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Oil Supply Investment under Low Prices and Its Impacts

Ken Koyama, PhD
Chief Economist, Managing Director
The Institute of Energy Economics, Japan

On November 17, a conference titled "The Oil Supply Outlook in the New Oil Price Environment" took place in Oxford of the United Kingdom. As indicated by the title, discussions there focused on how oil supply will be affected by the new price environment where oil prices have halved from the first half of last year and are likely to remain low for the immediate future. Interestingly, a major topic in this respect was how low oil prices are affecting short-, medium- and long-term investment cycles.

The conference began with presentations and discussions about how low oil prices have affected supply in each major country or region. Generally, in oil producing countries other than the members of the Organization of the Petroleum Exporting Countries, low oil prices have steadily reduced investment in maintaining and expanding oil production, decelerated oil production growth or cut oil output, according to the discussions. But the situation has differed from country to country. Among non-OPEC oil producing countries other than the United States, Russia has continued moderate growth in oil production despite the generally severe economic environment including low oil prices and Western economic sanctions. This is mainly because ruble-denominated domestic investment has not declined so much despite a plunge in dollar-denominated oil export income under the Russian currency's substantial depreciation, according to some participants in the conference. One participant noted that as the economic sanctions have made it difficult for Russia to use advanced technologies for developing oil resources and develop such resources in frontier regions, Russia has given priority to the development and maintenance of oil output at its present major oil production areas and achieved success in concentrated or specialized oil production and development. As a matter of course, low oil prices have gradually undermined the future of Russian oil production. Particularly, a delay in the development of untapped oil resources in underdeveloped areas expected to expand oil production in the future may have significant implications. But a dominant view at the conference was that Russia may maintain the present oil production level over a short term.

But business conditions for oil production and development are severe in other major non-OPEC oil producing countries excluding the United States. In British and Norwegian North Sea oilfields and Mexico, a downward trend in oil production has continued and could deteriorate depending on future developments, according to some participants in the conference. Although the United Kingdom promoted the development of satellite oilfields around earlier-developed oilfields to help prevent total output from declining under high oil prices, the present low prices are expected to slow down such development. One participant noted that oil production declines could accelerate as new oil development is postponed with investment reduced even in the maintenance of production amid heavy capital spending cuts at oil companies. The problem of accelerated oil output declines is not limited to the North Sea. It is attracting global attention amid capital spending cuts under low oil prices.

Even in Brazil and Canada that are expected to expand oil output in the future, low oil prices have caused capital spending cuts and delays or freezes in oil development projects, indicating that production growth could be restricted, according to a participant in the conference. Interestingly, however, it was noted that due to a relatively longer investment and production cycle, Canada may continue to expand oil output, with projects subject to investment under high prices starting production, before low oil prices begin to remarkably affect the production expansion in or after 2017. This is an important case where the length of the investment cycle greatly influences the timing of production expansion.

In this respect, the United States represents a case in which a short investment cycle allows the low oil prices to affect oil output, particularly shale oil, according to a view given at the conference. The oil price plunge has resulted in a dramatic decline in the number of oil drilling rigs in operation in the United States, as is well known. But drilling and production have concentrated in core production areas with substantial cost cuts achieved, allowing shale oil production to be more resistant to low oil prices than expected earlier. In fact, however, low oil prices have caused a drop in total shale oil production. If oil prices remain low, shale oil output may decline by 1 million barrels per day from a peak, according to a participant in the conference. Due to the presence of many uncompleted oil wells, however, another participant noted that if crude oil prices rose back to $60 per barrel or more, production starting at uncompleted wells would allow overall output to expand by 700,000 bpd within one year. In 2014 alone, in fact, crude oil prices above $100/bbl in the first half of the year encouraged U.S. output to increase by as much as 1.7 million bpd. In this sense, U.S. oil output can respond fairly quickly to price changes due to the short investment cycle. Therefore, a participant noted that the United States could serve as a “market stabilizer”.

Lastly, we discussed oil production in the Middle East in respect to the impact of low oil prices. Saudi Arabia and Iraq are representative countries that have remarkably increased oil output even under low oil prices from 2014 to the present. Both are major oil producers that can produce oil at low cost. Saudi Arabia has expanded production under its policy of giving priority to maintaining or increasing its market share and is likely to keep output at or above 10 million bpd for the immediate future, according to a dominant view given at the conference. One participant pointed out that factors behind the high-level Saudi oil production included growing domestic oil demand and supply for expanded domestic oil refining capacity. As for Iraq that has expanded output more than original expectations by market participants, some participants in the conference called for paying attention to a possible further output expansion, while others forecast that output growth may come to a pause in 2016. Iran’s oil production was taken up as the largest wild card for the future. Some participants noted that if Western economic sanctions on Iran were lifted, Iran could start oil exports from inventories in tankers over a short term and expand output at Ahwaz and other oilfields that have restricted production under the sanctions. But many others pointed out that how much Iran could expand production was unknown. Iran’s possible oilfield development using foreign investment has attracted global attention. The development may depend on terms and conditions in specific contracts to be announced in the near future. The possibility of Iranian output expanding over a medium to long term cannot be denied. In this sense, oil market players would have to keep close watch on Iranian moves, according to a view provided at the conference.

Generally, the environment for investment in oil supply expansion is severe under low oil prices. In non-OPEC oil producing countries, particularly, low oil prices have deteriorated the economics of oil production and caused investment cuts and are expected to restrict output over a short to long term. But low oil prices' adverse effects on production differ from country to country depending on investment cycles and national conditions. Oil policies have great influences on oil supply in the Middle East. It may be important to watch country-by-country developments regarding oil production and investment.

Contact: report@tky.ieej.or.jp
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