GLOBAL OIL MARKET TRENDS

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Once upon a time, in 2014, a huge imbalance between supply and demand was in the making.
We are witnessing the biggest drop in investments ever in the oil & gas industry

**Investments in the global E&P industry**
USD billions (real 2016 dollars)

- Other Onshore
- Shale/Tight oil
- Oil sands
- Offshore shelf
- Offshore midwater
- Offshore deepwater

Source: Rystad Energy UCube
We expect slow return of oil in countries affected by political or economic crises like Libya, Nigeria, Venezuela, South Sudan.

Strong growth from US oil will be needed to balance oil markets as soon as markets rebalance.

We see core-Opec will not significantly increase market shares, revenue is probably maximized at flat production levels with US growth to a large extent meeting world demand growth.
Three indicators of well productivity – shale oil base decline today is 40% lower than in Dec14

- The most impressive initial production improvements during 2016 are observed in Permian Midland and Bakken
- Recent wells in Permian Delaware exhibit the largest ultimate potential among liquid plays

Source: NAS Report
In 2016, we expect a further 10-20% improvement in breakeven prices across the liquids plays. This expectation assumes no further changes from the most recent well configuration and no changes in drilling efficiency. Hence, further improvements in commerciality are attributable to the expiration of old expensive service contracts and activity concentration in the best parts of the plays.

In the period 2012 to 2014, several factors contributed to better profitability, including the reduction on well cost and an increase in Expected Ultimate Recovery (EUR) per well. The reduction in well cost was due to shorter drilling time (increased pad drilling) and shorter completion time (increased use of zipper fracs). The increase in EUR was due to lower decline rates thanks to better well placement and advances in known completion techniques, i.e. modified zipper fracs.

In 2015, acceleration in commerciality improvements came from lower unit prices (cost compression) and a "high-grading" effect.

The chart shows average wellhead breakeven prices for selected shale plays by the year the wells were drilled (spud year).

Breakeven prices has decreased 50% over 4 years, 1/3 of this is driven by sustained efficiency gains.

Source: NASWellCube Premium
What about supply responses affecting the medium term? Sanctioning of new fields has collapsed to alarmingly low levels…

Source: Rystad Energy UCube
..and the supply impact will be felt 5-7 years down the line - less than half of normal volumes

Oil field production profiles (excl. shale assets) by approval year
Million bbl/d

Source: Rystad Energy UCube
Brent at 50 USD/bbl is too low after 2017 as supply will not be able to grow.
Thank You!

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