MOODY'S INVESTORS SERVICE

OUTLOOK
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TABLE OF CONTENTS

Global outlook turns positive on rising demand and prices, as pandemic restrictions fade 2
E&P companies stick to spending discipline and efficiencies even as prices rise 4
Refiners' earnings will beat weak 2020 comparison as demand recovers 5
Integrated oil earnings surge while production growth and investment remain subdued 6
Tepid OFS demand points to flat earnings trend in 2021-22 7
Moody's related publications 8

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Energy – Cross Region

Outlook turns positive on higher prices and recovery in demand

Our outlook for the global energy industry is positive. This reflects our expectations for fundamental industry business conditions over the next 12 to 18 months.

» **Sustained momentum in commodity prices will support the turnaround in the global industry's fundamental conditions and a positive global sector outlook through mid-to-late 2022.** Pent-up consumer demand and a pickup in trade and manufacturing activity around the world are spurring a rebound in economic activity, encouraging a faster recovery in demand and prices for oil and gas through late 2021 and into early 2022. We maintain our medium-term commodity price ranges, $45-$65/barrel (bbl) for oil and $2.00-$3.00/MMBtu for Henry Hub natural gas.

» **The exploration and production (E&P) sector will continue to make solid gains in earnings and operating cash flow in 2021 based on higher oil prices, favorable physical market dynamics, and relatively low operating and OFS costs.** Individual producers will focus intensely on capital discipline and operating efficiency that will help companies generate stronger free cash flow, reduce debt and strengthen overall credit quality following an extremely difficult 2020. The strongest E&P companies will continue to consolidate assets throughout 2021.

» **Demand and earnings point to a positive direction for the refining and marketing (R&M) sector through mid-2022 as more economies reopen.** Pent-up demand for travel and seasonally higher second-quarter and third-quarter demand in 2021 will spur faster near-term volume growth until consumption returns to more historical patterns. Global demand for refined products will be up by about 6% in 2021 from year-earlier levels, and by nearly 4% in 2022.

» **Earnings for integrated oil companies will rise by a median rate of about 50% on higher average oil prices and recent gains in operating efficiencies.** The positive direction for integrated oil stems from strong earnings in the global E&P and refining sectors, while refining operations will recover more slowly for the European companies. The strong rebound in earnings also reflects a low base of comparison in 2020, when adjusted EBITDA almost halved, but EBITDA will not return to 2019 pre-pandemic level before the end of 2022.

» **Tepid fundamental conditions point to a stable direction for the oilfield services and drilling (OFS) sector through mid-to-late 2022 amid lukewarm growth in demand for services.** The large investment-grade OFS companies will improve cash flow modestly and will gain market share in the recovery, but smaller, regional and service-focused OFS companies that have insufficient liquidity to await a full recovery will likely have to consider bankruptcy filings or liquidation. Despite the rally in commodity prices, growth in drilling activity, a proxy for OFS demand, remains modest and will likely remain so through 2021.

Industry outlooks reflect our view of fundamental business conditions for an industry over the next 12-18 months. Since outlooks represent our forward-looking view on business conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the industry outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of the rating outlooks of issuers in the industry, but rather our assessment of the main direction of business fundamentals within the overall industry.

Global outlook turns positive on rising demand and prices, as pandemic restrictions fade

Our outlook for the global energy industry is positive, based on our expectation of a continued recovery and sustained improvement in fundamental conditions across the industry in the next 12-18 months. Pent-up consumer demand and a pickup in trade and manufacturing activity around the world are spurring a rebound in economic activity, encouraging a faster recovery in demand and prices for oil and gas through late 2021 and into early 2022. Lower costs and higher operating leverage will boost companies' earnings, even as production volumes remain flat. Recovery in demand will also boost margins for refined fuel products.

Considering the sharp decline in earnings in 2020, we expect exceptionally high EBITDA gains for the energy industry overall through the first quarter of 2022. The global outlook stems from the positive earnings directions for the exploration and production (E&P), refining and marketing (R&M) and integrated oil sectors (see Exhibit 1). Earnings prospects for oilfield service (OFS) companies remain more neutral through mid-2022 amid flat growth in production volumes across the industry and anemic demand for oil services and drilling. We maintain a separate outlook for the global midstream sector, which is stable today.

Exhibit 1
Largest sectors of global oil industry will see earnings rising through mid-2022

Global Oil and Gas Industry
Industry sector outlook: POSITIVE

- Demand recovery, positive price momentum and improved operating leverage lift global sector earnings from 2020 trough levels
- Reduced investment limits growth in production in E&P and Integrated Oil, slows recovery in OFS segment
- Rising regulatory costs weigh on earnings and investment decisions, fostering consolidation

E&P
Direction: POSITIVE

- Solid earnings gains backed by higher prices and reduced costs
- Capital discipline, focus on capital returns limit production growth
- Consolidation to continue, with strong producers becoming stronger

R&M
Direction: POSITIVE

- Rebound in pent-up demand boosts earnings in 2021-22
- Margins remain below mid-cycle levels, due to significant idle capacity
- Rising US regulatory costs will dent earnings

Integrated
Direction: POSITIVE

- Higher demand, prices, reduced costs propel earnings, but at levels still below 2019
- Investment remains curtailed through 2021
- Focus on free cash flow and deleveraging ahead of distributions

OFS
Direction: STABLE

- Modest gains in earnings
- Tepid recovery in demand across sector
- Largest companies accrue most benefits from ongoing rebalancing and consolidation

Source: Moody's Investors Service

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We would change our global sector outlook to stable if we believe consolidated global EBITDA growth will slow to less than 5% over the next 12-18 months, and to negative if we expect that consolidated EBITDA will decline more than 5%. Risks to our positive outlook include an interruption in the recovery in demand or other factors contributing to a decline in oil prices to less than $50/barrel (bbl).

While our outlook for global energy is positive over the next 12-18 months, over the longer term there is growing societal concern around climate change leading to increased risks for the industry from energy transition, greater regulation and reduced investor demand.

Restricted supply and demand recovery support strong pricing momentum

We maintain our medium-term commodity price ranges, $45-$65/bbl for oil and $2.00-$3.00/MMBtu for Henry Hub natural gas (see Exhibit 2). Our medium-term price ranges reflect our assessments of reinvestment economics and full costs of marginal oil and gas production. As global oil supplies continue to rebalance, we expect that light/heavy oil price differentials will remain narrow in 2021.

Exhibit 2

Our medium-term price ranges for oil and natural gas are unchanged

	Moody's commodity price ranges
Oil price range	$45-$65 / bbl
Natural gas (Henry Hub) price range	$2.00-$3.00 / MMBtu

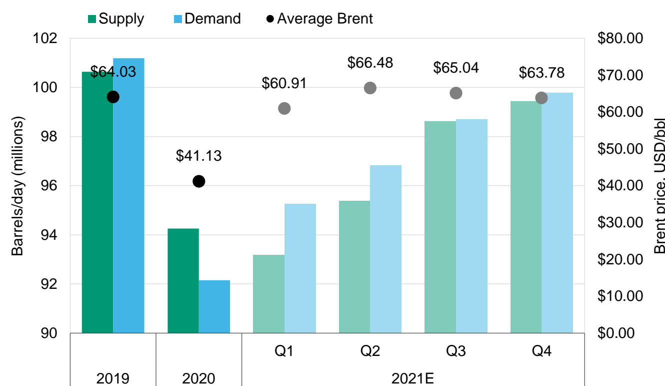
Source: Moody's Investors Service

Oil prices staged an impressive recovery after tumbling in March 2020, despite a widespread uncertainty surrounding economic recovery, and are trading at or above the upper level of our medium-term oil price range of $45-$65/bbl. Prices were propelled upward by restricted supply amid a steadily improving demand for oil and refined products.

Global demand for oil was 95 million bbl/day (bpd) in March 2021, and will continue to expand to nearly 100 million bpd by the end of 2021, close to the pre-pandemic level of 101 million bpd in 2019, according to US Energy Information Administration (EIA) estimates (see Exhibit 3). We expect that the OPEC-plus group of producers retains strong consensus and will continue to manage a gradual increase in production in step with the recovery in demand in 2021-22, while US production levels are unlikely to rise significantly before 2022. Global oil and refined product inventories had declined to their historical average levels by the end of the first quarter of 2021, making prices more immediately responsive to future supply/demand movements.

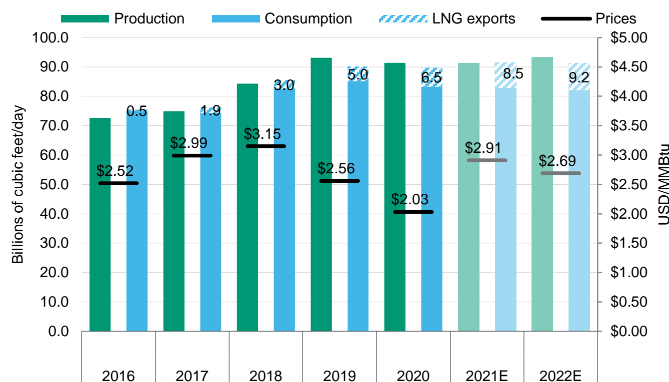
Benchmark North American natural gas prices at the Henry Hub will stay largely within the $2.00-$3.00/MMBtu medium-term range. The US market is finally balanced after significant decline in production of natural gas in 2019-20, including production of associated natural gas (see Exhibit 4). Higher oil prices that spur oil production inevitably lead to greater volumes of associated gas incidental to crude production—especially when prices remain solidly above $50/bbl for West Texas Intermediate (WTI), the main North American benchmark crude.

Exhibit 3
Global production growth will continue to follow demand recovery in 2021
Global liquids supply and demand, 2019-21E



Source: EIA, Bloomberg (average Brent prices for 2019 and 2020 and quarterly average futures prices for 2021)

Exhibit 4
Rising LNG exports needed to support natural gas market balance
US natural gas production and consumption, 2016-22E



Source: EIA, Bloomberg (average prices for 2016-20 and average futures prices 2021-22)

At a time of little growth in domestic demand for natural gas, the market will increasingly rely on exports of liquefied natural gas (LNG) to accommodate any production growth or support higher pricing momentum. While international natural gas prices have recovered from trough levels of 2020, the global LNG market remains competitive after large increases in capacity in 2019-20. (See Oil & Gas – Global: LNG competition intensifies amid reduced demand expectations, 15 October 2020.) We expect that LNG netback margins will support growth in US exports in 2021-22, but mainly as a support to Henry Hub prices rather than a driver for much higher prices.

Prices for natural gas liquids (NGLs) will trade at around 40% of WTI prices over the medium-term. NGL prices have recovered more quickly than oil prices, and historically have traded at levels averaging around 40%-45% of WTI. Strong seasonal demand for heating in Asia helped to accelerate the recovery in NGL prices.

E&P companies stick to spending discipline and efficiencies even as prices rise

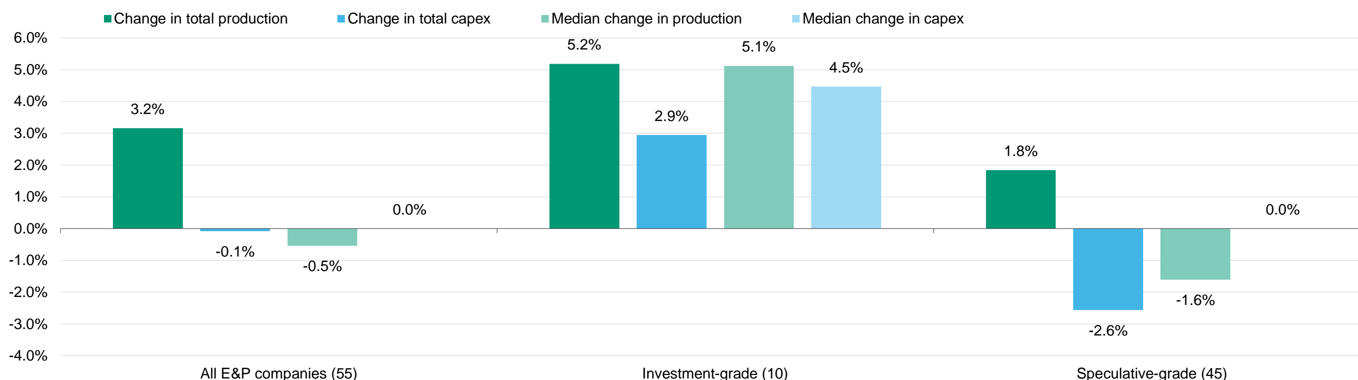
The E&P sector will continue to make solid gains in earnings and operating cash flow in 2021 based on higher oil prices, favorable physical market dynamics, and relatively low operating and OFS costs. Individual producers will focus intensely on capital discipline and operating efficiency that will help companies generate stronger free cash flow, reduce debt and strengthen overall credit quality following an extremely difficult 2020.

Several developments that took hold during 2019-20 will become even more entrenched and continue to reshape the E&P sector's positive direction in 2021-22 (see Exploration & Production – North America: Capital discipline, debt reduction and free cash flow propel potential rising stars, 21 April 2021). The biggest shift occurred around how companies are trying to allocate capital more effectively against a backdrop of heightened oil price volatility and investors' persistent calls for improved returns. A much wider group of companies today prioritize capital efficiency over volume growth to restore financial strength and deliver satisfactory shareholder returns (see Exploration & Production – Global: Heightened capital discipline will keep production volume flat in 2021, 14 April 2021).

Companies are trying to maximize returns on their asset portfolios and increase their resistance to any future price shocks by keeping costs low and maintaining high levels of operational efficiency. The ability to adopt and implement automation, digitalization, and standardization is increasingly differentiating the best performers in the industry from the average producer. Even as prices have increased, producers have not accelerated capital spending for the sake of massive volume growth (see Exhibit 5).

Exhibit 5

Aggregate E&P capital spending will remain flat and production volume will rise minimally during 2020-21



Source: Moody's Investors Service

The strongest E&P companies will continue to consolidate assets throughout 2021. While asset prices have recovered significantly from their lows set in mid-2020, valuations remain cheap compared to 2017-19. Financially stronger companies have used equity capital to scoop up high-quality assets since late 2020, predominantly in the prolific oil-producing Permian Basin of west Texas and southeastern New Mexico. Such acquisitions have improved the acquirers' credit quality.

An accelerating energy transition will increasingly compel E&P companies to provide better disclosures and reporting around their commitments, actions and spending on environmental and social issues. A growing number of financial institutions are making investment decisions based on various ESG performance criteria. Consequently, the E&P sector will try to change its traditional business and reporting practices enough to maintain access to affordable capital.

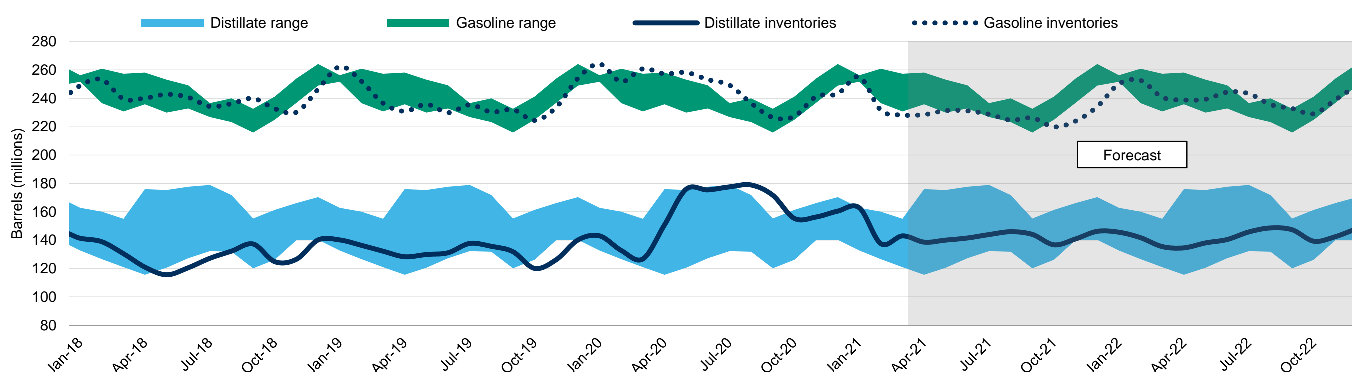
Refiners' earnings will beat weak 2020 comparison as demand recovers

Demand for refined products and refiners' earnings will increase through mid-2022 from a low 2020 base as more economies open with vaccination programs and as COVID-19 concerns ease. Pent-up demand for travel and seasonally higher second-quarter and third-quarter demand in 2021 will spur faster volume growth in the near-term until consumption returns to more historical patterns, pointing to a positive direction for the R&M sector. Yet refiners' profit will likely remain on average below mid-cycle levels in 2021, even with considerable uncertainty about demand, and earnings from non-refining businesses such as retail sales, midstream operations and chemicals will continue to rise with the resurgence in GDP.

Global demand for refined products will be up by about 6% in 2021 from year-earlier levels, and by nearly 4% in 2022. First-quarter 2021 global demand for refined products was almost flat from a year earlier, while OECD demand was down by 5% and US demand by 4%, according to EIA's April 2021 Short-Term Energy Outlook. The EIA also forecasts that volumes of refined products will not recover to pre-pandemic 2019 levels until 2022, or even later in the case of jet fuel. In the US, motor gasoline and jet fuel were trailing pre-pandemic demand levels as of the first quarter of 2021, while distillate volumes rose modestly from a year earlier.

US inventory levels support higher product prices and margins for motor gasoline and distillate, having dipped below their five-year averages (see Exhibit 6). Inventories declined based on refiners' production discipline, idling refining capacity, and various onetime events that shut down refineries and led to inventory drawdowns, including hurricanes in 2020 and severe cold winter weather in February 2021 in the US.

Exhibit 6
Inventories for gasoline and distillates were close to bottom of five-year averages in early 2021



Colored bands around storage levels represent the range between the minimum and maximum
Source: EIA Short-Term Energy Outlook, April 2021

Meanwhile, low utilization rates will prevent refiners from spreading high fixed costs over maximum throughput volumes and continue to depress operating margins. Utilization rates have been depressed in the US (below 80% for the first quarter of 2021) compared to about 90% operating rates for the first quarters of 2019 and 2020. A significant amount of refining capacity remains idled or offline. A return to service of existing capacity and new refineries expected to enter service could lead to an imbalance in the refined products market, exerting downward stress on profit margins.

Changes to US industry regulations will likely add to refiners' costs and encourage investments in renewable fuels projects. Prices for Renewable Identification Numbers (RINs)—which refiners earn for environmental compliance and can buy, sell or trade—increased substantially in 2020 in anticipation of a change in administration and fewer US Environmental Protection Agency grants of Renewable Fuel Standard exemptions for small refineries. Any additional regulations, including carbon regulations to encourage energy transition, would further burden refiners' earnings.

Refiners will make decisions about growth investment spending and dividends in the context of maintaining their financial strength in 2021-22 until refining margins improve. The uncertain path to recovery for the refining sector will encourage refiners to remain financially conservative, maintain ample liquidity, and repay any additional debt that companies took on in 2020 to shore up liquidity during a period of negative free cash flow.

Integrated oil earnings surge while production growth and investment remain subdued

Earnings for integrated oil companies will rise by a median rate of about 50% on higher average oil prices and recent gains in operating efficiencies, both in 2020 and since the downturn of 2015-16. The positive direction for integrated oil stems from strong earnings in the global E&P and refining sectors, even as we expect a slower recovery in the refining operations of the European integrated companies. The strong rebound in earnings will also reflect a low base of comparison in 2020, when the sector's adjusted EBITDA almost halved. Even with the continuation of growth through 2022, we do not foresee that EBITDA for the integrated oil companies will return to its 2019 pre-pandemic level by the end of 2022.

Integrated companies will maintain their reduced level of capital investment, but will not return to sustained substantial positive free cash flow in 2021. Facing high price volatility and rising regulatory costs, most of the companies will retain sharp focus on capital efficiency and returns, and will limit growth investments to maximize free cash flow in 2021, prioritizing debt repayment to volume growth or returns to shareholders.

Sustained reduction in capital investment by the integrated oil companies will limit the sector's production growth to the low single digit percentages in 2021-22. We forecast only a modest growth in capital investment in 2021 for most of the integrated oil companies following a 25% decline in investment in 2020. National oil companies enfolded into the OPEC-plus production curtailment deal will see a gradual recovery in production levels contributing to higher earnings and cash flow in 2021-22.

Shareholder remuneration strategies will vary by company, but dividend payments in 2021 are unlikely to rise significantly for most companies in the sector. We do not expect that integrated oil companies will return to share repurchases until oil prices shift sustainably to the higher end of our medium-term price range. Many integrated oil companies will continue to pursue capital investment in low-carbon assets, and may even increase their low-carbon investment budgets for 2021. Integrated oil companies, especially in Europe, had been at the forefront of the industry's carbon-transition efforts even before the pandemic of 2020.

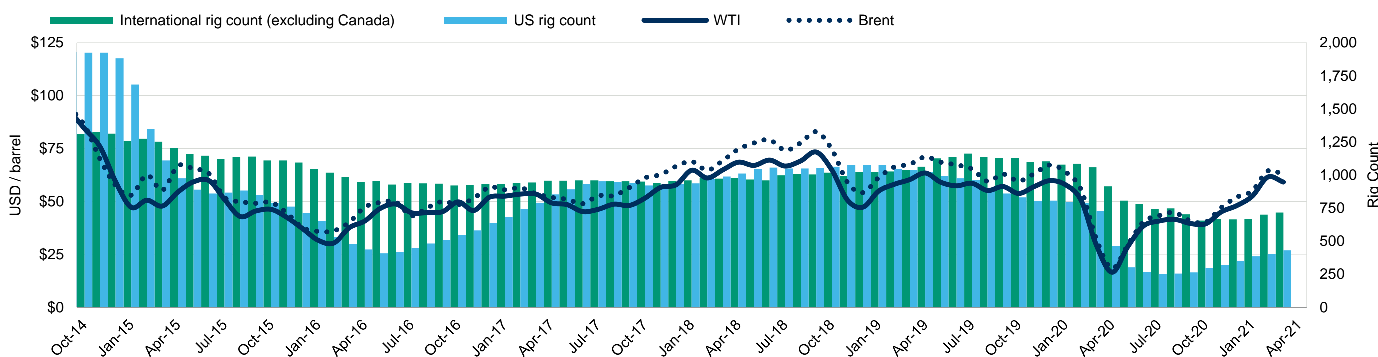
Tepid OFS demand points to flat earnings trend in 2021-22

The fundamental conditions point to a stable direction for the OFS sector through mid-to-late 2022 amid lukewarm growth in demand for services. The nascent recovery will largely benefit the large investment-grade OFS companies. Not only will these companies improve cash flow modestly in 2021 from 2020 lows, they will also gain market share in the recovery. EBITDA will improve in 2021-22 and the strain of debt levels will ease. The larger OFS companies will also focus considerable effort on increasing their digital services and expanding their services portfolio into low-carbon energy development (see Oilfield Services – Cross-Region: Big three companies on path to recovery, while smaller peers remain more challenged, 8 April 2021). But smaller, regional and service-focused OFS companies will have to rely on their liquidity while awaiting a full recovery in demand for services. Those with less liquidity will likely have to exit the market through bankruptcy filings or liquidation.

Despite the rally in commodity prices, growth in drilling activity, a proxy for OFS demand, remains modest and will likely remain so for the remainder of 2021. Drilling activity has risen from its lows of mid-2020, and the rig count has been on a consistent rise, especially in North America, since the third quarter of 2020 (see Exhibit 7). Yet rig activity was still nowhere near the highs of late 2019. Pricing for services will only improve when demand reaches its pre-COVID-19 peak, which is unlikely before mid-2022.

Exhibit 7

Global rig activity in mid-2021 remains significantly below 2019 peak level



Source: Baker Hughes, EIA

The US rig count rose steadily to 439 by April 2021 from its 244 bottom in August 2020, but was still down by 45% from January 2020 and by 60% from its fourth quarter 2018 peak. The international rig count bottomed out in October 2020 with a monthly average of 656, climbing only to 715 by March 2021—still 35% below its December 2019 peak. Demand has risen significantly for certain specific land services such as hydraulic fracturing as producers increasingly focus on completing their already drilled but uncompleted wells. Demand levels as of mid-2021 will likely persist into 2022, but growth will not necessarily remain as strong.

Meanwhile, near-term prospects for stronger cash flow remained dim for offshore service providers as of mid-2021, with weak dayrates reflecting subdued offshore exploration and development activity. Some of the offshore drillers that had filed for bankruptcy in 2020 have emerged with substantially reduced debt, but that in itself does not improve their cash flow prospects without a reduction in the rig supply that helps improve their equipment utilization.

Moody's related publications

Outlooks:

- Midstream Energy – Global: Outlook remains stable, with 3%-4% EBITDA growth through mid-2022, 26 April 2021
- Global – Oil and Gas: 2021 outlook stable with modest gain for prices but still-limited capital investment (Slides), 8 December 2020

Sector comments:

- Integrated Oil & Gas – Russia: Higher oil prices, weak rouble will fuel oil majors' 2021 EBITDA and leverage recovery, 22 April 2021
- Exploration & Production – North America: Capital discipline, debt reduction and free cash flow propel potential rising stars, 21 April 2021
- Oilfield Services – Cross-Region: Big three companies on path to recovery, while smaller peers remain more challenged, 8 April 2021
- Oil majors increasingly diverge on financial policy, response to energy transition, 29 March 2021
- Oil & Gas – Global: Lagging supply creates momentum for rising crude prices, 25 February 2021
- Oil & Gas – US: Freeze disrupts natural gas market; financial impact appears limited for producers, 19 February 2021
- Oil & Gas – Canada: Energy producer cash flow will improve due to narrow 2021 heavy oil differentials, 17 February 2021
- Integrated Oil & Gas – Europe: Weak performance in refining continues to weigh on the sector's credit quality, 11 February 2021
- Oil and Gas – Global: Downgrades dominated 2020, but pace slowed in second half as oil prices recovered, 11 February 2021

Sector in-depth reports:

- Exploration & Production – Global: Heightened capital discipline will keep production volume flat in 2021, 14 April 2021
- Corporates – Cross Region: Top of Mind: Frequently asked questions about top global sectors, 17 February 2021
- Oil & Gas – Cross Region: Post-pandemic industry will keep costs low in 2021, with eye on energy transition, 5 January 2021
- Oil & Gas – Global: LNG competition intensifies amid reduced demand expectations, 15 October 2020
- Oil & Gas – Global: FAQ on how carbon transition risk informs our credit views on the sector, 24 August 2020

Sector profiles:

- Oil & Gas – EMEA: First quarter 2021 newsletter, 8 April 2021
- Oil and Gas – North America: January-March 2021 newsletter, 6 April 2021

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