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Lower Oil Prices 2015

Oil prices, long recognized as volatile, have declined sharply since June 2014. During the last week of June 2014, the prices of Brent, the world reference crude oil, and West Texas Intermediate (WTI), the U.S. reference crude oil, were $113.74 and $107.04 per barrel, respectively, at their peaks. As 2015 began, the price of Brent was $57.86 and the price of WTI was $53.46. These prices represent almost a 50% reduction. It is uncertain how far prices will decline, or how long the period of lower prices will persist.

Since oil is a major traded commodity, used by consumers and industry the world over, the effects of these sharp cuts in price are likely to be felt in virtually every nation in the world. However, whether the effects are positive, negative, or mixed depends on the economic characteristics of the particular country. In general, consuming nations, net importers of crude oil, might be expected to benefit, while producing nations, net exporters, might be expected to suffer; many nations will experience mixed effects.

Why Lower Prices? Three key factors have contributed to the low oil price environment: demand growth, supply growth, and the actions of the Organization of the Petroleum Exporting Countries (OPEC).

Oil demand growth largely depends on the growth rate of the world economy. In 2014, growth in Europe approached recession levels, Japan was largely stagnant, and even China saw growth rates fall to roughly one half of what they were during earlier periods. In the United States, economic growth was modest in the first half of 2014, picking up only in the last quarter of the year. The net effect of this economic growth picture was that oil demand growth was very weak. Major international agencies tracking the oil market, including the International Energy Agency, the Energy Information Administration, and even OPEC, revised forecasts of oil demand growth downward during 2014.

On the supply side, output expansion was the key factor. U.S. supply of light, sweet, shale oil from the Bakken formation in North Dakota, and the Eagle Ford formation in Texas transformed the market. U.S. crude oil production has risen from about 5 million barrels per day (mb/d) in 2008 to almost 9 mb/d in December 2014. This increased production has reduced U.S. imports of crude oil, causing exporting nations to look for other markets. At the same time, weak global demand was reducing selling opportunities.

While both the demand and supply sides of the global oil market seemed to be signaling lower prices, one other critical factor was important, the decisions of OPEC.

During its history, opinions on the degree to which OPEC can control the price of oil has varied. The method OPEC can use to control price is to raise oil output if the price is increasing too much, or to cut oil output if the price is falling too much. If OPEC pursues these adjustment strategies, their market share, or sales volumes, increase during rising prices and fall during periods of declining prices. In the current environment, it might have been expected that OPEC would act to support prices.

OPEC met on November 27, 2014, and chose not to take any action to prevent further cuts in the price of oil. Their decision was to keep their oil output steady, even in the face of declining oil demand. This action signaled to the market that they were willing to see their overall oil revenues fall. Of course, not all OPEC members agreed with this strategy. While Saudi Arabia, Kuwait, and the United Arab Emirates supported the strategy, nations that depend heavily on oil revenues to support their national budgets, like Iran, Venezuela, and Nigeria objected. Since the OPEC meeting, informal comments by Saudi officials suggest that the steady output levels are likely to remain in effect for a while.

OPEC faced a dilemma at the November meeting. If they successfully supported the price of oil by cutting output, high prices would have provided a continuing incentive for U.S. shale oil producers and other non-OPEC producers to continue to expand output. If output continued to expand, additional OPEC output cuts would likely have been required in the near term to keep prices high. Since most of the burden of reduced output falls on Saudi Arabia, their financial position might have been compromised, while the other OPEC nations were shielded from the worst effects.

If OPEC decided, as they did, to hold oil output steady and let prices fall, all the member nations would share the pain of reduced oil revenues. Some OPEC nations might even be encouraged to try to expand their output to preserve revenues. However, if, as OPEC believed, U.S. shale oil production and Canadian oil sands production is possible only in a high oil price environment, then low oil prices might reduce the growth rate, or perhaps even the level, of these non-OPEC supplies and create market conditions conducive to a higher price of oil in the long term.

Who Gains, Who Loses? Because of oil's importance in the world economy all major consuming and producing nations will experience a mixture of positive and negative effects. For the United States, the benefits of lower prices are likely to be wide-spread, while the costs are likely to center on the oil industry and industries and regions that depend on the oil industry.

Since the price of oil directly determines the price of gasoline, diesel fuel, jet fuel, home heating oil, and a variety of other petroleum products, individual consumers and industries that use these products will benefit. Gasoline prices have declined by over 68 cents per gallon from December 2013 to December 2014. It has been reported that these cuts in the price of gasoline translate into about $630 million per day in savings for consumers. Consumers can use those savings to purchase other goods and services. Similarly, the airline and long-distance trucking industries are reaping substantial cost savings that encourage economic growth.

Even though U.S. oil production has increased, the nation is still a net importer. As a result, the fall in oil prices will help reduce the nation's balance of trade deficit, likely resulting in a stronger value of the dollar.

Other consuming nations, including those in Europe and Asia will also experience consumer benefits. However, the lower price of petroleum products coupled with stronger economic growth may increase the demand for these products.

The low price of oil is difficult for firms in the oil industry, weakening their financial position and inducing them to curtail investment plans. The key asset held by oil industry firms are their oil reserves. As those reserves decline in value, the balance sheet of the firm weakens and their share prices tend to decline. In addition, the lower price of oil also reduces cash flow, and potentially profitability, further weakening the share price. The overall effect of low oil prices on the stock market is uncertain however, because while share prices of oil industry firms are declining, the prices of oil consuming firms, like airlines, are rising. Virtually all oil sector firms are hurt by low prices, but perhaps those small firms involved in shale production, depending on cash flow and debt financing, suffer the most.

If the firms largely responsible for the increase in shale oil production falter, and either reduce exploration and development investments, or actually reduce output, U.S. production growth might slow and provide a market correction for low oil prices. Of course, a reduction in oil extraction rates in 2014 leaves more oil in the ground for the future, perhaps extending the time horizon for shale oil.

State and local revenues from oil-related taxes, royalties, and lease payments may decline with the price of oil.

Some nations are likely to experience largely negative effects due to lower oil prices. For example, Iran, Russia, and Venezuela, nations that depend on oil to drive their economies, are in trouble. On December 16, 2014, Russia was forced to raise domestic interest rates from 10.5% to 17% to attempt to protect the value of the ruble which had been declining along with the price of oil. Iran, faced with low oil prices in addition to economic sanctions, is finding it difficult to finance the government. It was reported that Venezuela is being squeezed out of capital markets, and may become ungovernable. A quasi-state damaged by low oil prices is ISIS. ISIS has been financing military activities in Syria and Iraq through the sale of limited amounts of captured oil. Any given quantity of oil will yield them less revenue in the new market environment.

Issues for Consideration. Two issues that have been discussed during 2014 may be affected by low oil prices. As U.S. production of shale oil has increased, there has been some difficulty in absorbing it into domestic markets. U.S. refiners invested heavily in modifying their facilities to accommodate expected supplies of heavy, sour, oil. This forecast was actually the opposite of what occurred in the market, a surge in light, sweet, oil. As a result of the refinery mismatch, Bakken and, to a lesser extent, Eagle Ford shale oil has sold at a price discount compared to WTI. Producers, hopeful of enhancing their revenues, began to petition for lifting the ban on U.S. oil exports which has been in place since 1975.

If all oil prices decline proportionally, pressure to allow the general export of U.S. crude, now possible only to Canada and through several other minor exceptions, will continue. If the low oil prices reduce the Bakken price discount, the debate on oil exports will likely be affected.

The second issue affected by low oil prices may be the federal gasoline tax. The gasoline tax, used for highway maintenance and construction, has not been changed since 1993. Since that time, maintenance and construction costs have risen. The Highway Trust Fund has become chronically short of funds. With the rate fixed at 18.3 cents per gallon, revenue only increases as more gallons are used. Recently, however, due to increased fuel efficiency and fewer miles travelled, gasoline usage has declined or is stable, reducing revenue potential. Conversely, low gasoline prices may motivate higher consumption, and hence, revenues.

Due to taxpayer resistance, it is difficult to increase gasoline taxes when prices are high and rising. It may be possible to increase the tax in an environment of low and declining prices. Consumers may be more willing to sacrifice a portion of a price decline in the interests of improved highway maintenance and construction.

The Future. While the near-term market conditions suggest continuing low oil prices, a sharp cut in output by Saudi Arabia could change the market quickly, albeit at substantial cost to the Saudis. In the longer term, the inability to predict oil prices almost guarantees that analysts will be surprised by the evolution of the market.

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