

Industry Top Trends 2021

Oil And Gas

Industry Continues To Face Headwinds



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What's changed?

The sector is experiencing a huge, unexpected demand shock. COVID-19 has drastically altered the 2020–2021 outlook and caused a supply overhang. The demand collapse has had severe consequences for refining too.

Climate policies are tangibly affecting funding and altering business strategy.

Emissions and other environmental, social, and governance (ESG) issues are mainstream for investors, politicians, regulators, and consumers.

OPEC is still a relevant force. The oil market remains underpinned by OPEC+ cuts. Without restraint, as in April 2020, the market would be oversupplied.

What are the key assumptions for 2021?

Oil prices and refining margins are likely to remain depressed. Even with demand broadly rising from late 2020, spare oil production and underutilized global refining capacity are likely to limit upside.

The gas-price rebound is fragile. A third sequential warm winter could reverse the third-quarter ramp-up in prices in key regions.

Capital expenditure may recover modestly. Given an uncertain industry outlook, we estimate 2021 spending will remain flat or modestly **rise**. This means little respite for drillers and oilfield service companies.

What are the key risks around the baseline?

Further severe lockdowns. We assume governments will hold back from heavy lockdowns. If not, the synchronized impact on the industry could be severe, since demand is still weak.

A breakdown in OPEC+ compliance or an eventual rebound in U.S. shale.

Sustained extra supply from OPEC or a resurgent U.S. would likely have a negative price impact.

An accelerated energy transition. Further tightening of policies and increases in carbon taxes would put more pressure on the industry, sooner than we currently assume.

Ratings trends and outlook

Global Oil and Gas (ex Midstream)

Chart 1

Ratings distribution by region

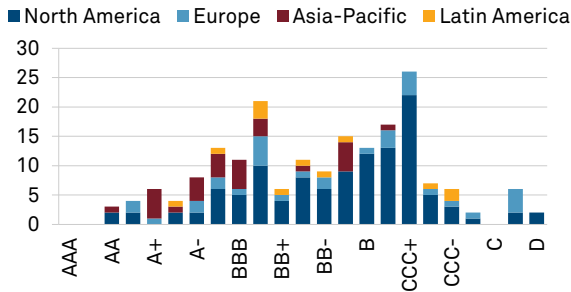


Chart 2

Ratings distribution by subsector

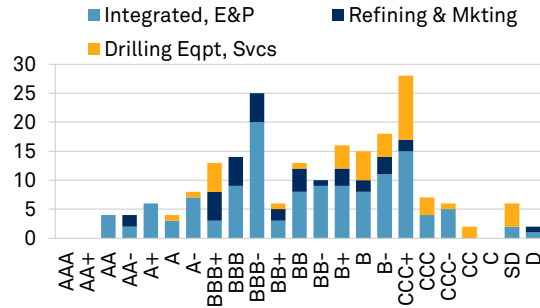


Chart 3

Ratings outlooks

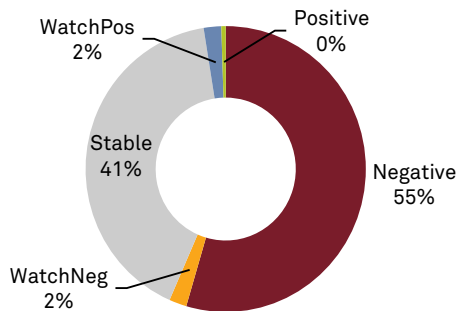


Chart 4

Ratings outlooks by subsector

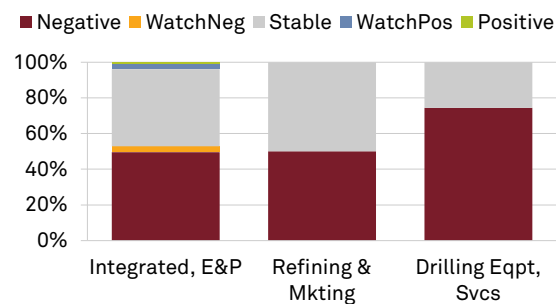


Chart 5

Ratings outlook net bias

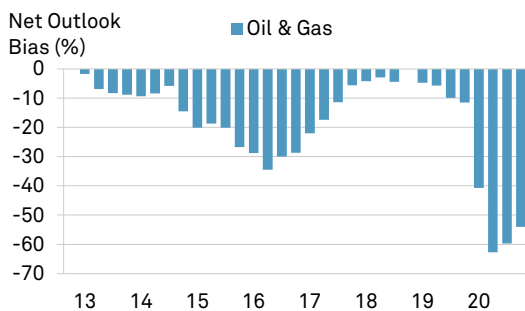
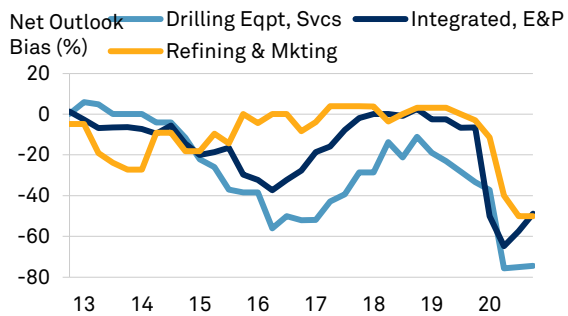


Chart 6

Ratings net outlook bias by subsector



Source: S&P Global Ratings. Ratings data measured at quarter end. Data for Q4 2020 is end October, 2020

Shape of recovery

Sector Outlook Heatmap

	Sensitivities And Structural Factors			Shape Of Recovery			
	COVID-19 Sensitivity	Impact If No Vaccine in 2021	Long-Term Impact On Business Risk Profile	Revenue Decline – 2021 vs 2019	EBITDA Decline – 2021 vs 2019	Revenue Recovery To 2019 Levels	Credit Metric Recovery To 2019 Levels
Oil & Gas	High	Low	Moderate	10%-20%	10%-20%	2023	2022
Exploration & Production and Integrated	High	Low	Moderate	10%-20%	10%-20%	2023	2022
Refining & Marketing	High	Low	Moderate	20%-30%	20%-30%	2023	2022
Oilfield Services and Drilling	High	Low	Moderate	10%-20%	20%-30%	>2024	2023

Source: S&P Global Ratings.

S&P Global Ratings believes there remains a high degree of uncertainty about the evolution of the coronavirus pandemic. Reports that at least one experimental vaccine is highly effective and might gain initial approval by the end of the year are promising, but this is merely the first step toward a return to social and economic normality; equally critical is the widespread availability of effective immunization, which could come by the middle of next year. We use this assumption in assessing the economic and credit implications associated with the pandemic (see our research here: www.spglobal.com/ratings). As the situation evolves, we will update our assumptions and estimates accordingly.

This report does not constitute a ratings action.

Global oil and gas

Ratings trends and outlook

The modest upward revision of our price decks in September led to outlook revisions to stable from negative on several issuers. Nevertheless, the outlook for the global upstream and refining portfolio remains largely negative. Companies are exposed to downside risks vis à vis our base-case assumptions as well as longer term challenges for the sector. Leverage remains high for most issuers and, due to investor apathy, most high-yield companies still do not have capital market access to meet upcoming debt maturities. Companies are still struggling to generate breakeven cash flow, which resulted in a brief wave of mergers and acquisitions (M&A) in the U.S. upstream space. Most of the M&A has been completed with low premiums and financed through all-stock transactions. Exploration and production (E&P) and oilfield service companies continue to see a wave of defaults and distressed exchanges due to lack of capital market access.

The significant demand destruction from the pandemic has weakened the financial performance of the global refining industry, to one of the lowest levels in decades. The sector outlook is negative, with about 57% of global ratings on negative outlook. There have been six downgrades since March, accounting for about 25% of the global portfolio. Refining utilization in North America is about 78%, well below historical averages in the mid-90% area, and companies are struggling to remain profitable. In the U.S., announced refinery closures this year have totaled 1.05 million barrels per day so far, which is approximately 6% of the total capacity at the start of 2020. We believe refiners will likely continue to struggle in 2021, with margins well below mid-cycle levels for much of the year, although we expect some improvement in the second half of 2021 with prospects for a vaccine that could lead to a boost in demand for refined products globally.

The longer the pandemic weighs on demand for oil and refined products, the more challenging it will be for refiners in particular to rebuild credit quality and preserve current ratings, even if they decide to reduce or suspend future dividend payments. We are focused on cash burn rates because refining operations are at best marginally profitable and at worse generating significantly negative cash flow.

1. Oil prices and refining margins are likely to remain depressed.

Even with demand broadly trending upward from late 2020, spare production and refining capacity are likely to cap upside. Our assumptions for both 2021 and 2022 for Brent and WTI are \$50 per barrel (/bbl) and \$45/bbl respectively, with refining margins to remain low due to low utilization (see chart 7).

2. The gas price rebound could be capped.

A third sequential warm winter could reverse the third-quarter ramp-up in prices globally. We remain cautious about this price rebound's resilience.

3. Capex may recover modestly.

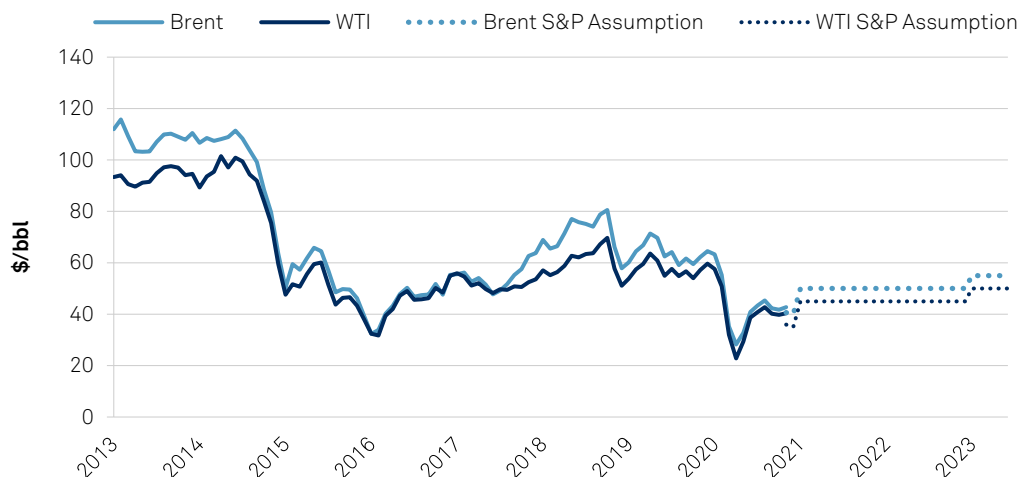
Given an uncertain industry outlook with moderate prices and cash flow, we do not anticipate a big step-up in 2021. This, together with the operating expenditure restraint, means little respite for drillers and oilfield service companies.

Global energy demand will most likely resume an upward trajectory when the pandemic recedes, driven by China, India, and other expanding economies. Demand growth in OECD countries is much flatter, since fuel-efficiency improvements and insulation, as well as consumer choices, dampen fuel and power demand growth. At the same time, renewable sources of energy, especially for power, are capturing much of the growth and increasing

their market shares. As an example, S&P Global Platts Analytics estimates that gas demand has already broadly peaked in Europe.

Chart 7

Oil price: current prices and S&P Global Ratings assumptions



Source: S&P Global Ratings.

Oil

One of the key consequences of the pandemic is the outlook for oil prices. With demand falling nearly 20% in second-quarter 2020, a massive supply glut remains, despite actions taken by OPEC+ to cut supply and balance global inventories. Looking at the futures curve for Brent and WTI, the market is expecting prices to remain relatively flat. In fact, WTI does not hit \$50/bbl over the next five years and while prices have rebounded from their nadirs because of economies reopening and production cuts, the curve barely supports full-cycle economics for the most efficient of shale producers. Our price assumptions of \$45/bbl for WTI and \$50/bbl for Brent for the next two years echo this sentiment. We believe OPEC will continue to monitor and manage accordingly, but with an eye on capturing market share. As a result, we do not expect oil prices to rise to a level that supports any meaningful reactivation of shale oil.

Faced with headwinds such as low oil prices, uncertainties about demand due to the pandemic and a new administration in the U.S. which is likely to result in a higher cost profile and declining well productivity, several operators have sought to partner with peers or a larger partner to deliver better value to shareholders.

Notwithstanding recent increased drilling activity, the oilfield service industry in our opinion still has no ability to increase prices; many of the smaller companies have either filed for bankruptcy or will file. There doesn't appear to be any panacea for this sector over the next couple of years, especially given our expectation that capital budgets for next year will be relatively flat. To support margin improvement, drillers will be focused on activities away from U.S. shale and digitalization. Moreover, the offshore drilling market remains oversupplied. We believe further consolidation and asset retirements will be needed to counter the dismal operating environment of low oil and gas prices, negative operating cash flows, and unsustainable leverage. The pandemic put a hammer to the brief glimmer of improvement we saw in 2019 when utilization and day rates trended upward. Floater utilization rates are below 60% with jack-up rates only slightly better. Unless utilization rates rise to about 80%, the industry will have no ability to enhance prices and limited ability to tap capital markets.

Gas

Natural gas prices have rebounded somewhat after plummeting due to the pandemic and the subsequent decline in demand from the power sector and liquefied natural gas (LNG). A warm summer in the U.S., economic resurgence, lower production due to rig declines, and lower by-product production were the main reasons for the rebound. We remain concerned however about the sustainability of prices due to a second wave of COVID-19 and, in the U.S., relatively high inventory levels as we enter the colder winter months. The inventory levels create an overhang on prices, and if the winter is unseasonably warm, like the previous two years, we believe prices could fall. We consider that LNG demand, power sector demand, and associated gas production will be key variables.

Capex

Many upstream producers rely on futures curves when determining capex budgets for next year. Given the shape of the WTI and Brent futures curves, we believe budgets will be relatively flat from 2020, but 20% below 2019 levels in 2021. Moreover, investor pressure for producers to remain free cash flow positive is forcing upstream companies to focus on streamlining and cutting capex. The implications for the oilfield service industry is that it will continue to struggle to improve margins or activity.

Credit metrics and financial policy

Cash flows and credit metrics have been under severe pressure in 2020, given low oil and gas prices and the collapse in refining margins since March. Production has also been lower for many, due to agreed or necessary cuts.

Typically, for the major oil and gas integrated companies, we look at ratios over a three- to five-year period. Although a terrible 2020 depresses average ratios and provides a weak starting point to 2021, rating implications hinge on financial headroom coming into 2020, as well as the extent to which ratios are projected to be broadly back in line in 2021. For a majority of the majors, including some national oil companies (NOCs), ratios should be back at rating thresholds in 2021, or at least close.

Much of the upstream high-yield portfolio resides in the U.S. Most of these producers lack capital market access and are seeking to merge or be acquired as they struggle to generate free cash flow at oil prices of less than \$50/bbl WTI. As expected, there has been a surge in bankruptcy filings this year, and we expect that trend to continue for many of the high-yield E&P and oil field service companies.

Interestingly, a range of financial policies has been on display in response to the downturn. Capex has been cut globally by approximately 25%. Some companies have also taken the opportunity to cut and rebase their dividend distributions. Among the largest companies, BP, Eni, Equinor, and Shell have made explicit cuts, while Chevron, ExxonMobil, Total, and Saudi Aramco have not. For some, such as Petrobras and Rosneft, lower earnings mechanically result in lower dividends.

Financial policy for North American refiners is a mixed bag. Some refiners, in an effort to bolster liquidity during the pandemic, issued debt totaling more than \$14 billion. The cash is sitting on balance sheets, and we net this against total debt. Higher rated companies have also tapped bridge loans and 364-day facilities as an added liquidity source from their bank groups. However, many of these same companies have thus far decided to preserve their dividend payouts, which is a substantial use of cash, and a credit negative in our view.

It is difficult to compare current credit measures to what refiners typically target during normalized mid-cycle conditions. We don't base our ratings on short periods of exceptionally weak (or strong) debt-to-EBITDA ratios, but rather look to expected improvement over the next two years, which will largely depend on a widely distributed

vaccine and corresponding strengthening in demand and refining margins. That said, it is possible margins will stay below the historical mid-cycle level for much, if not all, of 2021.

Key risks or opportunities around the baseline

1. Further lockdowns or another mild winter.

The extent of COVID-19 resurgence and its ultimate impact on the global economy remains the largest unknown. The change in season has brought about a surge in infection rates particularly in Europe and the U.S., raising concerns about lockdowns and the resulting impact on oil demand. While we feel effective vaccines will moderate the pandemic's economic impact in 2021, logistical challenges with mass inoculation could delay the pace of a recovery to pre-COVID demand levels and exacerbate the oversupply, supporting the "lower for longer" price thesis. Gas was less affected by the pandemic than oil, but gas prices were already weak globally before 2020, in part due to two sequential warm winters.

2. A breakdown in OPEC+ compliance or an eventual rebound in U.S. shale.

We believe OPEC will continue its commitment to alleviate the supply overhang and will focus on balancing global inventory levels. However, we also believe OPEC will look to regain market share, something it hasn't been able to do for the past six years, at the expense of U.S. shale producers. There is also the threat that approximately 4 billion barrels of production that is currently off line—largely in Iran and Venezuela—could find its way back to the market if the Biden administration were to lift sanctions on these countries.

3. Accelerating energy transition risks.

Further tightening of policies and increases in carbon taxes would put additional pressure on the industry, sooner than we currently assume. Renewables and clean energy have seen sustained investment in 2020. At the same time, automakers are continually focusing on electric vehicles (EVs) and climate-friendly technology. We believe under the Biden administration the energy transition story will continue to accelerate in the U.S. through increasing regulation and setting standards/goals for carbon emissions. As substitutes for oil and gas become more cost competitive for end users, adoption by country or demographic could shift meaningfully.

Risk from further lockdowns and winter weather

The severity of the pandemic's second wave, and any future waves, as well as the nature and longevity of governments' responses could exceed our assumptions for 2021. The primary impact of lockdowns on the industry was the collapse of oil demand. After a drop by 8.0-8.5 million barrels per day (mbd) in 2020, the IEA, Platts Analytics, and others forecast that demand will recover by only two-thirds of this figure in 2021. This is because the market is also vulnerable to changes to travel patterns, such as more working from home.

A more gradual or stalling economic recovery would likely sap oil demand, putting further pressure on prices. Given high oil and product stock levels, as well as uncertainty about whether OPEC will support production quotas, the market could swing back into oversupply. Such a scenario would also increase downside risks for already weak refining utilization and margins and challenge our assumption of average margins moving away from cyclical lows in the second half of 2021.

The main downside risks for gas prices are related to another unseasonably warm winter in the Northern hemisphere and lower demand because of further pandemic-related

lockdowns. Gas prices have rebounded in all major regions since mid-2020, but given high inventory levels, this improvement could be short-lived if heating demand is moderate or low as we enter 2021. In addition, wetter and windier weather allows greater hydro and wind power generation, reducing gas demand.

Risks due to overproduction

The continuing agreement by OPEC and others to limit supply while demand recovers is vital to bring down stocks and rebalance the market. Additional supply, in excess of prevailing demand, could adversely impact sentiment and physical balances.

Actions by the OPEC+ coalition and others have been successful in reducing the gross market imbalance that resulted in April 2020. The unprecedented 10 mbd voluntary and involuntary production reductions were critical even as demand rebounded from May.

Compliance with the OPEC quotas and commitments agreed by Russia and other countries has been relatively solid overall, even if individual countries, such as Iraq, have pumped above their quotas. However, there may be increasing challenges to this consensus. Libya is not subject to a quota and is now increasing production again, while Iranian and even Venezuelan barrels could again move if sanctions are revisited.

We project a decline in U.S. production in 2021 compared with 2020, especially onshore. But if prices are sustained well above \$50/barrel—which we view as a shale breakeven price—and funding is available, U.S. exports could gradually rise again and become significant.

For many drillers and oilfield services companies, many market and financial risks have already materialized in the past two oil price downturns. Even as the sector continues to restructure operationally and financially, with some exits and mergers, it remains beholden to expectations for oil prices and producers spending in 2021 and the long term.

Energy transition

The energy transition is a darkening cloud for the—still well-entrenched—oil and gas sector, as science, sentiment, and policies push the world away from fossil fuels. This shift of the global energy complex to more sustainable renewable sources of power will take decades, given the existing frameworks and assets, but the nature and speed of the changes in different countries and segments is uncertain. Nonetheless, 2020 has seen a step-change in many oil majors' strategic responses and also some government policy updates. The timing of oil's peak is uncertain, but we believe a decline is inevitable.

We see the long-term downward trend in oil and gas demand as an evident threat for the industry. As we noted in August, we see a greater degree of uncertainty for large oil players' historically core assets, competitive positions, and cash generation than five or ten years ago (see [“Writedowns, While Eye-Catching, Are Not The Largest Issue Facing Oil And Gas Supermajors,”](#) published Aug. 3). These structural challenges and uncertainties for the highest rated companies' business risk profiles also come in the context of a decade of downward trending return on capital and arguably greater industry volatility.





From a financial perspective, we also see that the supermajors' and some others' balance sheets and leverage do not provide substantial financial headroom, even factoring in credit metrics recovering to levels more appropriate for the respective ratings in 2021.

Oil and gas companies' strategic responses fall into two camps. All are focusing on operational efficiency, so that lower core oil and gas production costs allow greater cash generation and build resilience to both lower prices and an uncertain future. However, some majors, including the European ones, are expanding into parallel energy markets. In BP's case, the new strategy to become an international energy company explicitly involves reducing hydrocarbon production (excluding Rosneft) by about 40% over 10 years. Many of these previously noncore energy activities, such as power trading, solar

power generation, or even hydrogen businesses, are not completely untested by oil integrated majors. It is the targeted very material scaling up of these businesses that is new. The U.S. majors are primarily focusing on core activities, but also investigating carbon capture and storage (CCS), as well as biofuels.

Chart 8

Energy transition strategies of upstream oil and gas companies

Type	Description	Examples
Emissions offsets	Producers seek to offset emissions from existing operations independently from the operations themselves	 Afforestation and carbon credits
Transformation of operations	Producers seek to reduce carbon intensity by transforming existing operations (drilling, flaring, leakage, refining)	 Electric drilling platforms, CCUS, reduced flaring, increased operational efficiency
Transformation of product offering	Producers seek to reduce carbon intensity by offering new, low-carbon products using either (A) the existing resource base or (B) existing delivery channels	 (A) Hydrogen (from natural gas) (B) Biofuels
Transformation of business model	Producers seek to reduce carbon intensity by fundamentally transforming their business model, seeking out new end users and new delivery channels	 EV charging stations, direct power sales

Source: S&P Global Platts

In theory, massive and effective carbon (CO₂) capture, for re-use, sequestration, and storage, could significantly reduce the climate change consequences of Scope 3 emissions. In practice, we see the substitutes for oil and gas receiving more consumer and policy support. CCS is technically and commercially feasible in a number of settings, and is seen as one tool, especially for hard to abate activities. Before CCS could become more widespread, it may be that higher carbon taxes or incentives are needed to offset the costs and the need to retro-fit so many existing assets. Even if CCS is deployed widely, it seems likely that the substitutes, such as renewables for power and EVs for transport, will present viable and established alternatives to hydrocarbons.

Renewables as a sector will continue to experience growth and hold promise. A challenge for the oil majors joining utilities companies in the space will be the competition for specific projects and assets. We see a risk that at the project level, strong bidding, for what are targeted as strategic assets, will result in lower-than-expected returns. Still, even though returns from some renewables businesses can be more predictable than typical oil production and refining activities, not all are necessarily significantly more stable. The oil majors have several competitive strengths to enter and build positions in these markets. These include relatively strong balance sheets, low costs of capital, experience managing complex (offshore) projects, and trading along energy value chains. The challenge will be to execute effectively, so that profitable and sizable businesses are in place before oil and gas assets become less cash generative.

Related Research

- [How Hydrogen Can Fuel The Energy Transition](#), Nov. 19, 2020
- [Upstream Firms Ride An Inevitable M&A Wave Amid Industry Pressure](#), Nov. 16, 2020
- [SLIDES Published: Commodities 2020: Global, Russian And CIS Ratings Trends](#), Nov. 16, 2020
- [As Europe's Gas Markets Slowly Stall, Gas Producers' And Utilities' Business Risks May Rise](#), Nov. 16, 2020
- [The Energy Transition And COVID-19: A Pivotal Moment For Climate Policies And Energy Companies](#), Sept. 24, 2020
- [The Energy Transition: COVID-19 And Peak Oil Demand](#), Sept. 24, 2020
- [S&P Global Ratings Revises Oil and Natural Gas Price Assumptions](#), Sept. 16, 2020
- [Writedowns, While Eye-Catching, Are Not The Largest Issue Facing Oil And Gas Supermajors](#), Aug. 3, 2020

Industry forecasts

Global Oil and Gas (excluding Midstream)

Chart 9

Revenue growth (USD)

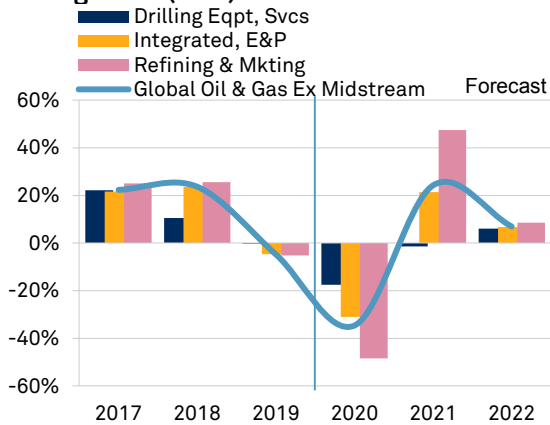


Chart 10

Capex growth (USD, adjusted)

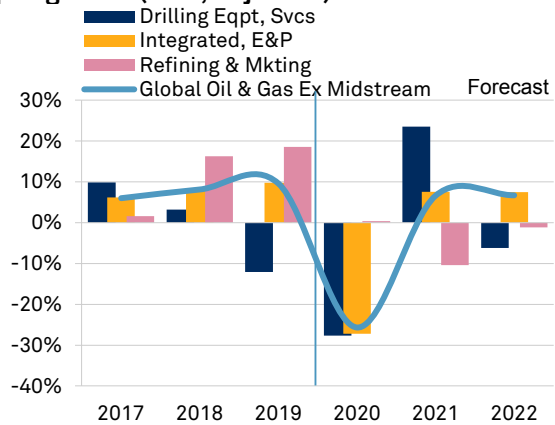


Chart 11

Debt / EBITDA (median, adjusted)

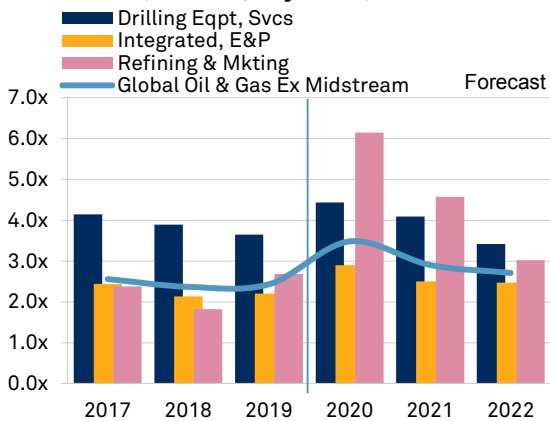
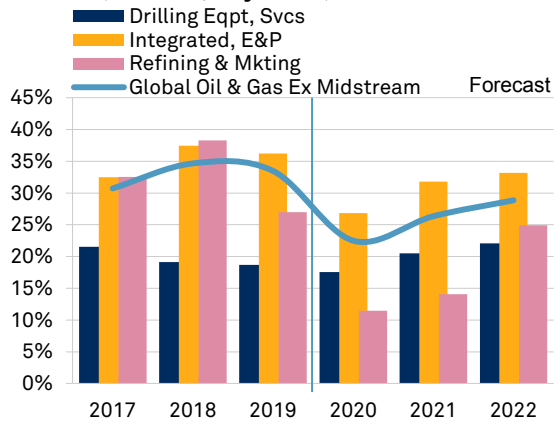


Chart 12

FFO / Debt (median, adjusted)



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. FFO--Funds from operations.

Cash, debt, and returns

Global Oil and Gas

Chart 13

Cash flow and primary uses

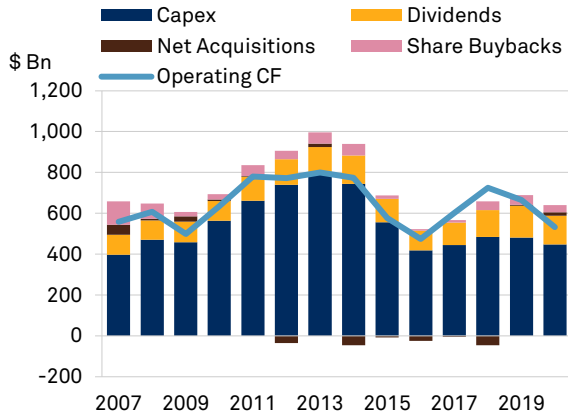


Chart 14

Return on capital employed

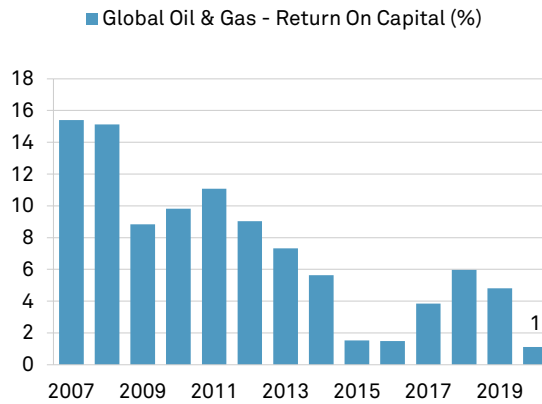


Chart 15

Fixed versus variable rate exposure

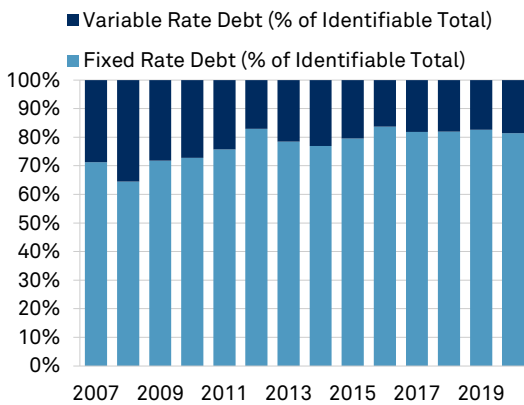


Chart 16

Long term debt term structure

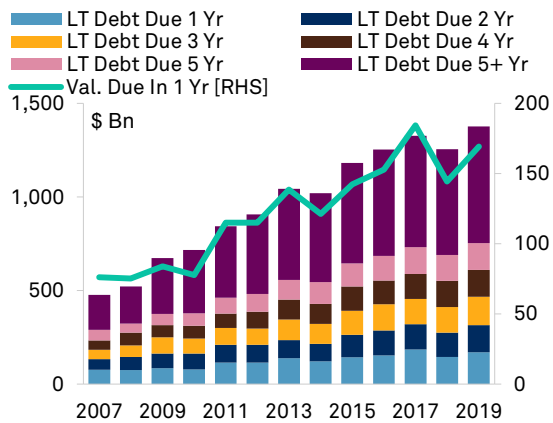


Chart 17

Cash and equivalents / Total assets

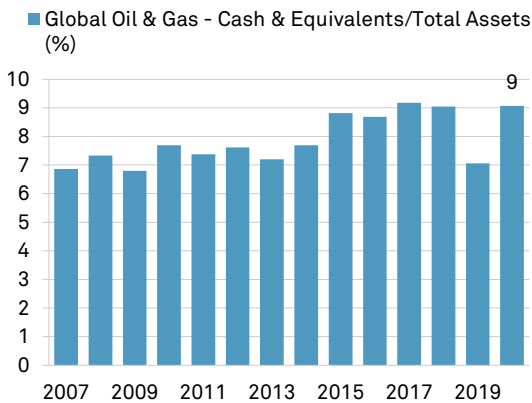
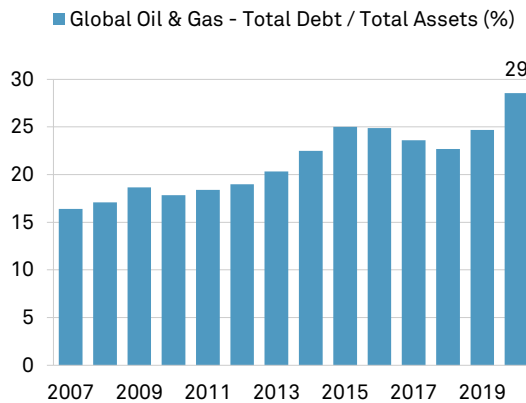


Chart 18

Total debt / Total assets



Source: S&P Global Market Intelligence, S&P Global Ratings calculations. Most recent (2020) figures are using last twelve months (LTM) data

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