Insight

What's Behind Rising Oil Prices?

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Summary

- Oil prices are currently 34 percent above what the federal Energy Information Administration projected in January, contributing to increased gasoline and energy prices in the United States, and many are blaming the oil cartel OPEC.
- Constrained supply in OPEC is one reason for high oil prices, but pipeline congestion in Canada (caused by political challenges) is likely a significant underlying cause of constrained supply and higher oil prices.
- Despite calls for OPEC to increase production in order to suppress prices, its available spare capacity is near historical lows, and it likely will not tap this production reserve.

Introduction

Oil prices are high—34 percent above the price projected at the beginning of the year—and the Trump Administration is blaming the Organization of Petroleum Exporting Countries (OPEC), the cartel of some of the largest oil producers that acts together to manipulate prices. The State Department has called on OPEC to stop holding 1.42 million barrels per day in reserve and put more oil into the market to depress oil prices.

But is OPEC fully to blame for high prices? OPEC has done its part to constrain supply and boost prices, as its member countries and Russia agreed in 2016 to cut production, but American producers have been able to produce enough to mostly offset this slackening supply. Further, OPEC's spare capacity right now, while real, is low relative to historical levels, and the member countries are unlikely to open up their spigots except to address a

supply disruption. At this moment, international pressure on OPEC likely will not lead to lower prices.

The other culprit of high prices lies north, with pipeline congestion in Canada that is the result of internal politics there. Thus, increased domestic production is likely the best route to lower oil prices.

The Current State of Global Petroleum Liquids Production

Price is a function of supply and demand. To evaluate the cause of above-normal prices, therefore, it is useful to compare projections of supply from the beginning of the year to recent output data. The chart below, comparing the Energy Information Administration's (EIA) January 2018 Short-Term Energy Outlook (STEO) to actual outputs, demonstrates a global supply shortfall—approximately 410,000 barrels per day—but not exclusively because of OPEC.

Global Petroleum and Other Liquids Production			
millions of barrels per day	Projected	Actual	Difference
US	17.23	17.99	0.76
Canada	5.29	4.77	-0.52
OPEC	39.75	39.16	-0.58
Former USSR	14.35	14.66	0.31
Other	24.08	23.71	-0.37
Total	**100.69**	**100.28**	**-0.41**

Source: EIA Short Term Energy Outlooks (January 2018 and September 2018)

It is worth noting that the EIA's projected in January that the price of oil would be $56 per barrel in August, but the observed price (for domestic, West Texas Intermediate) was $68 per barrel. The increase in prices is due to a mixture of increased demand and reduced supply. Since supply is below the expected level, increasing it is a natural priority for policymakers concerned about oil prices.

While total OPEC production is down by approximately 580,000 barrels per day (mostly due

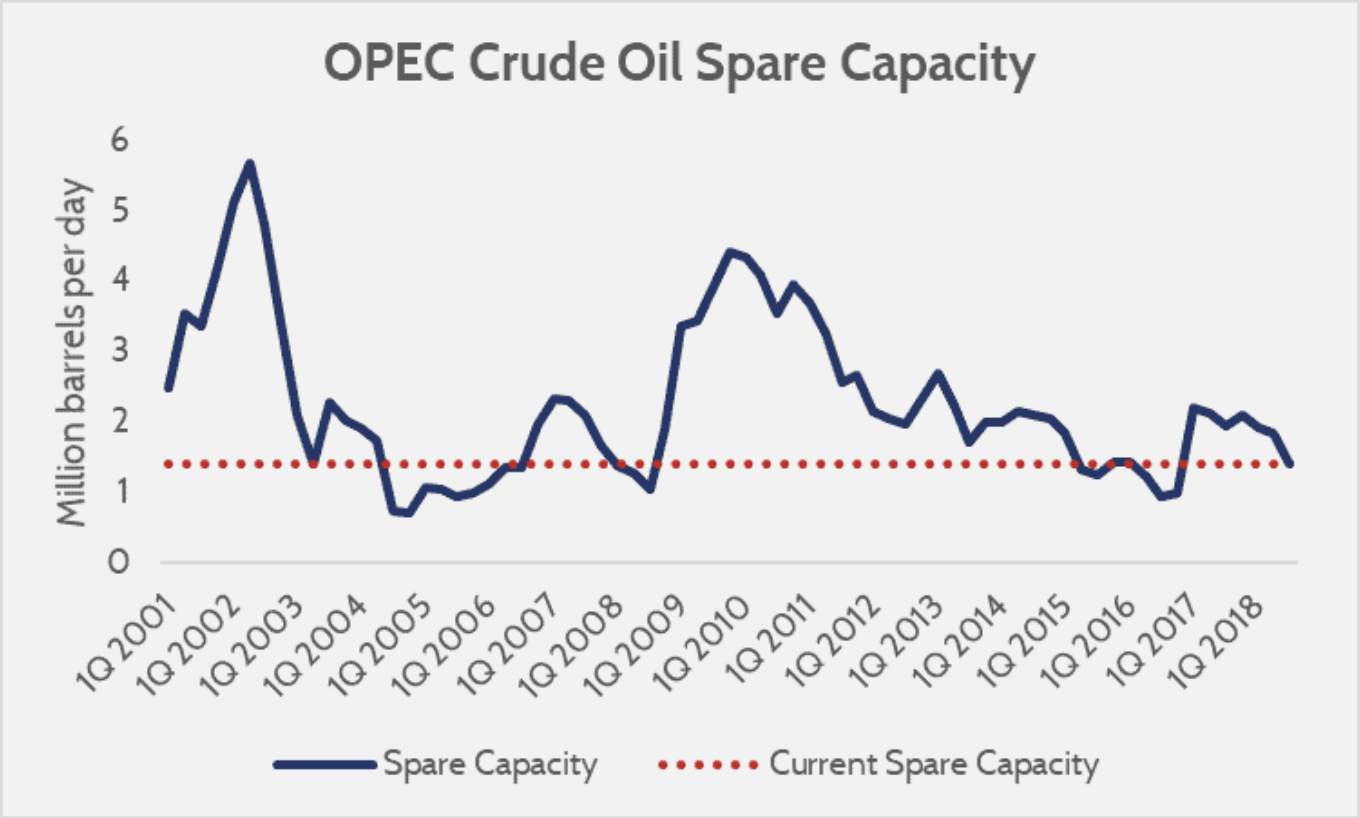
to Venezuela's political turmoil that has caused its crude oil production to slide by nearly 1 million barrels per day since 2016), other producers have been able to cover that shortfall. Relative to January's projections, production in Russia and other former USSR states is up by 310,000 barrels per day. More notably, U.S. production is up 760,000 barrels per day. Increased production in the U.S. and Russia has been able to partially offset the impacts of Venezuela's political strife, conflict in the Middle East, and renewed sanctions on Iran.

Canadian production, however, is *down* relative to the projections by 520,000 barrels per day, coming in almost 10 percent lower than projected. Canada's struggles are thanks mostly to a political environment that is constraining the construction of pipelines. A court order overturned the 590,000 barrel per day expansion of a major Canadian pipeline, Trans Mountain, with the ruling saying that First Nations in Canada were not adequately consulted on the expansion. The Trans Mountain Pipeline had also been acquired by the Canadian Government's Canada Development Investment Corporation, after private investors backed out of the project. It is unclear when or if Trans Mountain will be expanded.

The Trans Mountain pipeline struggles also come on the heels of the well-known Keystone XL pipeline delays, which began when the Obama Administration refused to give State Department approval for its construction, further constraining the availability capacity to get Canada's oil to market.

Will OPEC Bring Oil Price Relief?

While OPEC does manipulate supply to raise prices, pressuring the cartel right now is unlikely to result in price relief for Americans. Despite a cap on output, the cartel's "spare capacity" that can be brought online is estimated to be only around 1.42 million barrels per day (per the EIA's September STEO), which is not much in the context of history, as the chart below shows. (This spare capacity is likely the figure underlying the State Department's recent statement that OPEC is "withholding" 1.42 million barrels per day of production.)



Source: Energy Information Administration OPEC Supply Data

When spare capacity is low (as it is now), it is typically used more as a cushion for short-term supply disruptions than a price manipulation tool. The lower OPEC's spare capacity becomes, the more reluctant OPEC will be about tapping it—and in the past OPEC has maintained higher spare capacity even with prices much higher than they are today.

What Will Force Prices to Fall?

To put downward pressure on prices, supply needs to increase or demand needs to decrease. Demand likely won't drop, at least in the United States: The EIA projected in January an average real disposable income per person for August of $13,125, with year-over-year gross domestic product (GDP) growth of 2.2 percent. By September, however, EIA estimated disposable personal income to be $14,364 and year-over-year GDP growth to be 2.9 percent. It makes sense that as incomes rise, the demand for energy will also rise, as well as consumer's tolerance for higher prices.

As for increasing supply, the source of that oil is the central question. OPEC production may

continue to struggle, as countries which rely heavily on oil revenues to fund the government typically struggle to secure investments for new exploration and productivity. Given that Saudi Arabia, Venezuela, and other major oil exporters were hurt economically by the 2015-2017 dip in oil prices, it can be a difficult trade-off to put production investments over government programs. Canada may increase its production, but it will need to overcome pipeline congestion issues in order to supply markets. Building more pipelines will require some reform of its pipeline approval policies—a difficult lift politically.

The United States may hold the best hope for continued increased production, as estimates of future shale oil production are often revised upward. And since U.S. oil production is almost exclusively privatized, the industry is very responsive to price signals. The administration's current initiative to deregulate pipeline approval may also bolster production, as it will reduce the costs associated with delivering product to market.

The United States also has a potential avenue to increase oil production: enhanced oil recovery (EOR). EOR involves injecting carbon dioxide into existing wells to allow the pumps to reach more oil. Early in the year the United States extended a subsidy for EOR via the 45(Q) tax credit. A recent study estimated that without any new incentives, EOR production in the United States could increase by between 100 million and 900 million barrels annually by 2040 (0.27 to 2.53 million barrels per day). Production is not guaranteed to increase much through EOR in the short term, however, since EOR relies on particular infrastructure such as carbon dioxide pipelines.

Conclusion

Oil prices are above normal not just because of OPEC's lackluster production (mostly due to Venezuela) or new sanctions on Iran. Pipeline congestion in Canada has limited supply substantially, contributing to increasing prices . U.S. oil production is well above expectations, and will continue to rise, but that alone is not enough to overcome production shortfalls globally.

Americans should anticipate a prolonged period of prices above projections made last year and early this year. Thankfully part of the reason for higher prices is that American wealth has been growing faster than expected, increasing demand for oil-derived energy while simultaneously improving Americans' ability to absorb higher oil prices.

Yet even with "high" oil prices currently, those prices are still below what had been expected as little as five years ago, and Americans are still enjoying a period of relatively

low energy costs thanks mostly to increased oil production. Also, net imports of petroleum products for into the United States are shrinking, and likely won't stop, as America is expected to be a net exporter of liquid fuels by 2029. This rising production means that oil-producing regions are able to benefit from high prices, offsetting some of the economic harm elsewhere in the country.