

The Role of Oil in ISIL Finances

Addendum

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Before the Committee on Energy and Natural Resources
United States Senate

January 6, 2016

The subsequent questions and answers found in this document were received from the Committee for additional information following the hearing on December 10, 2015 and were submitted for the record.

Question from Senator Ron Wyden

Question: Mr. Crane, does ISIL seem to have the technical capability needed to sustain their current level of oil production indefinitely? Absent an increase in attacks from the US and our allies, is ISIL capable of maintaining their existing oil infrastructure?

ISIL has not been able to maintain past levels of oil output in Syria. Production in fields currently controlled by ISIL ran 300,000 barrels per day prior to the Syrian civil war. Before the recent attacks on trucks and oil production infrastructure, production levels from these fields were running 30,000 to 40,000 barrels per day. However, production will not completely cease. ISIL has been able to pressure or induce individuals with oil industry expertise to work in these fields. Absent attacks from the United States and our allies, production could very well rise.

Question from Senator Al Franken

Question: In the Senate we talk a great deal about the importance of “energy independence”. While technological advances such as hydraulic fracturing and horizontal drilling have certainly increased our oil production, the U.S. still imports a tremendous amount of crude oil—more than 7 million barrels every day. The number-one source of these imports is from OPEC countries – many of whom don’t have the same geopolitical interests as the United States. Many Senators

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have been pushing for the U.S. to lift the ban on crude oil exports. If we start exporting some of our oil, will the U.S. have to make up the difference by importing more oil from OPEC countries?

First, I would like to trace through the likely effects of repealing the export ban on U.S. production and the distribution of U.S. produced oil. I will then address your question more directly.

What happens if the oil export ban is repealed? *A substantial amount of increased production in the United States comes from fields in North Dakota. Currently, some of this oil is refined in the Midwest, but production out of the Bakken now exceeds Midwestern refineries' demand for this oil. Some is transported to the Gulf. This oil is transported by pipeline, barge and rail. Some of this oil goes west by rail to the Pacific Coast and is barged to California refineries, and some is transported by rail to East Coast refineries, which are designed for lighter, sweeter crude oils like those from the Bakken. It goes by rail because there are no pipelines to the east or west coasts. Railroads charge from \$5 to \$10 per barrel more to transport this oil than pipelines do for comparable distances. Producers have to discount their oil to cover the costs of transporting it, so as to make it competitive with imported oil delivered by tanker.*

If the export embargo were to be repealed, much of the oil currently going to the east or west coasts by rail, might go to the Gulf Coast where it would be exported to foreign markets. It would be exported because transportation costs are lower to the Gulf than to the two coasts: there are pipeline connections to the Gulf Coast, oil can be barged down the Mississippi, and distances by rail are less, all leading to lower transportation costs. Because of lower transportation costs, producers have to provide less of a discount to get their oil to market. The reduction in the discount due to the repeal of the export embargo would increase the profitability of Bakken oil, leading to higher production of oil than would otherwise be the case. How much more would be produced, especially at current prices, is a matter of debate, but some more oil would be produced. In the context of the global market, this increased production would exert some downward pressure on global oil prices, but in light of the size of the likely increase in volumes, it probably would not have a major impact on world market prices.

Repealing the export embargo is also like to increase refining efficiency. Because oil cannot be exported, light, sweet oil from Eagle Ford and other Texas fields is sold to refineries along the Gulf. Most of these refineries have been optimized to use heavy crudes, primarily from Venezuela and Mexico. To induce these refineries to purchase light crude from fields in Texas and elsewhere, the light crude has been sold at a discount to world market prices for similar crudes, like Brent. If this crude could be exported, it would not have to be sold at a discount. Gulf refiners would then choose to import heavy, sour crudes, for which they are optimized. The

global refining industry would enjoy efficiency gains as lighter and heavier crudes would be sold to refiners that are optimized to run on those types of crude.

If we start exporting some of our oil, will the U.S. have to make up the difference by importing more oil from OPEC countries? *The net amount of crude oil consumed in the United States is driven by U.S. demand, not U.S. production. U.S. refiners already import more oil than necessary to satisfy U.S. demand. They refine these additional imports and export refined products. U.S. exports of refined oil products and natural gas liquids ran 3.82 million barrels per day in 2014, more than half the number of barrels per day of crude oil imported, which was 7.34 million barrels per day.*

Assuming that U.S. demand does not change, repealing the export ban could result in increased exports of crude oil (we currently export to Canada), but a decline in exports of refined oil products, or no change in exports of refined oil products, which would imply more imports.

In 2014, Canada was our most important supplier of oil, accounting for 39 percent of total U.S. imports of crude oil. Mexico is also an important supplier. However, OPEC provided 41 percent of gross imports; Saudi Arabia and Venezuela were our most important suppliers from OPEC. If demand for imported oil were to rise because of increased exports of U.S. crude oil, some of the increased demand would likely come from OPEC, especially supplies to U.S. East Coast refineries. Imports from Venezuela, an OPEC member, likely would also rise, as would imports from Canada, not an OPEC member, as both those countries produce heavier oils, and these oils would substitute for some lighter oils from Texas that are currently being refined in Gulf Coast refineries.

How much oil we produce, export, or import is not a fundamental determinant of the health of the U.S. economy. Many countries with healthy economies, for example, Germany and South Korea, import all their oil. Other healthy economies, like Norway and up until recently Canada are important exporters. The key to U.S. energy security does not lie with production. Rather, it relies on well-functioning international oil markets and a resilient domestic economy that can quickly and efficiently respond to the ups and downs of world market oil prices.

Finally, it is true that some OPEC members do not have the same geopolitical interests as the United States. However, the export ban likely has not affected their policies. The oil exports ban has been in place since 1975. Over the past 40 years the political interests of the United States and these OPEC members have not converged. In the case of Venezuela, they have diverged. OPEC members must sell their oil to generate funds for their governments. Regardless of U.S.

actions, they will find buyers. With the export ban, they likely receive a marginally higher price than they would if the ban were to be lifted, but the quantities now banned from export are likely not enough to have a large effect on exporters' overall revenues.