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Welcome to the Tortoise podcast. Thank you for joining us. Today, Tortoise provides a timely update on trending topics in the market.

Brian Kessens - Good day, this is Tortoise senior portfolio managers Brian Kessens and Rob Thummel with a special podcast on OPEC and Saudi Arabia's decision to increase production.

First question Rob – What exactly happened?

Rob Thummel – So on Saturday, Bloomberg reported that Saudi Arabia will increase oil production in April after failing to reach an agreement with Russia to cut production. So, that leads us the next question of why would Saudi Arabia increase oil production?

Brian Kessens- Yeah, that's really the question of the day. Because of lower crude oil demand from the coronavirus, OPEC, led by Saudi Arabia, recommended a 1.5 million barrel per day reduction in oil production at the March 5th OPEC meeting that was last week. The recommended allocation called for OPEC, mainly Saudi Arabia, to reduce production by 1 million barrels per day and non-OPEC, which is mainly Russia, to reduce production by 0.5 million barrels per day subject to Russia's agreement. Russia's refusal to participate in OPEC's proposal resulted in Saudi Arabia reversing course suggesting that it would begin to increase oil production in April.

Next question, Rob, I guess is why did Russia then choose not to participate with OPEC's recommendation?

Rob Thummel - Bloomberg news reported that Russia wants U.S. producers to reduce production as well. In addition, Russia is retaliating against the U.S. for U.S. sanctions placed on Russia specifically related to the construction of the Nord Stream 2 natural gas pipeline.

OK, so this leads us to the question of why are oil prices declining?

Brian Kessens – So, currently, impact of coronavirus on 2020 global oil demand is uncertain. Estimates for 2020 global demand reductions range from 600,000 – 1,300,000 barrels per day. Note this is the reason why OPEC recommended a 1.5 million production cut. Global oil supply could increase by 500,000 – 1,000,000 barrel per day based on how much Saudi Arabia increases production. The net result is an oversupplied global oil market between 1.1 and 2.3 million barrels per day. Keep in mind global oil demand is approximately 100 million barrels per day, so the market is oversupplied by 1-2%. History suggests when global oil inventories exceed historical averages then oil prices decline.

So Rob, this all begs the question, how does this get resolved?

Rob Thummel – So, most OPEC countries, including Saudi Arabia, are operating in a fiscal deficit and cannot afford to have oil prices in the \$20's or \$30's for an extended period of time. The average breakeven price for OPEC oil producers is \$80 per barrel, and that includes Saudi Arabia. According to Reuters, Saudi's cash reserves were \$490 billion at the end of 2019 down from \$714 billion in 2014. With current oil prices, Saudi Arabia's cash reserves would be reduced by \$50 - \$100 billion per year. In addition, Russia's reported breakeven is \$42 per barrel. OPEC is likely not to reverse the last four years of hard work to reduce global crude oil inventories. So, how do we think will U.S. producers react?

Brian Kessens – We think that U.S. producers are likely to accelerate the capital discipline that they had already begun last year or even two years ago and immediately starting reducing drilling rigs. In fact, we got indications just this morning from some producers that they are already starting to reduce their overall rig count. U.S. production likely declines if low prices persist. For reference, during last oil prices decline, U.S. oil production declined by 1.1 million barrels per day peak-to-trough. So, Rob, looking into your crystal ball, who will win the oil battle - Saudi Arabia, Russia, or the United States?

Rob Thummel – OK, so this is not an either/or proposition. We're going to need oil production from Saudi Arabia, Russia, AND the U.S. to balance oil markets longer term. Russia is effectively producing at its maximum rate of approximately 10 million barrels per day. Saudi Arabia is currently producing about 9.7 million barrels per day and has produced up to 11 million barrels per day in its history. And the U.S. is producing 13 million barrels per day today. As global oil demand continues to increase, the U.S. and Saudi Arabia will need to increase production. So, a relevant question for a lot of our investors is, what happens to U.S. midstream?

Brian Kessens - Midstream assets remain essential and cash flows are resilient. The current Alerian Index (AMZ) price is significantly lower than AMZ index on February 11, 2016 when oil prices bottomed at \$26.21. Midstream balance sheets have improved since 2016 and dividend/distribution coverage ratios are much higher. I'd also add that at that time, midstream companies were probably dependent on the equity capital markets being open to finance capex needs and today they are nearly all self-funding. We expect midstream companies to focus free cash flow capital allocation on dividends and share buybacks. Prolonged low oil prices might result in some producer bankruptcies. However, there are over 9,000 oil producers in the U.S. according to the American Petroleum Institute. Currently, we don't expect producer bankruptcies to materially impact the cash flow of our midstream investments. The vast majority of the counterparties to public midstream companies are investment grade, I'd also note. Many producers are well-hedged for 2020. Rob, is there anyone that actually benefits from low oil prices?

Rob Thummel - Low oil prices are great for the consumer. Consumer response to low oil prices has been strong in the past with global oil demand growth rising to 1.6 million barrels per day or 60% higher than normal in 2016 and to 1.8 million barrels per day or 80% higher than normal in 2017. Gasoline, diesel, and jet fuel demand rises when oil prices are low. Crude oil storage likely benefits if the forward curve for crude oil moves higher to steeper contango, and contango effectively means current prices are lower than longer-dated prices. There is more to the U.S. energy sector than just oil. Natural gas prices likely improve. Lower oil production means less associated natural gas production from oil production.

So, to wrap it up, what are the four takeaways?

Brian Kessens – I guess maybe a couple on the midstream side. Midstream companies generate primarily fee-based cash flows from moving energy products and those cash flows are not tied to oil prices. Midstream cash flows really remain resilient through crude oil price swings. Our analysis and conclusions are that midstream EBITDA increased actually during the 2015/2016 decline in oil prices. Counter-party risk over the last 30 years also has been essentially negligible to midstream companies despite fear to the contrary. And then as well as it relates to our midstream strategies, the vast majority of them are invested in natural gas and refined product pipelines. About 10% - 20% are invested in what would be considered crude oil pipelines. There is also a natural hedge as lower crude oil prices historically increased the demand for refined products. I guess, Rob, are there any takeaways on the upstream side of things?

Rob Thummel – Sure. So, oil prices are declining, but we think that's a temporary decline. Saudi Arabia, in our opinion, is using lower oil prices as a negotiating tactic. Saudi Arabia cannot afford low oil prices for a prolonged period of time. The Saudi's strategy is to lower oil prices in the short-term forcing Russia back to the negotiating table, so a new oil production cut agreement can be put in place. Now, don't forget, U.S. remains the largest oil producer in the world. Lower oil prices will accelerate though a reduction in capital spending for U.S. oil producers that will likely halt U.S. oil production growth. Thank you for joining us. Those are our comments for today. We look forward to talking with you again next week.

Thank you for joining us. And stay tuned for our next cast. Have topics you want covered or other feedback to share? Write us at info@tortoiseadvisors.com.

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