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How Should We Interpret Shale Oil Production Resilience to Oil Price Plunge?

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Crude oil prices have come under downward pressure again. The benchmark West Texas Intermediate crude futures price had rallied above $50/barrel in February from a low of less than $45/barrel in January. In March, however, the price resumed a downward trend, sinking to a six-year low below $43/barrel. The recent crude oil price trend has attracted global attention anew. I had an opportunity to talk with European experts on the matter during a March 17-20 European tour. I would like to summarize interesting points of my talks with European experts.

These experts generally pointed out that market conditions including an easy supply-demand balance are far from those for leading oil prices to start a full-blown rally. In response to the sharp oil price fall until early this year, demand for inventories amid the emergence of “contango” in the future price structure and China's special crude oil purchases to fill-in national reserves were coupled with a spread of data indicating a substantial drop in U.S. oil drilling activities to support oil prices. But these factors have fallen short of bringing about any sufficient improvement in market conditions. Rather, as noted by European experts, oil market players have grown concerned about an economic growth slowdown in China despite the economic growth target set at 7% for 2015. The inventory expansion has pushed U.S. private sector inventories to a record level beyond 450 million barrels, emphasizing an oversupply. The rapid inventory expansion has implied the higher inventory level to be reaching closer at physical limit for storage, dragging down any future inventory demand increase as a supporter for oil prices.

But they made another key point. It was that shale oil production's resilience to the oil price plunge may be greater than expected. Shale oil production substantially increased when crude oil prices remained above $100/barrel, and some industry sources indicated that the break-even costs for shale oil production would be between $40/barrel and $80/barrel. Therefore, crude oil prices' slip below $50/barrel had been expected to affect shale oil production growth. In fact, the International Energy Agency revised its projection of this year's shale oil output growth from 1 million barrels per day as estimated early this year to 750,000 bpd in March. But it is interesting that the IEA still

expects such magnitude of shale oil output growth even under the current market conditions.

As indicated by my talks with European experts, the key point for anticipating short-term production under the current oil price environment would be that the short-term marginal production cost rather than the break-even cost is important for oilfields in operation. For U.S. shale oil, the marginal production cost is possibly far lower than $40/barrel. Unless crude oil prices slip below the marginal production cost, continuing production is economically reasonable. Many European experts also pointed out that shale oil producers might have made streamlining and cost-cutting efforts to survive the low-oil-price environment that is different from the past situation where crude oil prices had exceeded $100/barrel. As a result, shale oil production costs might have declined. European experts also noted that rig operations might have been suspended only at inefficient oilfields, exerting little adverse impact on overall short-term shale oil production. Rather, rig operations now continue only at more efficient oilfields, indicating that shale oil production still remains efficient even amid the low-oil-price environment. This is interesting. Given this point, many European experts view U.S. shale oil production as more resilient to low oil prices than expected earlier.

As oil prices have declined so much, however, shale oil development projects have begun to be reviewed or delayed. But European experts explained that the abovementioned resilience indicated that any early rally in oil prices would encourage these projects to be reviewed again relatively earlier to expand supply. This means that a temporary freeze or delay on shale oil production and development under low oil prices now serves to keep “inventories under the ground” and would be lifted on an oil price rally to expand actual oil supply. European experts interestingly noted that U.S. shale oil might have a high supply elasticity to oil price hikes as well as high resilience to low oil prices.

If shale oil’s supply elasticity is high, shale oil production may play a greater-than-expected role in holding down oil prices over a short to medium term. If shale oil production is more resilient to low oil prices and more influential for holding down oil prices than expected by Saudi Arabia and other members of the Organization of the Petroleum Exporting Countries, they may have to review their strategy. Not only U.S. shale oil production, but also demand trends, geopolitical risks and financial factors, will affect crude oil prices in the future. Balancing all these factors appropriately will help stabilize oil prices. But we may have to closely watch U.S. shale oil production as a key factor influencing the international oil market.

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