Industry Top Trends 2018
Oil and Gas

Overview

- **Ratings Outlook:** After a tumultuous period where there were a significant number of downgrades, the S&P Global Ratings' outlook for the sector is broadly stable. The ratings outlook largely reflects our generally range-bound outlook for hydrocarbon prices.

- **Forecasts:** Given the outlook for hydrocarbon prices, we don't expect significant increases in credit ratios for the sector. Cash generation will generally trend upward, with capital expenditures (capex) remaining moderate. Decisions about shareholder returns—and any acquisitions and disposals—are likely to be as important for debt levels.

- **Assumptions:** Our hydrocarbon price assumptions for oil and natural gas are broadly flat, mirroring the futures curves. We expect global capex to increase nominally with the U.S. demonstrating more substantial increases as steep decline curves warrant high investment. Though improved, we don't expect oilfield services (OFS) to improve much further due to the flat rig count, given the outlook for hydrocarbon prices. We believe the offshore deepwater market has bottomed and won't experience a rebound anytime soon because oil prices remain far below breakeven to justify a greenfield project and there's still too much rig supply in the market.

- **Risks:** Hydrocarbon price risk remains the number one risk in the sector. The outlook for the credit ratings reflects a flat oil and natural gas prices of $50 per barrel and $3 cubic feet, respectively. A great deal of uncertainty remains as to how long OPEC production cuts continue. Moreover, the sector has a significant amount of debt maturing over the next couple of years and any meaningful drop in prices will lead to defaults and bankruptcies. Acquisition activity upstream is also increasing. To date this has been more opportunistic than the more defensive OFS and engineering merger deals.

- **Industry Trends:** The 2018 outlook for many of the industries in the sector is one of general stability and largely reflects the range-bound price environment for hydrocarbon prices. Many companies have reduced debt through asset sales or equity offerings and the industry appears to be in good standing with the capital markets. The upstream segment will be hard pressed to see more incremental benefits from efforts to drive further costs and productivity from the system. For longer-term planning and investment, the energy transition, including the rate of adoption of electric vehicles, remains on the agenda. The impacts on strategy vary significantly by company.
Ratings trends and outlook

Global Oil and Gas

Clearly, the number of downgrades has stabilized owing largely to generally stable hydrocarbon prices and effort by oil and gas companies to reduce costs, improve productivity, and de-lever the balance sheet where appropriate. The rating spectrum is still highly weighted toward high yield because most issuers are in the U.S. and we rated them during the four-year period prior to the November 2014 OPEC meeting. The OFS industry has the preponderance of negative outlooks. Despite the improvement we’ve seen in the sector and the overall price increases they’ve initiated, the price increases and volumes are insufficient to garner adequate rates of return and healthy credit ratios. Thus, these companies will remain under pressure for possibly further negative rating actions unless there’s additional improvement in hydrocarbon prices. Moreover, the OFS subsector includes the offshore contract drillers, almost all of which have negative outlooks, reflecting the uncertainty of when the offshore deep water industry will recover. The O&G industry’s liquidity remains healthy because debt markets are robust, with attractive rates and covenant-light deals being the norm. The banking environment and borrowing bases are stable and we don’t expect any declines in borrowing bases during upcoming redeterminations.

Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ended Sept. 30, 2017
Industry forecasts

Global Oil and Gas

Chart 7 – Revenue growth (local currency)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Credit ratios for the sector largely improved along with the rebound in the oil prices and the significant decrease in industry costs and productivity gains garnered by producers. Some companies, particularly the larger investment-grade companies, have sold assets to reduce debt or they’ve issued equity to transact deleveraging asset acquisitions. OFS margins will remain mostly flat because OFS companies are limited in their ability to increase prices more and we don’t expect exploration and production (E&P) companies’ costs to improve. Moreover, we believe there’s limited opportunity for additional productivity and efficiency gains. The slight improvement in credit metrics for 2018 will stem from slightly higher production levels due to ramp ups in capex.
Key assumptions

Exploration and Production

1 Oil prices
Our base case price deck for West Texas Intermediate (WTI) and Brent is broadly flat at $50 per barrel (bbl) for the remainder of 2017 and 2018, and $55/bbl for 2019 and beyond. Oil prices, for the past year have been trading range-bound between $45/bbl and $55/bbl and are being supported through 1.8 million bbl/d of production cuts from OPEC and several other nations. The OPEC cuts, which were implemented to address oversupply in the market and reduce record high inventory levels, are up for renewal in March 2018. We believe the cuts will either be extended or slowly unwound as inventory levels haven’t yet reached targets and the elimination of those production cuts would likely lead to a rapid and significant decline in oil prices. Moreover, we believe the Saudis, who are likely to proceed with an IPO of Saudi Aramco, will have incentive to maintain production to keep oil at prices that will support the IPO.

2 Natural gas prices
Our natural gas price deck is stable at $3.00 per Btu over the next three years. Our premise hasn’t changed from last year. We believe that there is ample natural gas supply in the U.S., particularly from the Northeast where the prolific and low-cost Marcellus and Utica shale plays will continue to supply much of the growth in natural gas demand. The slow rise in long-term natural gas demand is primarily driven by coal-fired utilities switching to natural gas, increased liquid natural gas (LNG) use, and exports to Mexico. Northeast regional differentials continue to remain below the Henry Hub price but we believe they will narrow given the significant amount of takeout capacity being built in the region over the next several years. A lot of associated gas comes from extensive oil drilling occurring in the Permian Basin.

3 Capital expenditures
We believe global capex will still be substantially below levels needed to sustain production. We haven’t yet compiled our forecast for next year’s capex but third-party industry forecasts are anticipating a 4% increase in 2018 down from 8% this year. North America spending continues to lead the pack and is anticipated to grow 31% this year. We expect onshore spending in the U.S. to increase 15% next year reflecting mostly stable price deck of $50-$55 per barrel. International spending again is expected to grow in the low-single digits in 2018. The one area that will likely see a decline in spending is the offshore sector because oil prices will remain below levels needed for sanctioning deepwater greenfield projects. We expect offshore spending to drop approximately 10%-15% in 2018--on the heels of an expected decline in 2017 of about 20%.
### Oilfield Services

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<th>Rig count</th>
<th>Margins</th>
<th>Spending</th>
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<tr>
<td>1</td>
<td>The global rig count (not including the U.S.), which has been dwindling, now stands at approximately 931 as of the date of this report and is close to the cycle low of 921. The rig count decline has been concentrated in Mexico, Venezuela, Indonesia, and Thailand. Mexico and Venezuela continue to face declining production and Venezuela remains in financial distress. After bottoming to a low of 316 in May of 2016 from a high of 1,609 in October 2014, the oil rig count in the U.S. has had a nice rally and increased 133% as of the date of this report, driven primarily from the rebound in oil prices. The region in the U.S. that has had the most significant growth has been the Permian Basin where the count has grown by over 300% to just over 400 rigs. The U.S. natural gas rig count has remained relatively flat over the past year and with the $3 natural gas price expected to remain relatively flat for 2018, we don’t believe there will be a significant increase in the overall count.</td>
<td>OFS companies’ margins, while improved in 2017, will remain weak for issuers in 2018. Despite an increase in overall prices for OFS of about 10%-15% in 2017, we don’t expect significant increases in prices in 2018 without a corresponding increase in rig count. OFS companies enjoyed 10%-15% increases in drilling costs but more than 25% in completion services, particularly pressure pumping. We expect frac sand prices to decline as more capacity is added in 2018 and the existing shortage of pressure-pumping equipment in the Permian will be alleviated as more capacity is added.</td>
<td>The ability of OFS to increase prices will be dictated ultimately by rig counts. While spending will be higher for the E&amp;P industry, much of it will be to sustain production with some growth spending as well. Drillers have become very efficient, which has in some respects reduced the need for some OFS activity. As noted, we don’t expect significant increases in spending globally outside the U.S. OFS companies in the U.S. should reap a nominal benefit from a 30% expected increase in spending.</td>
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## Refining

### Gasoline and distillate demand
Emerging economies will likely continue to spur global gasoline demand and demand growth, as well as for other oil products, while demand from the Organization for Economic Cooperation and Development (OECD) members drops further. The U.S. Energy Information Administration (EIA) forecasts U.S. gasoline demand to increase about 1% in 2018. Our demand forecasts are generally in line with the EIA in this respect. Industrial activity and economic growth is likely to support healthy demand for diesel. In the U.S., we expect diesel and other distillate demand to remain robust in 2018, driven by stronger expected economic growth, increased exports, greater oil and natural gas drilling activity, and an assumption of normal temperatures. Our forecast for distillate demand growth is about 2% in 2018.

### Increasing crude oil production
We see global oil supply and demand growth being broadly matched in 2018, assuming OPEC production constraints remain. U.S. growth is a key factor, with the EIA predicting 2018 crude oil production to reach an average of 9.9 million bbl/d, which is 0.6 million bbl/d higher than 2017 and would surpass the previous record of 9.6 million bbl/d set in 1970. EIA forecasts that most of the U.S. crude oil production growth will come from both the Permian region in Texas and the Gulf of Mexico. We believe this will mean narrower crude differentials between WTI and Brent that will average $2-$3 per barrel, or the cost of transportation. This will likely mean more moderate profitability for U.S. refineries, as crack margins and differentials return to their pre-Harvey levels.

### Refining margins
We’re assuming regional 2018 crack margins to be generally in line with 2017. We expect average utilization for most OECD and non-OECD refining capacity to be in the low- to mid-90% area, remaining at the upper-end of the five-year average. Higher U.S. gasoline production and inventory levels in 2017 contributed to refinery margin compression. Despite an increase in gasoline production and high inventory levels, rising U.S. exports provided some support for gasoline margins, which we expect to continue into 2018. Healthy demand continues to support diesel margins.
## Contract Drilling

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<td>1</td>
<td>Both the global jack-up and the floater markets remain in a state of oversupply. We expect this to continue until late 2019 at least. This reflects the collapse in demand, especially in deepwater drilling, since late 2013, but also the ongoing supply of about 150 newly constructed rigs—ordered in 2014 before market conditions grew radically stronger. This imbalance exists despite nearly an estimated 100 floaters being retired (scrapped) or cold stacked (moored in need of reactivation) by 2018. Many older vessels in need of periodic surveys are being retired. Fewer jack-ups have been scrapped as they can be cheaper to cold stack (around $1,000 per day compared with up to $40,000 per day for drill ships). We note some recovery in demand for jack-ups for example in South East Asia and the North Sea, though not in the Gulf of Mexico. Shallow-water activity in the Middle East, India, and China has only been mildly disrupted.</td>
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<td>2</td>
<td>Utilization rates remain low at about 55% across jack-ups and floaters. We generally assume that vessels coming off contract won’t find employment. We estimate utilization for floaters is unlikely to improve substantially until late 2019 at the earliest.</td>
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<td>3</td>
<td>We don’t see stronger dayrates until utilization has picked up—usually 85% is the threshold when rates begin rising. In general, we understand contract extensions and short-term contracts are being signed at close to break-even levels. Keeping rigs ready for work involves paying the majority of costs—without revenues—and is therefore uneconomic for all but the most attractive vessels with well-funded owners.</td>
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## Midstream

### Commodity prices

We believe commodity prices for both crude oil and natural gas will be relatively flat for 2018. Our base case price assumption for WTI and Brent crude is unchanged at $50/bbl for 2018, improving to $55/bbl for 2019 and beyond. Our price assumption for natural gas is unchanged at $3 per million Btu over the next few years. We are forecasting that natural gas liquid (NGL) prices to average about 60 cents per barrel in 2018. Under these price assumptions, we don’t expect commodity prices to substantially impact midstream companies’ credit profiles because most already have largely fee-based contract profiles. However, we think the flat-price environment could cause a slowdown in organic growth projects, especially if upstream companies slow down their production spending.

### Cost of capital

We expect capital costs to be pressured in early 2018. We expect midstream companies structured as master limited partnerships (MLPs) to continue simplifying their corporate structures by eliminating incentive distribution rights (IDRs) in an effort to improve their capital costs and bring down equity yields. We forecast an increase in distribution-coverage ratios and a reduction in distribution-growth rates to the mid- to low-single digits as companies shift their focus to financing a greater portion of their capital projects with retained operating cash flow. Unless equity prices improve or equity yields decline meaningfully, we expect a significant increase in hybrid equity issuances and for companies to pursue joint-venture opportunities when possible to reduce financing requirements.

### Volumes

With commodity prices roughly flat from 2017 levels, we believe location is the most important factor for gathering and processing companies’ volume growth expectations in 2018. In our view, companies with strong acreage positions in the Permian basin should see the largest growth in 2018 due to its low break-even drilling costs and double-digit returns even with $50/bbl crude prices. Outside of the Permian, we forecast volumetric growth in the Marcellus and Utica as construction of infrastructure projects conclude and become fully operational. Once Rover Pipeline is fully operational, which we expect to occur in the first half of 2018, it will improve natural gas takeaway capacity in the Northeast. We also forecast volumes to improve in the South Central Oklahoma Oil Province (SCOOP) and Sooner Trend Anadarko Basin Canadian and Kingfisher Counties (STACK) basins. Stronger NGL prices will likely result in an increase in processing and fractionation volumes across the U.S.
Key risks and opportunities

## Exploration and Production

### Hydrocarbon prices and productivity/efficiency gains

Much of the direction of oil prices will hinge on what OPEC does with the current production cuts that are set to expire at the end of March 2018. At the very least, the cuts have put a floor on pricing. However, in the event that the cuts aren’t extended or at least unwound slowly, we’ll most likely see oil prices rapidly decline. Our ratings are relatively stable and would remain so long as oil prices are at least in the mid-$40 price range or higher. Natural gas continues to take market share from coal and with any increase in demand being met by the Marcellus and Utica basins, companies with exposure to these regions could see ratings improve.

The productivity gains and cost reductions that have occurred in U.S. shale have been well documented. However, additional productivity gains from longer laterals, cluster spacing, and adding more proppant are limited. The tier I wells many companies drilled when prices were low present greater risk and uncertainty. Although not expected for the next few years, we believe that shale production will begin to decline at some point as the inventory of tier I wells begins to deplete and shale continues to contend with rapid decline curves. E&P companies will in such a scenario, see increasing costs, reduced productivity, and declining production.

### Mergers and acquisitions

After deal activity accelerated in late 2016 and the first half of 2017, we expect activity levels to nominally increase in 2018. The market remains in a state of cautious optimism. The expectation of stable oil prices will aid in eliminating some of the uncertainties and the wide bid/asks typically exhibited in a volatile market. Large integrated oil producers could seek more shale acquisitions as they move from longer to shorter cycle projects and to replace very high production levels. For the smaller companies, purchases of contiguous assets will remain the norm. Asset valuations, especially for acreage in the Permian are very high and with interest rates and equity valuations remaining low, we believe that debt-financed acquisitions will account for the majority of deals completed in 2018, which could lead to lower ratings. The private equity segment remains active in the sector.

### Capital market access

The oil and gas industry faces a significant amount of debt maturities over the next couple of years. This is due to many companies issuing or refinancing debt during the high oil prices of 2012-2014. However, while interest rates are low and the high yield spreads are near the low levels they were in September 2014, any significant declines in oil prices, would result in a severe amount of companies unable to refinance their debt and would lead to another wave of bankruptcies. Equity investors are also becoming less patient with companies that continually outspend cash flow to grow and utilize debt to fund the difference. They are placing a premium on issuers that can grow within cash flow. We expect borrowing bases, which are the life blood for many high yield companies, to remain stable. However, a distressed pricing environment coupled with the impact of reduced drilling budgets, liquidity could be strained.
Oilfield Services

1 Hydrocarbon Prices
We believe the primary risk to OFS companies lies with OPEC and whether they’ll continue with the production cuts in March. At current hydrocarbon expectations, the rig count is unlikely to change much. A sustained oil price environment below $40 would lead to a rapid decline in rig count and hence a resulting decline in prices for OFS goods and services. This would lead to another round of bankruptcies and likely consolidation in the industry.

2 Limited Price Improvements
The level of price increases garnered in 2017 by the OFS companies was insufficient to cover internal rates of return for many. Further price increases will be needed to achieve some stability. Approximately two-thirds of the companies we rate in this sector are in the single ‘B’ and below category and approximately two-thirds have negative outlooks as they continue to report insufficient returns and produce aggressive credit metrics.

Refining

1 Regulations
Environmental and other regulation remains a key risk area. The implementation of changes to accommodate the IMO sulfur cap to be enforced in 2020 is one example of recent regulations. We view the U.S.’ renewable Identification credits (also known as RINs) an ongoing burden on refineries’ profitability because the full cost is not always passed through to the consumer at the pump. The industry had high hopes of moving the point of obligation under the Renewable Fuels Standard (RFS) to the fuels blenders under the Trump Administration, but the initiative seems to have faltered. The status quo will cost many refineries such as PBF Energy Inc., CVR Refining L.P., and Valero Energy Corp. collectively over $1 billion.

2 Refining margins steady
In general, we assume average refining margins and profitability will be broadly similar to 2017, which we view as slightly below mid-cycle margins in the U.S. owing to an oversupply of crude oil feedstocks and demand that might not keep up with refined product supply. For the U.S., product exports should continue to provide relief in this regard, but we believe it will keep a ceiling on consistently better margins. While crude differentials could widen from time to time during periods of unexpected outages (i.e., Hurricane Harvey), we think crude differentials will likely narrow and not provide much upside for U.S. refiners during 2018 overall.

3 Higher leverage
Given the potential volatility of EBITDA, we are sensitive to structural increases in gross and net debt. For some, stronger profitability in 2017 has been somewhat offset by higher share buybacks and lower average cash balances. This has eroded the large cushion in credit ratios some refiners built up from 2011-2015. Larger diversified refineries with a full backlog of midstream or retail assets will fare much better than their smaller less-diversified peers. U.S. refiners that have growing midstream MLPs have some options and flexibility to monetize assets, but could increase consolidated debt as the midstream business becomes a large part of total EBITDA. The refining operations will benefit from its ownership in their midstream subsidiaries and the distributions received, which could help moderate the effects of volatile refining margins.
Contract Drilling

1. **Stronger oil price recovery**
   A realization or widespread expectation of sustained higher oil prices than our base case or current consensus assumes would make more offshore projects economic. A consequent ramp up in offshore and particularly deepwater exploration and development activity would increase rig demand and likely accelerate a recovery for drillers as the market tightened. Given the present and enduring excess rig supply, even stronger oil prices would have a significant lag before stimulating the drilling market. A price recovery could however delay the scrapping of older rigs, thereby maintaining the rig market imbalance and delaying a recovery in utilization and day rates.

2. **Faster rate of rig scrapping**
   Across all segments of the offshore rig market, current supply and nearly finished rigs in yards mean more scrapping of older and less economic rigs is almost certain to be a precursor for any rig market rebalancing. More rapid retirement and scrapping across fleets could address market oversupply and improve utilization sooner. We note that bankruptcies of drilling companies haven’t resulted in their rigs automatically leaving the market. Indeed, under Chapter 11 proceedings, some modern, high-specification vessels now carry lower overheads.

3. **Mergers and acquisitions**
   There has been some corporate mergers and acquisitions (M&A), but also a number of asset transactions as companies either acquire rigs at below the cost of construction or improve their fleet with high-specification, modern rigs.
Midstream

Cost of capital
The high cost of equity capital is likely to continue to pressure the balance sheets of many midstream companies. Most companies have outlined their dividend policy for 2018 and we expect distribution growth to be in the 5%-7% range. Many companies have simplified their corporate structures—either by eliminating burdensome IDRs or collapsing their structure to become a corporation rather than an MLP—to resolve issues related to capital costs, while at the same time positioning themselves for sustainable long-term growth.

Companies with double-digit equity yields that lack a credible growth strategy might have to reconsider their distribution policy and, in some cases, continue the trend of resetting (cutting) their distribution. In some instances, this might even mean cutting the distribution more than once or eliminating it all together. Relative to some of their more mature peers, newly formed high-growth MLPs such as Valero Energy Partners L.P. and Delek Logistics Partners L.P. are likely to stand out amongst peers in the sector as they benefit from an inventory of assets at their parent companies that are likely to be dropped into their MLPs to facilitate growth.

Capital expenditures
Under a flat commodity price environment, the backlog of capital spending projects has declined as midstream companies are instead focusing on improving the utilization of their assets while at the same time reducing operating costs. We forecast capital spending to be about 5%-10% higher in 2018, particularly for more diversified investment-grade companies. Capital spending projects will focus on low-cost basins such as the Permian, SCOOP/STACK, Utica, and Marcellus for which we anticipate volumetric growth year over year.

In terms of M&A, we believe the bid-ask spread remains wide, with acquisition multiples elevated. We don’t envision any significant M&As in 2018 unless equity costs improve. However, we do expect additional joint-venture opportunities for large, long-lead time projects as companies focus on improving their balance sheet and sharing the risk, such as the Gulf Coast Express Pipeline Project, which includes Kinder Morgan Inc., DCP Midstream L.P., and Targa Resources Corp. combining separate pipeline projects into one.

High leverage
We forecast investment-grade midstream companies to target adjusted debt/EBITDA of about 4x-4.5x. We believe management teams will undertake greater financial discipline by financing a larger percentage of capital spending with internally generated cash flows. Under an environment of lower distribution growth, more companies are using excess cash flow to reduce debt. This is forecast to reduce equity needs to some extent with the remainder largely coming from hybrid equity and at-the-market equity offerings. We expect companies to refinance debt opportunistically, which includes issuing hybrid equity to term out borrowings outstanding on their revolving credit facility.

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Cash, debt and returns

Global Oil and Gas

Chart 11 – Cash flow and primary uses

Chart 12 – Return on capital employed

Chart 13 – Cash and equivalents / Total assets

Chart 14 – Total debt / Total assets

Chart 15 – Fixed versus variable rate exposure

Chart 16 – Long term debt term structure

Source: S&P Global Market Intelligence, S&P Global Ratings calculations