Congressional Research Service
Informing the legislative debate since 1914

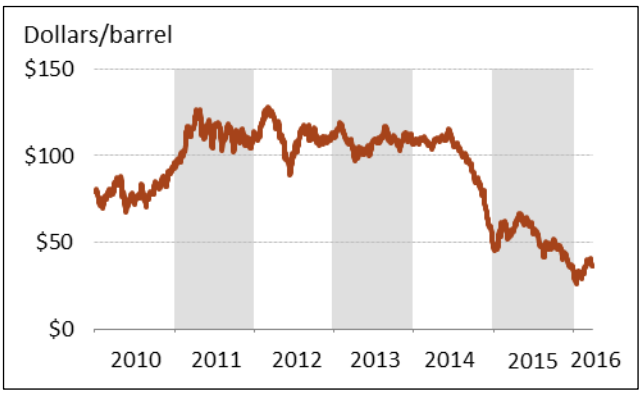
IN FOCUS

April 13, 2016

Higher Oil Prices?

On January 11, 2016, the price of Brent crude oil, the reference grade on the world oil market, fell to $28.82 per barrel, a decline of over 45% in about three months. On April 12, 2016, the price of Brent had recovered to $44.68 per barrel, and some voices in the oil industry began suggesting that the long period of low, and volatile, oil prices, which began in June of 2014, might be coming to an end.

Figure 1. Spot Price of Brent Crude Oil, 2010-2016



Source: Energy Information Administration, oil spot price data. Graphic by CRS.

Although oil prices in excess of $100 per barrel appear unlikely, prices falling below $30 per barrel again are also viewed as unlikely. Because the price of oil is, in effect, a barometer, reflecting the balance between demand and supply in the oil market, the question of the level of prices becomes one of the potential balancing of demand and supply. Over the past two years, supply has chronically exceeded demand, resulting in increasing storage levels, a market supply glut, and lower prices.

Whether the oil market can achieve balance is partly dependent on the time frame considered, short or long term. In both the short and the long terms, conditions and events are emerging that might encourage those who hope for higher prices, but significant difficulties remain.

Short-Term

An event which has encouraged those who expect higher oil prices is the meeting of oil producers scheduled for Doha, Qatar, beginning on April 17, 2016. The purpose of the meeting is to attempt to negotiate a freeze on oil production at the January 2016 production level. The meeting is to include Organization of the Petroleum Exporting Countries (OPEC) nations, as well as major non-OPEC oil producers, Russia, and as an observer, Mexico, among other nations.

Whether this group of nations can agree to a binding agreement is questionable, but even if that result is attained, short-term balancing of demand and supply on the world oil market, and hence higher, more stable prices, remains questionable.

First, several key nations, including OPEC members Iran and Libya, have indicated that they will not attend the meeting, or agree to a production freeze. These two oil exporters are important because the target production freeze date of January 2016 is unfavorable for them. If they endorsed it they would insure for themselves low market share and revenues generated by oil, their most important export. January 2016 was the month oil export sanctions against Iran were lifted. At the time, the Iranians predicted that within six months they would expand their oil exports by some 500 thousand barrels per day, and within a year they would be exporting about a million barrels per day more than they did under the sanctions regime. If the Iranians agreed to a production freeze agreement, they would, in effect, be locking in the effects of sanctions on their oil exports, even though the sanctions have been lifted. For Libya, which produced less than 400 thousand barrels per day in January 2016, less than one third of the total produced before chaos enveloped the economy in 2011, a production freeze agreement would ensure that even if the Libyans could resolve their political situation, they would be unable to benefit from renewed oil earnings. Other nations, like Iraq, might also find a freeze objectionable as their production and exports have recently been increasing.

Neither Iran, nor Libya, could conclude that other nations were sharing the costs of a production freeze. Saudi Arabia and others achieved high levels of production in January 2016 and are unlikely to have enough excess capacity available to expand production. Nor would a production freeze guarantee higher oil prices in the short-term. A freeze might merely lock in those high levels of production and the supply glut that currently exists in the market.

However, the current supply glut does have a potential short-term solution. While Saudi Arabia has announced that they have no intention of playing the role of a “market maker,” if they chose to reverse that position unilaterally, or with a small group of other large exporters, and decided to cut production, prices would likely surge within a short period of time.

Such a strategy would not necessarily be irrational from a short-term economic perspective. The current supply glut has been estimated at about 2 million barrels per day by the International Energy Agency. Saudi Arabia is currently producing about 10.0 million barrels per day. If Saudi Arabia cut production by 2.5 million barrels per day, oil markets would quickly tighten as oil in storage was depleted, and prices would likely rise. All oil exporting nations that continued to produce at the same levels would gain in export revenues. It is even possible that Saudi

Arabia might see a revenue increase. If the price of Saudi oil rose by a greater percentage than the percentage by which Saudi exports declined, export revenues, the product of price multiplied by quantity, would increase. For example, if a 2.5 million barrel per day, or 25%, cut in exports resulted in a price of at least $60 per barrel, that would increase revenues for Saudi Arabia. Even with a cut in production, however, Saudi Arabian excess capacity would likely act as a limiting factor for oil price increases. In the longer term, many other factors would likely play a role in determining whether a cut in exports could be sustained and beneficial for Saudi Arabia.

Long-Term

Whether any short-term output freeze or production cut can support higher oil prices long-term is an open question. The outcome may depend on whether the oil market has fundamentally changed as result of the emergence of new oil supplies in the United States and, to a lesser extent, other parts of the world.

Over the period 2005-2015, U.S. crude oil production increased from about 5 million barrels per day to over 9 million barrels per day. This increase in domestic production caused oil imports to decline, and caused other oil producers to lose their U.S. market share. As these producers, for example, Nigeria, which lost virtually all its U.S. sales, competed in other markets, excess supply conditions began to develop and prices weakened. This result occurred even though the United States had export restrictions dating back to the 1970s in place. In 2016, those restrictions are no longer in place, potentially increasing the influence of U.S. production on world markets.

The question of whether the market has fundamentally changed largely depends on how quickly U.S. production responds to higher prices. In 2014, when OPEC decided not to attempt to support the price of oil, but to attempt to defend the market shares of the OPEC nations, some observers believed that due to high production costs, U.S. output would decline quickly as prices fell, first below $80, and then $50 per barrel. While U.S. production has declined by about 500 thousand barrels per day since June 2015, it remains over 9 million barrels per day despite the low price environment. The decline in U.S. oil production was neither as quick, nor as steep, as some observers expected.

There is also a belief that U.S. oil production will recover rapidly due to the incentive of higher prices. This result depends on the known location of new oil deposits, as well as the relatively low costs and level of technical complexity of resuming production. If output can expand rapidly as prices rise, the effect of a production freeze agreement, or a Saudi Arabian output cut, in supporting prices will not hold in the long-term. Higher prices would cause supply to increase and excess supply conditions similar to those prevailing in 2014-2016 could re-emerge, causing price to fall.

In some sense, long-term oil demand is the wild card in the market forecast. For the near term, oil demand growth is forecasted to be weak, reflecting weak economic growth estimates in the emerging economies, China, Europe, and the United States. More rapid economic growth could fuel a more rapid growth in oil demand, erasing the supply glut in the market.

Winners and Losers

A return to higher oil prices, although probably not in excess of $100 per barrel, would generate both positive and negative economic effects both in the United States and in other nations around the world.

In the United States, higher oil prices would quickly result in higher gasoline, diesel, and all other petroleum product prices, reducing consumer purchasing power, slowing economic growth, and increasing measured inflation. However, higher oil prices would also likely generate a resumption of capital investment in oil production and development. This would benefit employment and incomes in both the oil and supporting industries. Capital budgets have been sharply reduced by the oil industry in 2015 and 2016 and might be expected to recover.

On the financial side, the state budgets of oil producing states domestically would gain revenues, improving their fiscal positions. In addition, the stock market might also gain as energy stocks rose.

On the international side, the economies of the oil exporting nations would benefit from higher prices. Many oil exporters, for example Russia, Venezuela, and others, earn a disproportionate share of their total export earnings from oil. The fall in oil prices has caused their national budgets to fall into deficit, causing program cuts, elimination of subsidies, withdrawals from their foreign currency stocks, and a reduced ability to carry out their foreign policy objectives. These effects have raised the potential for civil unrest, and the inability to resist outside threats.

Not all oil exporting nations are U.S. allies. As a result, in some cases, the United States has benefited indirectly from the reduced capability of oil exporters.

Conclusion

Merely the speculation concerning an agreement to support oil prices has boosted oil prices over the past several weeks. If the Doha meetings fail to achieve any agreement, those price increases could easily be reversed. In the longer term, perhaps three to five years, it is likely that prices will attain a higher level if demand growth continues, and if supply growth is limited by reduced capital budgets for exploration and development of new resources.

Robert Pirog, Specialist in Energy Economics

IF10388

Disclaimer