

- \* Column title, "Equilibrium"
- \* Suggested story title: Oil Scarcity
- \* Author: Dennis Botman, IMF Resident Representative to the Philippines

## **Oil Scarcity**

Commodity prices have quickly returned to high levels, owing to structural as well as cyclical and special factors, and market pressures remain elevated. Among commodity prices, oil plays a particularly central role for the global economic outlook. The latest World Economic Outlook (WEO) discusses in detail the tension between the rapid growth in oil demand and the downshift in oil supply trends and its implications for global growth and imbalances (available at: <http://www.imf.org/external/pubs/ft/weo/2011/01/index.htm>).

Oil is a key factor of production, including in the production of other commodities and in transportation, and is also a widely used consumption good. Oil is the most traded commodity, with world exports averaging US\$1.8 trillion annually during 2007–09, which amounted to about 10 percent of total world exports in that period. This means that changes in oil market conditions have direct and indirect effects on the global economy, including on growth, inflation, external balances, and poverty. Since the late 1990s, oil prices have generally risen—notwithstanding cyclical fluctuations—and supply constraints are widely perceived to have contributed to this trend. This has raised concerns that the oil market is entering a period of increased scarcity.

In the short term, the outlook for oil markets remains quite uncertain, as perceptions of geopolitical supply risks can be volatile. Cyclical and special factors seem to explain much of the recent commodity price behavior. In fact, the magnitude of the actual oil supply shock has, in historical comparison, been moderate to date. Indeed, current OPEC spare capacity levels, estimated at about 4½ percent of global demand, are sufficient to make up for losses of supply from Libya and to meet the expected increase in demand. However, Middle-East and North Africa (MENA) oil supply risks will probably only gradually unwind through 2011. Hence, in the WEO baseline, oil prices are projected to average about \$107 per barrel in 2011 and 2012 from \$79 in 2010.

In the near term, the oil supply risks and continued robust global activity—notwithstanding some slowing—means that upside risks to oil prices will remain high. Oil derivative markets have indeed started to price in higher risks of price spikes over the next few years. Against this backdrop, oil market risks have become an important concern for global economic stability and further surprises because of supply disruptions is the key downside risk for global growth.

Turning to the medium term, even assuming that supply disruptions in the MENA region are short-lived, oil prices are expected to remain high, reflecting the tension between continued robust oil demand growth and the downward shift in the trend growth rate of global oil production. Indeed, persistent commodity price increases in recent years point to a break with

the experience of the 1980s and 1990s as well as with the experience of earlier commodity price booms. Concern about resource scarcity is more widespread now than a decade or two ago. The analysis of demand and supply prospects for crude oil suggests that the increased scarcity arises from continued tension between rapid growth in oil demand in emerging market economies (primarily China, which is now the largest energy consumer in the world) and the downshift in oil supply trend growth (due to oil fields reaching maturity and long lags between investment planning and delivery limiting capacity expansion). If the tension intensifies, whether from stronger demand, traditional supply disruptions, or setbacks to capacity growth, market clearing could force price spikes, as in 2007–08.

As for the effects on the global economy, the simulation analysis in the WEO suggests that the impact of increased oil scarcity on global growth could be relatively minor if it involves primarily a gradual downshift in oil supply growth rather than an absolute decline. In particular, a sizable downshift in oil supply trend growth of 1 percentage point appears to slow annual global growth by less than  $\frac{1}{4}$  percent in the medium and longer term. On the other hand, a persistent decline in oil supply levels could have sizable negative effects on output even if there is greater substitutability between oil and other primary energy sources.

The oil-induced wealth transfer from oil importers to exporters can increase capital flows, reduce the real interest rate, and widen current account imbalances. GDP of oil importers declines, but they initially experience two countervailing effects that support output. The first, and more important, is a surge in goods exports to oil exporters to satisfy their increasing domestic demand. The second is a surge in investment demand in response to lower world real interest rates. This occurs because the oil exporters' additional oil revenue, which accrues primarily to governments, leads to higher saving, which reduces world real interest rates by almost 100 basis points over 20 years. This effect is reminiscent of the international lending boom in the 1970s and early 1980s following large oil price increases.

Regional differences among oil importers in this phase of the adjustment stem mostly from differences in the strength of their export links with oil exporters, with GDP in emerging Asia and Japan benefiting the most from the consumption boom in that region. In addition, emerging Asia also benefits more from lower world real interest rates, in view of the region's higher propensity to invest. Global imbalances worsen in this scenario over the short to medium term.

Macroeconomic and structural policies can help economies adjust to unexpected changes in oil scarcity. Removing real rigidities in product and labor markets may mitigate the initial shock by facilitating the smooth reallocation of resources. Rather than ad-hoc tax measures, which tend to be regressive and inefficient, such policies need to be complemented with efforts to strengthen targeted social safety nets, because higher oil prices could lead to shifts in income distribution and to increased poverty.

The Author is the IMF Resident Representative for the Philippines