



## Oil Report – Optimism Returns to Oil Services

Exhibit 1 **Brent Daily Prices & Volatility**

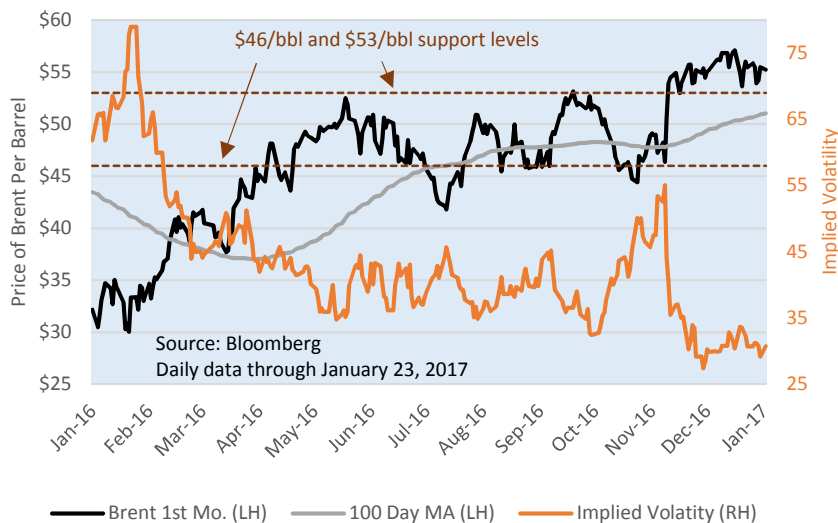
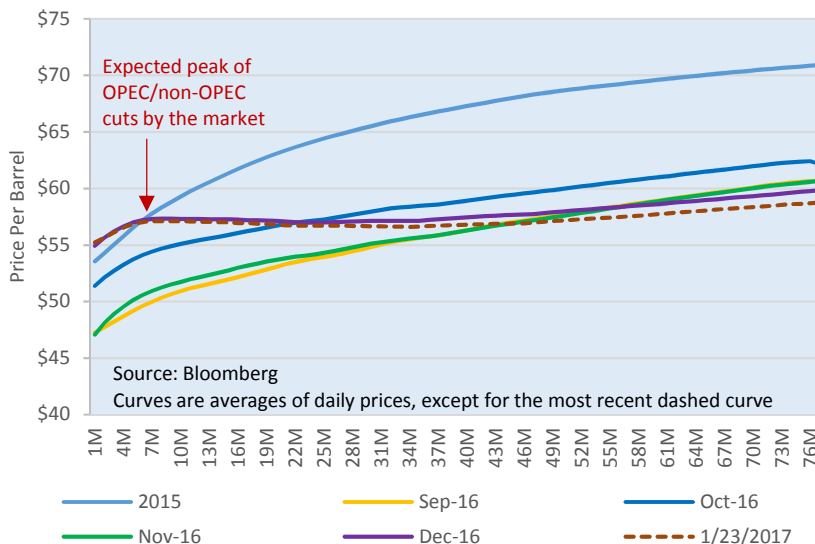
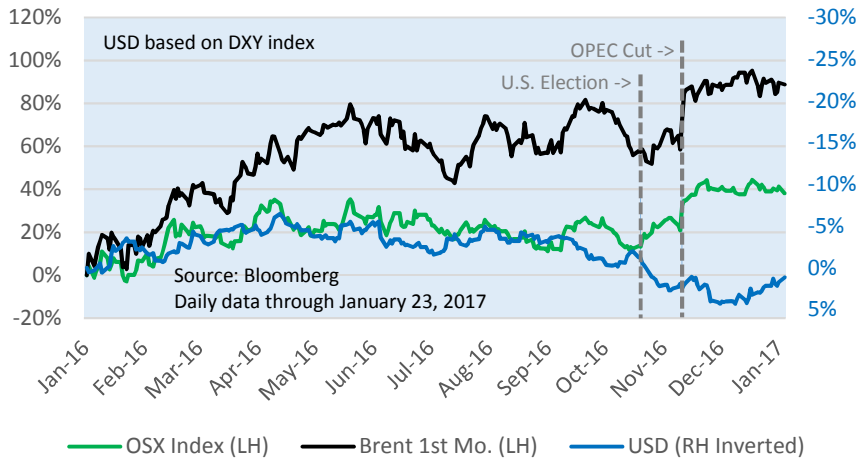


Exhibit 2 **Brent Futures Curves**



- **Executive Summary:** Oil prices have crossed over from trading in the \$40s and into the \$50s since OPEC announced cuts on November 30. Adding confidence that the cuts will hold is Saudi Arabia's willingness to undertake additional cuts in February. Also, reflecting the boost in optimism has been a flurry of investment activity among the oil majors and the rally in equities of oil service companies. It appears that the rally is being driven by the proposed OPEC and non-OPEC cuts.
- **Exhibit 1:** Brent front month contract has found support at the \$53/bbl level. For this level to hold, it would require compliance among OPEC and non-OPEC members whom agreed to implement production cuts for 1H 2017 totaling 1.76MM bbl/day. As confirmation, the options market is not expecting any real surprises over the next 30 days as shown by the low implied volatility. This remains well below levels seen one year ago.
- **Exhibit 2:** Since the OPEC meeting, the futures curves have made an important shift into backwardation for June 2017-2020 supplies. Should the curve become completely downward sloping, it may force some of the oil out of storage and onto the spot/front month deliveries, where prices would be higher in this scenario. It will also reduce the incentive of producers (e.g. shale) to hedge production further out on the curve at lower prices, something that OPEC would like to see.
- FYI: Large inventories of oil diminish the role of OPEC as a cartel by acting as a buffer to their supply cuts.
- Saudi Arabia's Energy Minister, Khalid al-Falih, on January 12, said that the Kingdom's production has fallen below 10MM bbl/day which indicates that their actual cut is more than the 486K bbl/day promised between OPEC and non-OPEC producers. He also said: **"Our objective is to set the market on an accelerated rebalancing course"** and that more cuts are planned in February.

Exhibit 3 USD vs. Oil Service Index & Brent Performance



• **Exhibit 3:** Both Brent and the Oil Service Index (OSX) responded sharply to the upside on news of the OPEC cuts on November 30, of 1.2M bbl/day for six months and were supported further with news on December 10, of additional cuts of 0.6M bbl/day by non-OPEC members. Normally, a stronger USD would pressure oil prices, yet, there has been a divergence between Brent and USD (Right axis inverted) since the U.S. elections.

• **Exhibit 4:** Based on a survey of analysts, there is a broad consensus for oil prices to increase further in 2017. This is likely based on the change in stance from OPEC towards balancing supply and demand with the announced production cuts.

• Saudi Arabia has a lot at stake with a 5% IPO of their national oil company, Saudi Aramco, planned for 2018. The proceeds would be used to diversify away from oil and ease budget constraints. To achieve a successful IPO (estimated to be the largest in history at \$100B) would require stable oil prices and a reduction in global oil inventories to normal levels. If Saudi Arabia can make this happen as the de facto leader of OPEC, new investors will be more eager to partner with Saudi Arabia and Saudi Aramco.

• **Exhibit 5: The latest offshore rig count for December is showing signs of stabilization** at 235 units with no change from the prior month. For 2016, the Asia Pacific region showed the largest increase in number of rigs. Please refer to the Appendix for details.

• Statoil announced on January 4, it is increasing the number of exploration wells to be drilled in 2017 to 30; an increase from 23 in 2016. This marks an inflection point for the oil major with the first increase in number of wells drilled since 2013.

• General Electric 4Q 2016 earnings call: "Oil and gas orders grew by 2% organically, our first growth in two years. We see some firming in the market. This includes a 42% orders growth in turbomachinery. Oil and gas equipment grew by 10% with services down slightly. And for the year, oil and gas digital orders grew by 30%. Service orders were strong across the company." - Jeff Immelt - Chairman & CEO, GE.

• Mexico concluded a successful auction on December 5, with strong participation from the oil majors for the development of 8 offshore blocks. Production from the auction expected to reach 900K bbl/day.

• BP approved the \$9B second phase of the Mad Dog project in the Gulf of Mexico (Dec 2, 2016). Production is expected to add 140K bbl/day with development costs being halved since initial estimates.

"2017 will demonstrate how efficient the oil and gas industry has become, showing projects in better shape all round," - Malcolm Dickson, Principal Analyst, Wood Mackenzie

Exhibit 4 Bank Forecasts For U.S. Crude-oil Futures In 2017

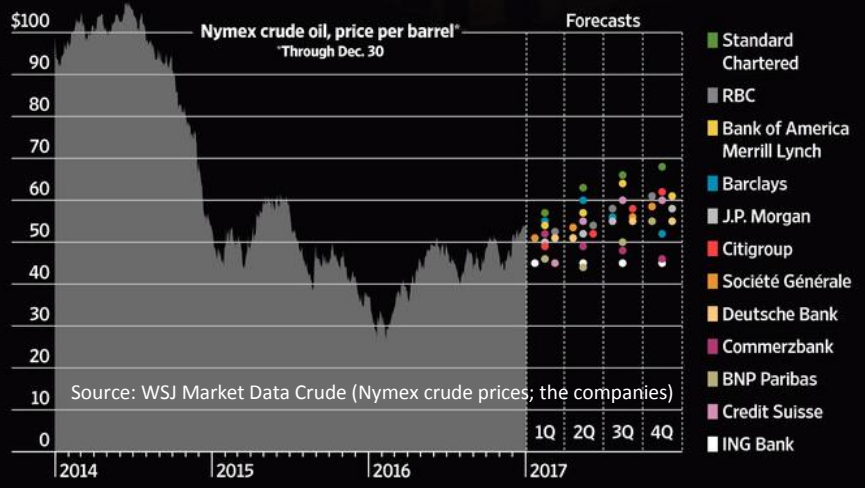
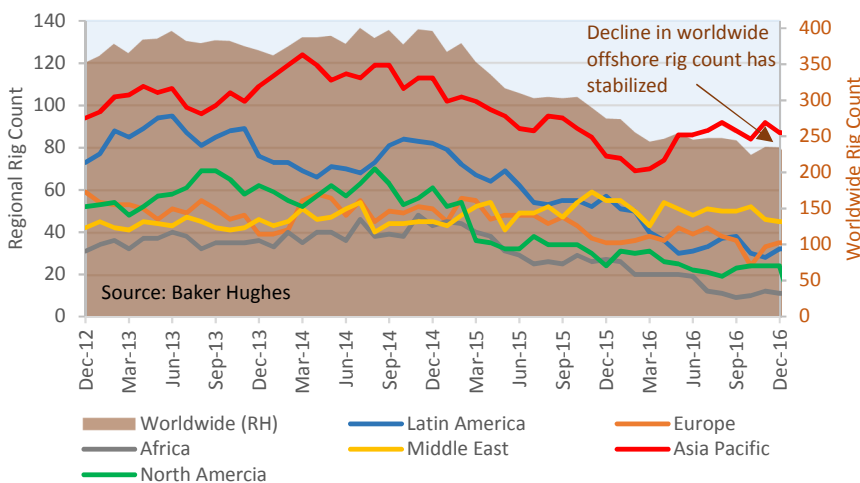
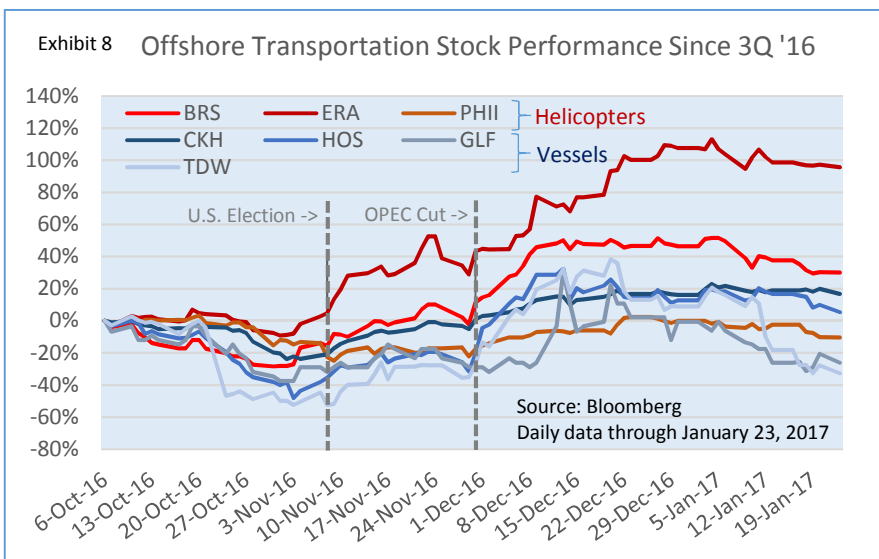
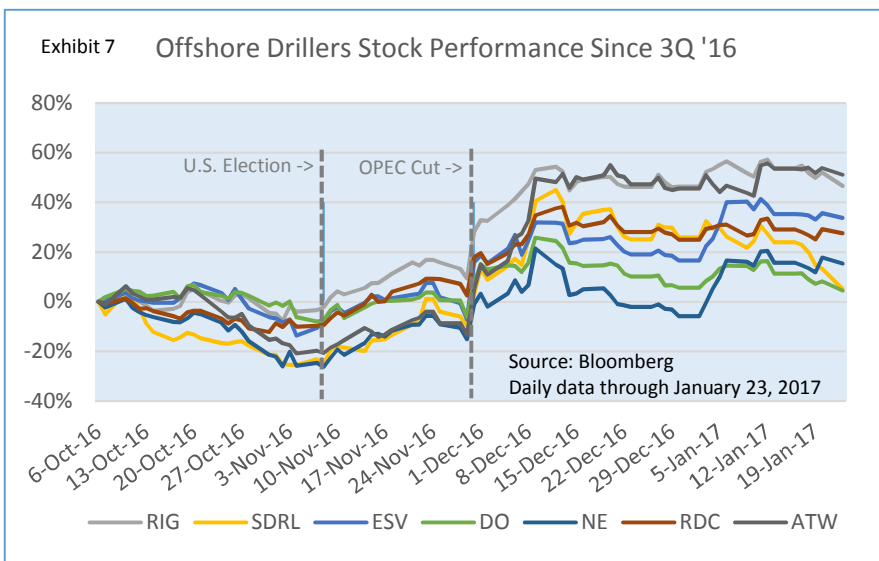
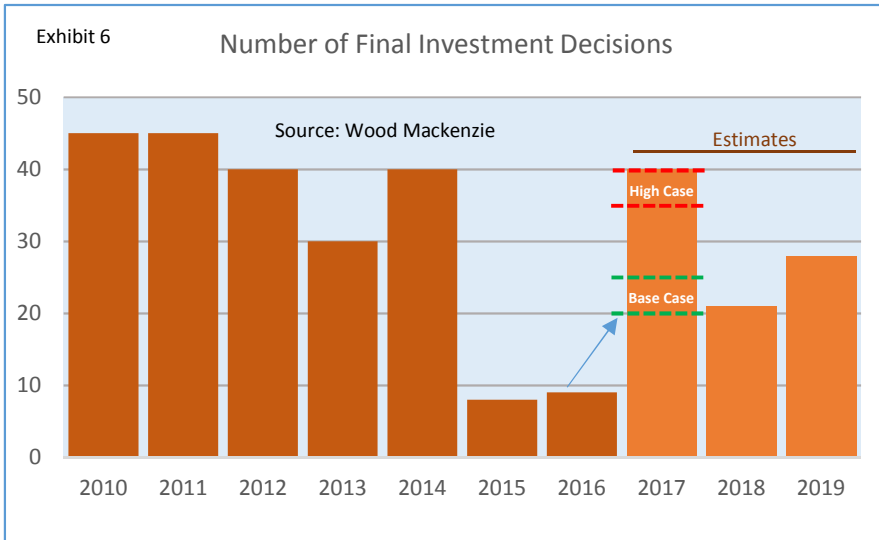


Exhibit 5 Baker Hughes Offshore Active Rig Count





- BP announced in late November the purchase of a 10% stake in the Zohr field from Eni for \$375M. Later in December, the oil major announced the purchase of a 10% stake in Abu Dhabi's largest onshore field for \$2.4B, and a \$1B investment for the development of offshore gas fields in Mauritania and Senegal.
- FYI: Discovered in 2015, Zohr is one of the largest conventional gas fields found in recent years. It is in the Mediterranean Sea and located 190 km off Egypt.
- Cyprus has selected Eni, Total and Exxon Mobil for licenses to explore blocks near the Zohr field. Negotiations on terms of the licenses are expected in late January/early February. Please refer to the Appendix for details on global licensing activity.
- Greek company, Energean, has revealed development plans for the Karish and Tanin gas fields in the Mediterranean Sea, 100 km off Israel. Development costs are expected to be \$1.5B with production projected to begin in 2020.
- Total announced before the close of 2016, a \$2.2B deal with Petrobras for stakes in two offshore fields in Brazil and interests in a downstream gas terminal and power plants.
- Exxon Mobil reported on January 12, a second oil discovery in ultra deepwater off Guyana in the Payara field. This is located 10 miles northwest of Exxon's Liza field discovered in 2015. Wood Mackenzie estimates Payara will produce 100K-150K bbl/day and Liza 180K bbl/day. A Final Investment Decision (FID) is expected in 2017.
- **Exhibit 6:** According to Wood Mackenzie, projects reaching Final Investment Decision (e.g. approval) in 2017 will be double that of 2016. They also forecast that exploration and production spend will increase 3% to \$450B. The same report predicts that **deepwater projects will spring back to life in 2017** while indicating the need for cost cuts in the long run.

"Now is a very good time to explore, because it hasn't been cheaper than this for many, many years."  
- Tim Dodson, Executive Vice President, Statoil.

- **Exhibit 7: Sentiment across the oil sector has improved** with offshore drillers being some of the best performers among equities since the end of 3Q 2016. The drillers' equities have also shown an immediate response to the OPEC cuts. Noteworthy is the strong correlation among the companies.
- **Exhibit 8:** Among the offshore transportation operators, Era's stock stands out with gains of 100% in less than four months. Its main competitor, Bristow (BRS), has had strong gains also within the group while PHI (PHII) has shown little reaction. For the vessel operators, they appear to be more correlated to the drillers. Overall, the price action for the oil service companies indicates a return to optimism.

**Appendix**

Exhibit 9

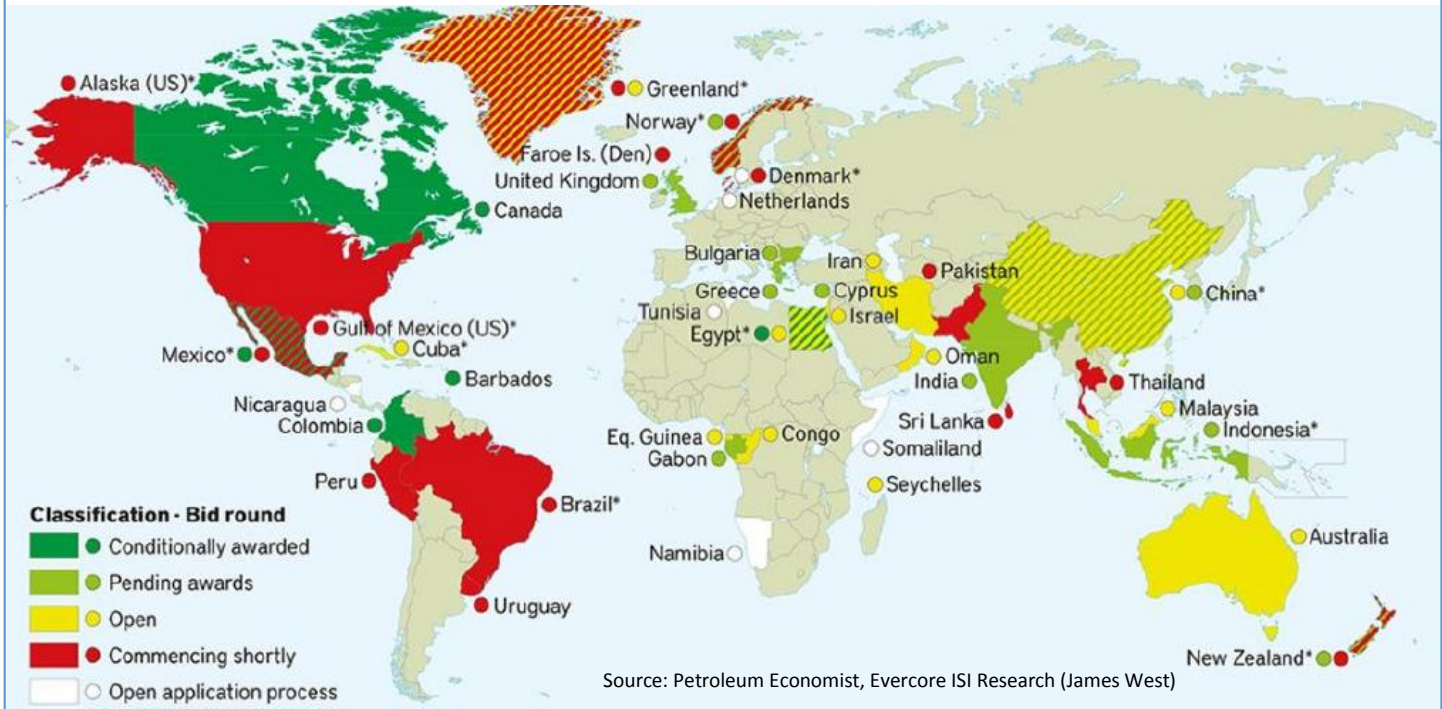
**State-of-the-Licensing Rounds - December 2016 (Primarily Offshore)**


Table 1

**Offshore Active Rig Count**

Region	Dec '16	Nov '16	Dec '15	Δ MoM	Δ YoY
Latin America	32	28	57	4	-25
Europe	35	33	35	2	0
Africa	11	12	27	-1	-16
Middle East	45	46	55	-1	-10
Asia-Pacific	87	92	76	-5	11
<b>International</b>	<b>210</b>	<b>211</b>	<b>250</b>	<b>-1</b>	<b>-40</b>
United States	23	23	24	0	-1
Canada	2	1	0	1	2
<b>North America</b>	<b>25</b>	<b>24</b>	<b>24</b>	<b>1</b>	<b>1</b>
<b>Worldwide</b>	<b>235</b>	<b>235</b>	<b>274</b>	<b>0</b>	<b>-39</b>

**Onshore Active Rig Count**

Region	Dec '16	Nov '16	Dec '15	Δ MoM	Δ YoY
Latin America	152	153	213	-1	-61
Europe	64	64	79	0	-15
Africa	67	67	64	0	3
Middle East	331	334	367	-3	-36
Asia-Pacific	105	96	122	9	-17
<b>International</b>	<b>719</b>	<b>714</b>	<b>845</b>	<b>5</b>	<b>-126</b>
United States	611	558	690	53	-79
Canada	207	171	160	36	47
<b>North America</b>	<b>818</b>	<b>729</b>	<b>850</b>	<b>89</b>	<b>-32</b>
<b>Worldwide</b>	<b>1537</b>	<b>1443</b>	<b>1695</b>	<b>94</b>	<b>-158</b>

Source: Baker Hughes