World Oil Demand: And Then There Was None

Charles K. Ebinger
Senior Fellow, Foreign Policy,
Energy Security and Climate Initiative
@CharlesEbinger

In recent weeks, many analysts have expressed considerable surprise as oil prices have hit $80 per barrel and prices at American gas pumps have fallen. This "surprise" seems to have crept up on us, but evidence of shifting market demand and energy production has been available for some time. Over the past three years, high oil prices have generated increased interest in oil and gas in remote locations such the Arctic and East Africa. In addition, breakthroughs in oil and gas technology have also driven the development of unconventional oil and gas resources in regions of the world that were previously considered too high-cost, too high-risk or too far away from established markets for profitable energy production. Further, as a result of climate change melting Arctic ice, new oil fields and delivery routes have opened up, while technological advancements in resource extraction are opening vast new regions for resource exploration in countries like Mozambique and Tanzania, which lack even the most the most basic infrastructure and need high energy prices to justify their development.

Despite possible environmental and infrastructure challenges, a number of countries and regions are motivated to pursue increased resource development and extraction for a variety of non-energy related reasons. For example, the political leadership of Greenland views the development of energy and mineral resources as an opportunity to gain independence from Denmark. For its part, Canada sees the development of its northern territories as a way to bolster its claims to national sovereignty over its "internal waters," a view contested by both Washington and Moscow. In the case of Russia, development of the Yamal Peninsula and its offshore Arctic waters has been a major priority for President Vladimir Putin, who believes the policy will catapult Russia into the vanguard of future global oil and gas producers and, as a result, will make Russia a market player in the Far East as well as Europe.

Oil Prices are in a Free Fall

Unfortunately, while these emerging energy producers are coming on line, the market for energy has been shrinking—at least for the near-term. Since June 2014 (when oil was at $115 per barrel), oil prices have been in a free fall, with demand dropping across Europe, Japan, India, China, Brazil and much of the emerging world market. The drop in demand is the result of a number of factors, including :

- Slowing global economic growth;
- Rising global oil production (especially in North America);
- Unexpected resumption of oil production in Libya, Nigeria, South Sudan and Iraq;
- Increasing energy efficiency, a response to three years of oil prices in excess of $110 per barrel, which, in turn, had an impact and continues to impact long-term global demand;
- A decision by Saudi Arabia in August 2014 to cut oil production by 400 thousand barrels per day, an attempt to defend its market share in the face of falling global oil prices;
- Record oil output from Russia;
- Surging natural gas liquids and hydrocarbon gas liquids production outside the OPEC quota system;
- Natural gas eating away oil's market share as a refining fuel and as a feedstock in petrochemicals;
- The decision by Japan to restart some of its nuclear reactors, reducing forward demand for fuel oil in the power sector;
- Dumping of oil onto the marketplace by hedge fund managers who had gone long on oil prices (by some estimates as much as two million barrels per day) in anticipation of further price rises – the hedge funds had no alternative but to liquidate their positions when the market turned against them.
- In August, Saudi Arabia tried and failed to stop the slide in oil prices. Now supported by the United Arab Emirates and Kuwait, the Saudis have decided to send a message to the world market that it will do whatever is necessary to maintain its market share, even accepting a near-term loss in revenue over the next two years. The Saudi goal is to slow or halt unconventional oil production, which is undermining their market share and profits. The short-term decline in oil prices also serves Saudi Arabia's agenda by hurting their adversaries (Iran and Iraq) and squeezing Russia's ability to fund the Assad regime in Syria.
- However, the Saudis and their allies may be overlooking the complex economics of unconventional oil production in North America. For example, while drilling new wells in some unconventional basins may not be profitable at $80 per barrel, many existing wells have largely been amortized by current tax policies making them economic at prices in some basins such as the Permian at prices as low as $40 to $50 per barrel. The most important factor is that the production profile of many unconventional wells is very different. For example in the Bakkan wells flow very strongly but then

crash often initially only recovering four percent of the oil in place while the Permian wells tend to plateau but ultimate recovery is much higher.

- While various pundits have opined on this question, the truth of the matter is that no analyst really knows the full range of production costs across the unconventional crude oil production continuum since this information is highly proprietary. Nonetheless, with oil prices for West Texas Intermediate (WTI) at $81 per barrel and Brent at $83 per barrel and with Wall Street in turmoil and Europe poised on the brink of a new recession, the specter of a major price decline similar to that of 2008 cannot be ruled out. While prices could overshoot on the downside, I believe that prices will fall to $60 to $70 per barrel, before stabilizing at a level still far above the $38 per barrel we saw in 2008.

The U.S. Crude Oil Exports Ban

The precipitous drop in oil prices could not have come at a worse time for U.S. oil producers, who have been advocating for the United States to lift the long-time ban on crude oil exports (in place since 1975). According to the Brookings Energy Security Initiative's research on the issue, if the ban were to be lifted immediately, the United States could be exporting 1.7 million to 2.5 million barrels per day (mmbd) by 2015. With the market in such a weak position and demand falling, adding as much as 2.5 mmbd to the world market would significantly drive down both crude oil and petroleum product prices (gasoline and home heating fuel). While beneficial to consumers in the near term, the effect on crude prices will only add to the current market turmoil and a further downward spiral in crude prices. Furthermore, with many unconventional oil wells also producing natural gas, to the extent that oil prices fall below $60 per barrel, some natural gas production could also be affected.

Crude Oil Prices in the Near-Term

Keep in mind, however, that the further crude prices fall in the near term, the faster they may rebound, as low prices become the engine that leads to a resumption of demand and world economic growth. The fall in oil prices will have various effects on different countries, though the magnitude is often overstated. For example, any further fall in oil prices could have serious deleterious effects on the Russian economy. As a major oil export economy (with oil accounting for 14.5 percent of Russia's gross domestic product), Russia's budget for 2014 is predicated on an average price of $97 per barrel. Therefore a price slide to $80 per barrel or below would pose a major economic setback for that country. The fact that prices have averaged at $110 per barrel for the year-to-date however allows Russia some cushion in the event of a short term price drop – as do Russia's large financial reserves. However, any prolonged drop in oil prices will pose serious challenges to the Russian economy.

Countries that produce at a high cost with large populations, subsidized consumer prices and various political constraints, such as Iran (sanctions), Indonesia (falling energy exports), Iraq (political turmoil), Nigeria (political instability and falling exports) and Venezuela (a collapsed economy in need of high export prices) will be thrown into turmoil. Fearful of low prices, Venezuela recently attempted and failed to call an emergency meeting of OPEC to discuss the situation. Given the already fragile nature of many of these regimes, the prospect of serious social upheaval cannot be ruled out. On the other hand, large oil importing countries such as China, India, Brazil, Japan and South Korea stand to benefit from falling oil prices.

It is against this backdrop that OPEC will meet in late November. The oil price slide and efforts to reverse it will be priority one on the ministers' agenda. While the Saudis may be willing to cut production if all the other OPEC members also agree to substantial cuts, the prospects for an agreement are slim to none, given their individual internal political realities and revenue needs.

As a long-term observer of the oil market, I have seen this game played out in various manifestations over the last 40 years. We are clearly in for a wild ride; buckle your seat belts.