

Extreme Discounts in Oil Services

Heading into 2020, who could have known that the global community would face a pandemic causing a coincident drop in both demand and the oil price? Against this backdrop, Saudi Arabia and Russia decided to boost supply, a move in March that pummeled energy stocks. Oil service companies have been among the hardest hit given their reliance on capital spending and their sensitivity to oil prices. In time, energy markets will find their footing. Even before they do, we believe the market will recognize that the best businesses in oil services may not only come out of the current downturn stronger but will be poised for profitability and growth when the market turns.

Supply

Typically, oil market cycles are driven by supply. The current demand shock is the first meaningful oil demand contraction in 70 years. The path of the oil sector in the medium term will be driven by the supply response to the low oil price.

Oil Services

Market leaders including Halliburton, Baker Hughes, National Oilwell Varco, and TechnipFMC can remain cash flow positive even if oil prices remain low. Each franchise offers a broad array of products and services, continues to improve its operational efficiencies, and maintains a solid balance sheet.

DUAL BLACK SWANS DRIVE THE OIL PRICE COLLAPSE

In the first quarter of 2020, the energy sector endured its second oil price collapse in the last five years. The sudden fall was caused by a *global pandemic* that constrained economic activity throughout the world and led to the first meaningful oil demand contraction in 70 years.¹ To make matters worse, Saudi Arabia and Russia announced their decision in March to boost supply, adding a supply shock to a market already reeling from a demand shock. By the end of the quarter, the price of crude fell to a 17-year low collapsing by over 80% from its 2014 peak.²

Oil market cycles are typically driven by supply fluctuations. The last cycle led to a continuing supply overhang caused by an increase in the US shale supply that placed a ceiling on oil prices throughout 2016-2019. The current backdrop has near-term challenges thanks to *concurrent demand and supply shocks*. As the effects of a pandemic-driven demand shock dissipate and the global economy recovers, the medium-term path for the oil sector should be set by the supply response to pricing. At this juncture, we see encouraging signs that the market is responding quickly to the unprecedented price collapse.

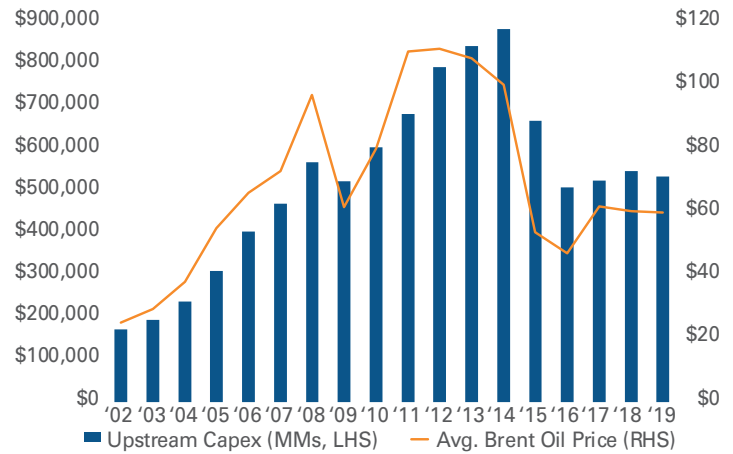
With the dramatic drop in the valuations of energy stocks and oil services in particular, we believe that the market is presenting a unique opportunity to buy leading businesses with significant upside in a post-virus world. We further believe that the depth of the valuation collapse for some has far exceeded the potential lasting economic impact of this shock — presenting us with a rare investment opportunity.

OIL SERVICE STOCKS FOLLOW OIL PRICES — AND CAPEX

Oilfield service stocks are widely considered to be high-beta plays on short-term oil price movements. This characterization is reasonable given that service company revenues are derived from the upstream capital expenditures of integrated oil companies. And capex tends to track oil prices, as illustrated in Figure 1.

A pandemic alongside shocks in both supply and demand wreaked havoc on oil markets.

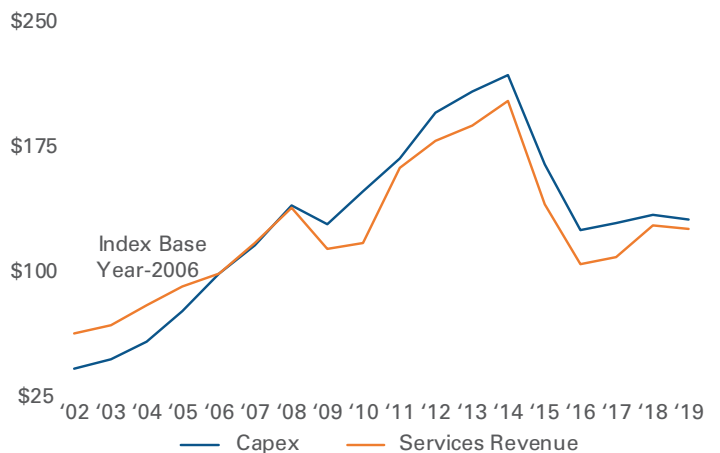
Figure 1: A Clear Relationship Between Upstream Capex and Brent Crude



Source: Rystad, data through December 31, 2019

Figure 2 illustrates the close relationship between upstream capex and oil service revenues. Both had ticked up from the bottom of the cycle in 2016 but remained far off their previous highs before the start of 2020. Then the COVID-19 outbreak sent the demand for oil spiraling downward, and Saudi Arabia and Russia flooded the market with new supply, furthering the collapse in oil prices. This development is expected to result in additional 2020 capex cuts of 20-30%, cuts which are likely to extend beyond the short term, further pressuring service revenues. In a sector that's been crippled by the latest economic downturn, the oilfield service industry's pain has been particularly acute. Many of these stocks have collapsed by 90% since 2014.

Figure 2: Oil Service Revenues Depend on Capex



Source: Rystad, December 31, 2019

¹ Source: International Energy Agency, "Global Energy Review, April 2020," presentation for press, p. 5. https://iea.blob.core.windows.net/assets/74921671-51f5-4b5d-b88f-cd58b24ae23f/GER2020_PRESS_final.pdf

² Based on West Texas Intermediate, CL1! Futures

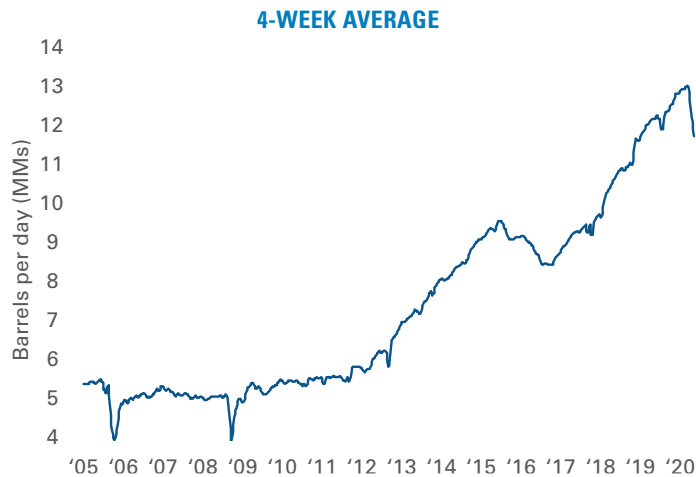
LOWER SPENDING BRINGS LOWER PRODUCTION

The long 2000-2014 boom in the oil and gas markets was catapulted by increased global demand led by China and the extended period of rising oil prices. The capex wave that ensued was directed at two distinct types of projects:

- 1) The longer-cycle oil and liquified natural gas projects were driven by the integrated and government-owned oil companies. These projects can take five or more years to complete.
- 2) The shorter-cycle US shale extraction projects were completed much faster, often in less than one year. The shorter ramp-up period by US shale producers resulted in tremendous supply growth, albeit often at a high cost. In fact, the growth of shale production was the biggest contributor to the global oil supply over the last 15 years.

With the market continuing to signal a muted oil price, weak capex spending should accelerate production declines. Oil production has historically lagged capex by three years. The large deep-water oil and gas projects tend to extend the period of adjustment, while shale projects shorten it. Capital expenditures (by integrated oil companies) reached an all-time high five years ago. And US production crested in March (Figure 3), as shorter-cycle projects came to a halt likely marking the peak of the cycle.

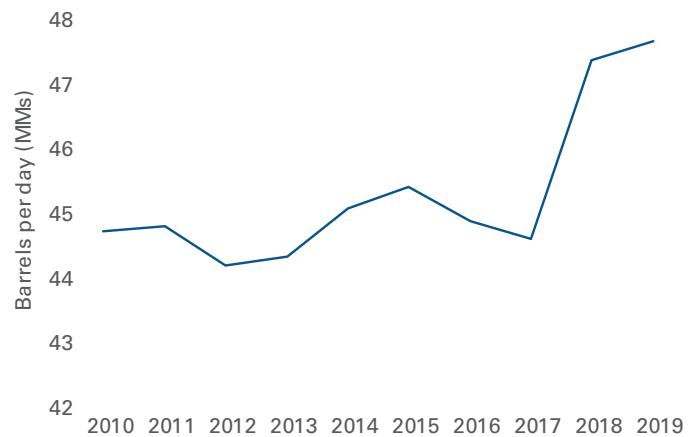
Figure 3: Has US Production Finally Rolled Over?



Source: The US Energy Information Administration
Data as of May 15, 2020.

While US shale producers appear to have already begun cutting output, we expect non-OPEC, ex-US producers (considered a proxy for integrated production outside of the US) to start reducing output in 2021. Figure 4 illustrates that this cohort has grown production significantly thanks to large-scale projects funded during the pre-2014 capex boom. Once the last of these mega-projects comes online, production should slow. French oil major Total SA is a prime example of an oil giant that is reaching an inflection point after years of benefiting from such tailwinds.

**Figure 4: Mega-Projects Outside of the US Have Raised Output
NON-OPEC PRODUCTION**



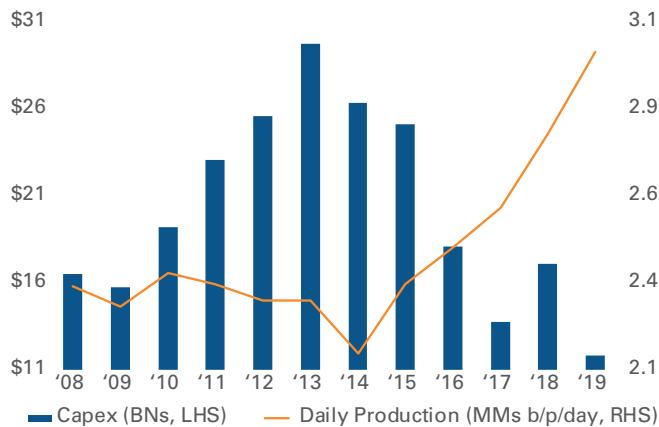
Source: International Energy Agency, as of December 31, 2020

US production peaked in March of 2020, as shorter-cycle projects came to a halt.

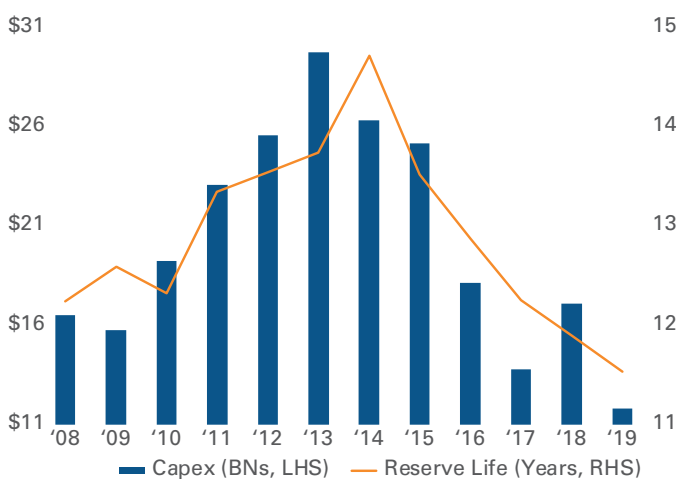
TOTAL SA — THE LAST GASP OF PRODUCTION GROWTH

For Total, projects that were funded during the boom came online and delivered materially higher production. The company profited long after the boom from big projects, such as Yamal (Russia), Kashagan (Kazakhstan), and Ichthys (Australia), that have allowed Total to increase output by over 40% while decreasing capex. (See Figures 5a and 5b on next page.)

Figure 5: Reserves are Not Sustainable as Production Rises and Capex Falls
A. CAPEX VS. PRODUCTION



B. CAPEX VS. RESERVE LIFE



Source: Company reports

Having dropped substantially from the peak (as shown in Figure 5B), reserves can only decline for so long before Total needs to invest in future production. Examples like this one are common throughout the sector. All of this sets the stage for the next oil supply shortage.

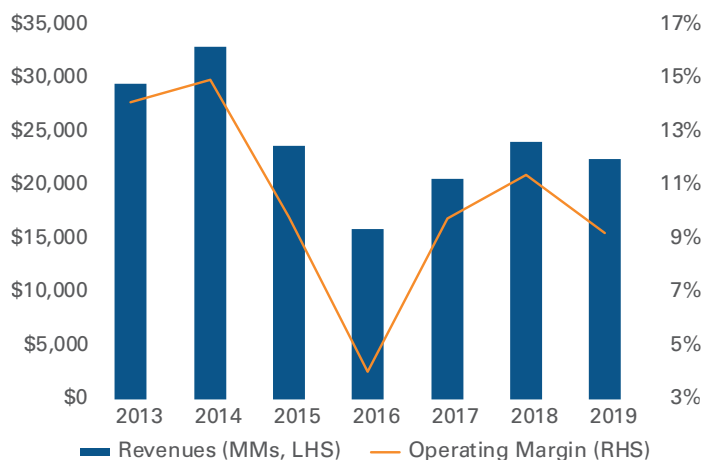
THE BEST BUSINESSES CAN SURVIVE — AND THRIVE

Where does all of this leave the oil services companies? The modest upstream capex in recent years has forced competitors to rationalize their cost structures and rethink their capital deployment plans to achieve adequate returns. Today's business environment will likely exacerbate the pressure on the industry and undoubtedly lead to further consolidation. Fortunately, industry managements are nimbler and better prepared to right-size their costs and rethink their businesses. The leading franchises are taking aggressive action to protect their balance sheets and mitigate the effect of

disruptions to their operations. Indeed, this group should be poised for profit growth when revenues improve.

The better-positioned service competitors in their respective service segments should have the balance sheet strength to get through the trough. These businesses have leading technology positions and relatively variable cost structures. They can idle equipment and crews as necessary and can cut costs dramatically as revenues fall, providing themselves with critical operating flexibility. Take Halliburton (HAL), for example. The world's third-largest oil service company by market capitalization has reduced the time between a customer stoppage and the removal of its field costs to less than a week. This kind of flexibility has enabled HAL's operations to grow revenues by over 40% and restore margins significantly since 2016. Furthermore, management is executing an additional cost restructuring program that is expected to save \$1 billion annually and support margins in the next few years.

Figure 6: Halliburton's Operational Resilience
RECOVERING REVENUES AND OPERATING MARGINS



Source: Company reports

Heading into 2020, Haliburton appeared on track for a multi-year recovery. Although the interruptions caused by COVID-19 delay its recovery, HAL has ample liquidity to endure the crisis. We estimate that the company will generate \$500 million – \$750 million in free cash flow in 2020, a figure that's based on our conservative assumption of \$25 per barrel for oil at the end of the year. The rapid stock selloff in the first quarter seemed to be a knee-jerk reaction to the aggregate level of HAL's debt. What the market appeared to miss at the time was that HAL's debt was covenant-free and mostly long term in nature. Less than \$700 million will mature in the next three years.

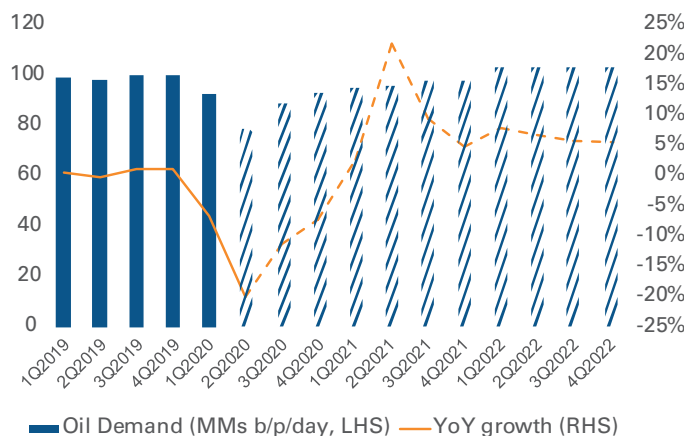
Haliburton has \$1.4 billion of cash on its balance sheet – enough to meet its near-term obligations comfortably without making a single adjustment to its current operations. The recent oil price shock sparked a series of actions by management to improve HAL’s longer-term prospects for profit growth. Yet the stock trades at a fraction of what it did just a few years ago.

Other leading service companies including – Baker Hughes, National Oilwell Varco, and TechnipFMC are similar to HAL in that each one can maintain positive cash flow even if oil prices remain muted for some time. Each provides a broad array of products and services, continues to improve its operational efficiencies, and maintains a solid balance sheet. All of these companies are likely to gain market share from weaker competitors and have the staying power to come out stronger on the other side of today’s demand downturn.

WHAT MATTERS MOST — SUPPLY WILL FALL OVER TIME

The demand for oil is influenced by many factors: GDP growth, the rate of renewable energy development, and the magnitude of electric vehicle adoption matter, to name a few. Yet even those with the most optimistic view of these innovative technologies concede that oil demand will continue to rise over the next five years before slowly declining. The impact of the COVID-19 shutdowns on demand, albeit still uncertain, will be relatively short term. As the economic impact of the pandemic recedes, we expect to see a snapback similar to the projections indicated by the orange line in Figure 7. Longer term, global demand has been very stable at around 100 million barrels per day – a fact that explains why oil prices are usually driven by *supply*.

Figure 7: Short-Term Fluctuations are Not Expected to Have a Lasting Impact
WORLD OIL DEMAND



Source: Rystad
Hashed bars indicate estimated demand; dashed orange line indicates the estimated growth rate.

The mechanisms that contributed to the supply overhang are self-correcting. And we expect the contributors of the last cycle to draw down the excess supply this time:

- 1) An accelerated supply response from shorter-cycle US businesses.
- 2) The supply from the non-OPEC sources should moderate as the production tailwind from investments made before 2014 exhausts itself starting this year.
- 3) OPEC and Russia have renewed their commitment to supply discipline over the next few quarters.

And it’s these drivers that will once again move supplies back into balance.

CONCLUSION

The uncertainties of the oil market have scared off many investors. However, these difficult periods provide fuel for value investors. Today’s valuations reflect almost no possibility of higher oil prices or capital spending in the future. Yet, the dearth in spending virtually ensures rapid production declines over the next few years.

Ultimately, low oil prices lead to lower supply. We believe the market will soon recognize the more resilient businesses – with strong franchises, robust balance sheets, and operational flexibility – that will navigate the current downturn and come out stronger. As supply and demand gradually move back into balance, the most well-positioned companies are set up for profitable growth in the next phase of the cycle. We don’t know exactly when this will happen, but we believe the skew of outcomes is heavily in the shareholders’ favor.

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While less patient competitors sway from their investment approach to boost short-term returns, we remain relentlessly committed to the value discipline. Ultimately, we believe style drift undermines long-term returns. PZENA INVESTMENT MANAGEMENT has adhered to a classic value, research-driven investment approach, continuously applied since its inception 25 years ago.

Research Excellence

We are committed to our classic value investing approach. This commitment requires an emphasis on research-driven stock selection. Our team shares a common understanding of the research task: A thoroughly vetted estimate of a business' ability to generate long-term, or normalized, earnings.

Before adding a position to the portfolio, we ask ourselves whether we would be willing to buy the entire company at the current price. We invest in companies whose share prices have dropped for reasons that we believe to be temporary. Thus, we take a long-term view on the nature of the business we are considering, the company's competitive positioning, and the management team's strategies for change. By focusing on businesses, instead of short-term share prices, we have an opportunity to deliver superior long-term returns.

Disciplined Investment Processes

We are disciplined bottom-up investors. Rather than focusing on outperforming peers or benchmarks, we construct concentrated portfolios consisting of the best value opportunities that we see in the market. Our investment approach emphasizes inexpensive stocks based on normalized earnings estimates.

Through our research, we determine if a company's business is strong, management's plan to generate earnings recovery appears sound, and there is downside protection.

Breadth and Independence

We oversee a range of investment strategies across market capitalizations and regions. As an independent asset manager Pzena is free to restrict capacity and preserve its ability to deliver high value-added strategies.

Client Service and Communication

We cultivate long-lasting client relationships through consistent management of assets along with timely, straight-forward and frequent communication. We try to bring a fresh perspective to the conventional thinking that dominates the investment world.

The client and investments teams work in partnership to ensure that our clients have a contact who is fully knowledgeable about the portfolio, our investment decisions, and our perspective. ■