult to determine. A recent study by the Bank for International Settlements (BIS), which examined the composition of financial assets held by OPEC countries, concluded that such flows are difficult
to track due to the complexity and integration of financial markets. Specifically, the BIS said it was unable to account for almost 70% of an estimated $700 billion in OPEC’s investable funds generated by the current increase in oil prices (1999 to 2005). This compares to 50% during the last windfall (1978 to 1982). The BIS study estimates that of the 30% that the BIS was able to account for, two-thirds has been deposited in BIS reporting banks (significantly lower than in the previous cycle). The remaining third has been used to purchase U.S. official and private assets and, to a lesser extent, German assets.

These figures do not capture the full magnitude of the petrodollar investments, as the BIS report covers only OPEC members, thus excluding some major oil-exporting countries, in particular Russia and Norway. U.S. Treasury International Capital Reporting System data to end-September 2005 indicate that oil exporting countries made net purchases of $158 billion of long-term U.S. securities since January 2003 and had net acquisitions of $113 billion of short-term U.S. securities and banking liabilities. More funds may have been placed in U.S. assets indirectly through foreign intermediaries (e.g., in Europe or Asia). Anecdotal evidence and historical experience suggest that oil producer investments are also going into construction loans, regional stock markets, private equity funds, and possibly hedge funds located outside the United States, which are difficult to track.

Overall, the macroeconomic situation in most oil exporting countries looks positive assuming oil...
prices remain firm, but it will remain important to use the oil windfall wisely. As evidenced by Table 2, many stock markets have done well in the last few years on the back of higher oil prices, improved fundamentals, and some petrodollars are staying closer to home. Despite high money growth and strong real GDP growth, inflation has also remained under control in most cases.

While inflation remains broadly contained in oil-exporting countries with pegged exchange rates, flexible exchange regimes would allow better control over domestic monetary conditions. Flexible exchange regimes would also permit the domestic economy to respond more rapidly and efficiently to changes in external financial conditions. For example, an appreciating currency under a flexible exchange rate would increase the real income of the residents of a country, by reducing the costs to them of both consumer and capital goods.

2. PETRODOLLARS EFFECTS ON GLOBAL IMBALANCES

Because of the prominence of energy in economic production processes, and the uneven global distribution of oil resources, a rise in the price of oil implies a substantial global redistribution of wealth and, hence, purchasing power. How changes in oil prices affect global imbalances depends in part on the time period considered, how quickly adjustments in demand and supply respond to price changes, and perceptions about the durability of the price change. Price spikes, for instance, probably have relatively small, in some cases negligible, effects on global imbalances. In this case however, the price increase has been sustained, and the impact on global imbalances has been significant. For example, the U.S. oil import bill rose from $104 billion in 2002 to $252 billion in 2005 and the current account surplus of Saudi Arabia increased from 6% of GDP to over 30% of GDP over the same period. Table 3 below shows the 3-year change in the estimated external positions of major regions.

As noted, in many oil-exporting countries import

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>-475</td>
<td>-759</td>
<td>-284</td>
<td>Middle East</td>
<td>30</td>
<td>218</td>
<td>188</td>
</tr>
<tr>
<td>Euro area</td>
<td>49</td>
<td>24</td>
<td>-25</td>
<td>China</td>
<td>35</td>
<td>116</td>
<td>81</td>
</tr>
<tr>
<td>Germany</td>
<td>46</td>
<td>121</td>
<td>75</td>
<td>CIS (Russia, etc.)</td>
<td>32</td>
<td>105</td>
<td>73</td>
</tr>
<tr>
<td>Japan</td>
<td>113</td>
<td>153</td>
<td>40</td>
<td>Latin America</td>
<td>-16</td>
<td>22</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>87</td>
<td>131</td>
<td>44</td>
<td>Africa</td>
<td>-8</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Emerging Asia excl. China</td>
<td>37</td>
<td>-6</td>
<td>-43</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Central and Eastern Europe</td>
<td>-25</td>
<td>-56</td>
<td>-31</td>
</tr>
</tbody>
</table>

3. POLICY IMPLICATIONS

To the extent that oil exporters’ revenues accumulate, global imbalances will be higher than otherwise and oil exporters will need to be part of the global adjustment process, just as emerging Asia, the United States, Japan and Europe need to play a role. The appropriate response for oil exporters will depend on each country’s specific circumstances and prospects for future market conditions.

- Some lower income oil exporters can be expected to absorb all or most of their higher oil revenues through increased expenditure on imports.

- It is reasonable for countries such as Norway, Russia, and Oman, which anticipate a future decline in oil revenues, to prudently accumulate current revenues, and spread future expenditures evenly over time.

- For large oil producers with limited near-term absorptive capacity, it is sensible to increase saving and to improve their debt positions against the possibility of future lower oil prices. If oil prices remain elevated or rise, however, then policymakers in oil-exporting countries can be expected to increase spending. Ideally such spending would be concentrated in investments with high social rates of return in order to strengthen the economy, raise standards of living, and assist with global adjustment of external imbalances.

- If oil prices remain elevated, large oil exporters should consider the role that the choice of foreign exchange regime can play in the adjustment process.