The Shrinking Path Forward for U.S. Oilfield Services

By Brad Handler

The recent oil price collapse is setting the stage for yet another steep decline in revenue and profit for the U.S. Oilfield Services (OFS) sector. As challenging as it will be for U.S. OFS companies to weather this storm, it represents just another blow to a sector already beleaguered by its and its customers’ inability to deliver adequate financial returns and longer-term demand uncertainty given climate change (decarbonization) concerns. All of these threaten to shrink and transform OFS in the years to come.

Sub-$30/barrel WTI (and soft natural gas) prices are precipitating dramatic cuts in oil and gas development spending by oil companies – early indications from U.S.-exposed oil companies suggest that they will spend 40%+ less in 2020 than they did in 2019 (their spending, along with the major oil companies, constitutes the bulk of OFS revenues). Such cuts point to the U.S. OFS industry experiencing even lower levels of activity in 2020 than in the 2016 trough (and 2016 saw the lowest rig counts since Baker Hughes started keeping track in the 1940s) and down 60% or more from 2019’s average\(^1\). In addition to the absolute decline, its expected speed is notable – it is plausible that trough activity levels are reached within six months vs. a 19 month decline in late-2014 through 2016.

OFS companies will, of course, not be idle in the face of this decline in revenue. They can be expected to cut costs even more quickly and aggressively than they have in the past, in order to mirror the activity decline (and with less concern about retaining the ability to respond to a possible recovery). The cost cutting tools at their disposal include layoffs, service/manufacturing base closures and cannibalization of idled parts and equipment. To a lesser degree, some of the companies are also likely to benefit from more sophisticated maintenance tools, leveraging predictive modeling techniques that they have been honing over the last two years.

However, the industry’s inability to generate positive cash flow during such extreme downturns – many public OFS companies only began to do so after 3-4 quarters of relatively robust recovery off of the 2016 trough – suggests considerable challenges lie ahead. How much pain OFS experiences will of course depend not only on where activity levels trough but how long they remain low; regardless, the risk of financial distress looms large.
With that said, it is interesting to consider what U.S. OFS may look like over the next several years. Let’s address the oil price backdrop first. With enough time, oil and associated natural gas production in the U.S. and elsewhere should decline. (Note that production decline may happen surprisingly quickly in the U.S., even without the negotiated cuts that members of the Texas Railroad Commission, select oil companies and plausibly President Trump have contemplated.) Couple this production decline with greater demand associated with economic recovery “post” COVID-19 and oil supply and demand should rebalance, fostering some price recovery.

Given that some recovery seems likely, it is also logical that the U.S. should – again – lead the world in that recovery – primarily for one of the same reasons it has historically. The U.S. offers a much “shorter cycle project,” – that is, oil companies can invest smaller sums and get returns more quickly than in most other oil producing regions. This shorter cycle may also be instrumental in persuading sources of capital to help fund projects, which, as is addressed below, is likely to be more difficult than in the past. Further, U.S. productivity, and particularly Permian basin productivity, seems likely to at least be maintained for many years, in part due to multi-zone co-development and continued optimization of completions design, although this contention is not without controversy.

Further, it appears unlikely there will be enough oil developed outside of the U.S. to meet demand; in other words, although the oil industry has been able to lower the oil price required to make various projects economic, including in deepwater, there appear to be an insufficient number of such projects. Moreover, these non-U.S. onshore projects still require their threshold prices to be sustained for as much as 20 years of production whereas the bulk of U.S. tight oil economics are realized within a few years.

Thus, there should be an opportunity for the U.S. OFS industry to recover. As for the companies, the survivors should enjoy better “fundamentals” than over the last several years, as bankruptcies and consolidation remove competitors and broaden service portfolios (more on this latter point below). Overall, the industry likely carries less debt than it does today and thus should be in a less vulnerable position financially®.

Yet if the industry emerges stronger fundamentally, it also seems poised to remain smaller for a long time, as uncertainty (cyclical volatility nearer term, decarbonization of energy longer term) makes oil companies more hesitant to spend, creditors less willing to lend and investors less generous with valuation (in this vein, we also expect proportionately fewer companies to be public). Further, although a few OFS companies are working to develop revenue streams related to renewable energy or environmental responsibility (e.g. methane/CO2 detection), this represents a very small proportion of OFS revenues and it appears unlikely they can grow large enough to be much of an offset.

The contours for industry participants likely change in other ways as well, including:

1) Greater diversification (within oilfield services), which reflects desire to offset the capital intensity of certain businesses, e.g. hydraulic fracturing, and helps deepen customer relationships by enhancing efficiency
2) Less indebtedness, even if it means sacrificing growth rates, out of respect for how short upturns can be. This factors in that growth of capital intensive segments tend to happen during upturns, constraining cash flow
3) Enhanced technology-related capabilities, both customer-facing (e.g. automated drilling capabilities that make better wells and reduce personnel costs) and internal
(the use of IoT/other technologies that allow more efficient maintenance of OFS-company equipment)

In sum, what is to remain of the U.S. OFS sector seems poised to reshape as a smaller, more defensive, more sophisticated industry that can continue to deepen its ties with its customers while insisting on adequate profitability. It’s a more humble path, but also a more sustainable one.

(1) For perspective, in 2016 the rig count [as tallied by Baker Hughes] troughed at 404 and the hydraulic fracturing crew count [as tallied by Primary Vision] troughed at 155. These counts compare to 2019 highs of 1,075 and 482, respectively, 2019 averages of 943 and 417, respectively, and in mid-March of 792 and 298, respectively.

(2) A majority of public OFS companies have reduced debt from the end of the prior upcycle in 2014 although the aggregate impact is partially offset by debt increases at select companies related to acquisitions or investment in equipment. That said, creditors and investors arguably exhibited too much leniency, extending credit or even allowing companies to emerge from pre-packaged bankruptcies with debt.

***************************
ABOUT THE AUTHOR

Brad Handler

Brad Handler is a former Wall Street Equity Research Analyst with 20 years experience covering the Oilfield Services & Drilling (OFS) sector. In this role, he published regularly on the state of the sector including demand implications of changes in the global energy markets (and the Shale Revolution), additions to OFS capacity and the competitive landscape, the financial health of individual companies and the opportunities and challenges presented by technology innovation. Most recently, Brad worked at Jefferies LLC, following several years at Credit Suisse and after starting on Wall Street at Goldman Sachs. External recognition includes being ranked Top 3 Oilfield Services analysts in the annual Institutional Investor magazine survey, the most widely recognized survey of Sell Side analysts by asset management professionals, and he has presented at industry-sponsored conferences and company seminars.

Brad’s experience prior to equity research includes business line management and strategic analysis at an Industrial Gases firm and commercial lending. Brad has a B.A. in Economics from Johns Hopkins University and an M.B.A. from the Kellogg School of Management at Northwestern University.
ABOUT THE PAYNE INSTITUTE

The mission of the Payne Institute at Colorado School of Mines is to provide world-class scientific insights, helping to inform and shape public policy on earth resources, energy, and environment. The Institute was established with an endowment from Jim and Arlene Payne, and seeks to link the strong scientific and engineering research and expertise at Mines with issues related to public policy and national security. The Payne Institute Commentary Series offers independent insights and research on a wide range of topics related to energy, natural resources, and environmental policy. The series accommodates three categories namely: Viewpoints, Essays, and Working Papers.

For more information, visit PayneInstitute.MINES.edu.

@payneinstitute

DISCLAIMER: The opinions, beliefs, and viewpoints expressed in this article are solely those of the author and do not reflect the opinions, beliefs, viewpoints, or official policies of the Payne Institute or the Colorado School of Mines.