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# Global Upstream: 5 things to look for in 2017

## The global upstream recovery begins

From oil and gas prices to the impact of President Trump, 2017 will be full of uncertainties. But what will the year hold for the global upstream industry? OPEC's historic deal in late 2016 reinforces our belief that upstream investment will grow again, as the oil price climbs. Confidence will start to return to the sector, bringing the crushing two-year investment slump to a close, with E&P spend set to rise by 3%. At the forefront of the revival will be US tight oil, and the Permian in particular.

Costs will continue to fall, though only marginally. But for all the pain of the past two years, we are starting to see a leaner industry emerge. 2017 will demonstrate how efficient the industry has become; showing projects in better shape all round. As a result, we predict double the number of FIDs compared with 2016. A parallel renaissance is occurring in exploration. In 2017, explorers will continue to adjust to lower budgets, becoming more streamlined, and profitable, in the process.

Despite these positives, much potential upstream investment still falls short of hitting standard industry hurdle rates – including half of deepwater projects. The industry has more to do to drive costs even lower. Some governments will be tempted to increase tax rates, but those with uncompetitive fiscal regimes will have to make changes to ensure they can attract still-scarce new capital.

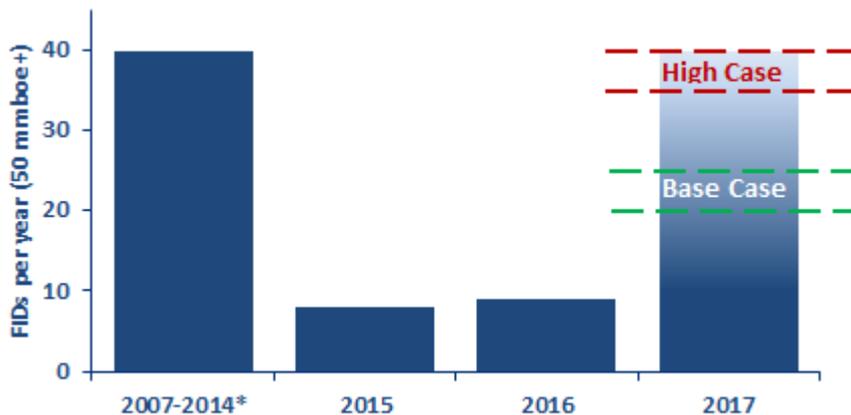
### 1) Global investment will rise, reversing two years of severe decline

The investment cycle will show the first signs of growth in 2017, since the oil price drop. Global E&P spend will increase by 3% to US\$450 billion. This will still be 40% below the 2014 peak, underlining not only the progress made in lowering costs (as we discuss below), but also a material shift in capital allocation away from complex mega projects towards smaller, incremental and short-cycle opportunities.

**Uncons will lead the recovery:** distinguished by low breakevens, scale and flexibility, these factory-type investments will be first to respond to rising prices. US Lower 48 spend is set to grow by 23%, to US\$61 billion, with risks on the upside if oil prices rise strongly and US Independents are emboldened by a Trump presidency. The rise will be largely driven by the Permian basin.

**FIDs to double but investment intensity to drop by nearly one third:** new project sanctions will reflect the shifting capital allocation patterns. We estimate the number of FIDs will increase from nine in 2016 to between 20 and 25. This is still well short of the 2010-2014 average of 40 a year. But capex per boe for the projects that we expect to be sanctioned next year averages just US\$7/bbl, down from US\$17/bbl for the 2014 projects. Costs have fallen because of a mixture of project optimisation and cost deflation.

## FIDs per year, 2007-2017



\*Average FIDs a year for >50 mmboe projects

**Deepwater will spring back to life:** deepwater FIDs will be a leading indicator the sector is still very much alive and starting to adapt to lower prices. The best development assets will hold their own against tight oil, especially as more risk-averse tight oil operators start to screen opportunities under higher discount rates. Deepwater assets make up a third of the prospective FIDs for 2017, and close to half of them break even below US\$55/bbl on an NPV,15 basis.

## 2) Costs to bottom out as a more efficient sector emerges

Capex deflation has averaged 20% over the past two years, mainly as a result of operators squeezing the supply chain. With service sector margins wafer thin, we believe there's now only room for small reductions: our recent cost survey suggests capex will fall by an average of 3-7%. But self-help is where we will see the most progress towards 2017 deflation.

**US uncons efficiency drive:** Nowhere is the mantra 'doing more with less' more evident than onshore US. There has been a dramatic increase in efficiency in the sector, exemplified by the drillers, who are managing to complete wells up to 30% quicker. As the tight oil sector heats up further, the spectre of cost inflation looms next year.

**Deepwater cost cutting – more needed:** projects slated for FID in 2017 are largely looking good, but the longer-term deepwater pipeline is more challenged. Of the 40 larger pre-FID deepwater projects, around half fail to hit 15% IRR at US\$60/bbl. The industry has selected the best projects to optimise and take forward. In 2017 it will have to turn its attention towards optimising the next wave of developments to get them sanction-ready.

## 3) Fiscal rules will need to improve to attract scarce investment

Governments with uncompetitive fiscal regimes will have to consider meaningful reform in 2017 if they wish to attract investment. The clear cut candidates for fiscal adjustments are countries where investment has stalled because of high breakevens, especially those in deep water. Angola improved terms for some marginal fields in 2016, and others may follow this lead: retaining existing terms for producing fields, but lowering the burden on marginal new-field developments.

Getting the risk-reward balance right will be a critical factor in attracting scarce investment capture in 2017, even for resource-rich hotspots such as Iran and Mexico. But elsewhere, fiscal incentives will be needed to attract scarce investment capital for exploration. Close to 30 countries are expected to launch new licensing rounds in 2017, so competition will be fierce.

Producers will also have to brace themselves for some countries seeking a greater share of the economic rent from producing assets.

## 4) Tight oil will grow; global gas markets oversupplied

OPEC's late-2016 agreement, with non-OPEC support, takes oil off the market and supports prices – a boon for most IOC and NOC producers. Even partial compliance by OPEC should be enough to accelerate market rebalancing. We expect Brent to average US\$57 in 2017; well above the US\$44/bbl in 2016, which we think represents the bottom of the cycle. Conversely, global gas markets will become progressively oversupplied through the course of 2017.

**Tight oil's role as the world's new swing producer will truly be tested:** tight oil has surpassed expectations during the down cycle. Can it now outperform in the up-cycle too? We forecast US tight oil production will grow by nearly 300 kb/d over 2017, spearheaded by the Permian Basin.

**Gas markets will detach from oil:** we expect US gas supply-demand fundamentals to be tight. We forecast calendar 2017 Henry Hub will jump to US\$3.70/mcf; 50% above the 2016 average, which will drive a new wave of high-return, gas-led investment.

## 5) Explorers will drill fewer, but better wells

Exploration will continue its transformation to a smaller, more efficient industry. Smarter portfolio choices and lower costs started to pay off last year. Explorers that build on this progress will stand a good chance of achieving double-digit returns in 2017.

Overall investment will at best match this year's spend of around US\$40 billion, and may fall still further. On the bright side, lower costs and debottlenecked services mean well count may hold up close to 2016 numbers. Plus, the worst of exploration's headcount cuts, already exceeding 30% of technical staff, may be in the past.

Majors and a handful of bolder Independents will drill most of the wells to watch. As in both 2015 and 2016, we expect the best discoveries to come from new plays and frontiers, despite greater emphasis on infrastructure-led drilling from many explorers. We expect more than half of the volumes to be found in deepwater, where some well costs will fall to US\$30 million or less, with full-cycle breakevens of less than US\$45/bbl. Emerging themes include exploration for pipe gas opportunities near under-supplied markets such as parts of North Africa, Eastern Europe and Latin America. Over-supplied LNG plays will be de-emphasised. High-cost frontiers, such as the ice-impacted offshore Arctic and extreme HP/HT plays, will be shunned.

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