

Don't Blame COVID-19, Just Embrace Shale 2.0

"I am always ready to learn although I do not always like being taught." – Winston Churchill

"He who learns but does not think is lost! He who thinks but does not learn is in great danger." - Confucius

The Great Shale Oil Restructuring

By now it should be abundantly clear that the current shale oil business model does not work – even for the very best companies in the industry.

With oil prices below \$30 per barrel again, for the second time in four years, and with share prices down at least 50-80% this year alone, the largest and lowest-cost shale oil producers are finally reducing their drilling activity. Survival beats bravado.

Some companies will write off this downturn as an anomalous event as opposed to acknowledging that it is the logical outcome of their flawed business models. This would be a serious mistake.

In fairness, the cause of this downturn and the potential magnitude of it are both quite unusual. This pandemic has created a tremendous amount of uncertainty and outcomes are unknown.

However, while the cause of this downturn is unique, demand shocks are not. They are a normal part of the economic cycle, typically occurring every 5-10 years. Planning for cyclical downturns is something that every company should do.

While the volatility in the markets reflects the uncertainty created by COVID-19 and the structural changes that have occurred in the markets, the absolute and relative returns generated by shale oil companies over the last decade are simply the result of poor economic decision making.

The growth model in the shale oil business does not make sense for a number of reasons. First, shale oil companies sit at the upper end of the global cost curve. Why on earth should the marginal producers of a commodity focus on growing supply when the low-cost producers have spare capacity? For shale oil, the growth model is nothing more than a highly levered gamble on OPEC policy. Given the events over the last few years, this seems like a bad bet for the shareholders, lenders, and employees of shale oil companies.

Second, most shale oil companies have corporate decline rates that are in the range of 30-50%. As a result, maintenance capital requirements accelerate with growth, leaving limited cash flows to pay down debt or return capital to shareholders even in the best of times. During cyclical downturns, many companies struggle to generate enough cash flow to meet their maintenance capital requirements, pushing production lower and leverage metrics higher.

Third, many shale oil companies have relied on excess leverage to finance capital investments despite the fact that full-cycle returns are modest and the business model isn't compatible with high levels of indebtedness. Deeply cyclical

businesses with steep depletion rates should not be levered. If anything, companies in the shale oil business should have no debt at all.

Lastly, the barriers to entry and the cost of capital have been far too low in this sector over the last decade. Too many shale oil companies, including the very best operators, believe that they are special. It's almost as if management teams have started to believe their own marketing materials. In reality, the best shale oil companies are only marginally better than a very, very bad group of peers, and most do not compare favorably with average companies in other industries. When oil prices go up, most operators increase capital spending to chase production. Some benefit more than others, but the differences aren't as meaningful as the good companies would like to believe. Since the industry sits at the high end of the global cost curve, all participants are caught in the same prisoner's dilemma. There are simply too many companies generating sub-economic returns in the shale oil industry. The reality is that most companies are not going concerns; they are merely bull market call options.

By now it is obvious that the shale oil industry needs to be restructured and the remaining companies need to pivot toward the Shale 2.0 business model immediately, as we have discussed in our prior reports. A rudimentary understanding of economics provides the framework for an industry with limited competitive differentiation, deep cycles, and a high degree of capital intensity. There should be only a handful of operators that use their scale to realize capital efficiencies, minimize cash costs (including G&A which remains way too high across the sector), and reduce their cost of capital. The advantaged companies should then use their lower cost of capital to consolidate the industry – not to push growth at their own demise. Restructurings, recaps, and M&A will take time.

But, the transition to Shale 2.0 should be done right away. ALL shale oil companies, even the slightly advantaged ones, should be run to generate reasonable full-cycle cash-on-cash returns, maximize free cash flow, and return of capital to shareholders — not to pursue growth. When OPEC spare capacity is low and excess inventories have been absorbed, shale oil will be required to balance the oil market. Prices will rise and shale oil economics will justify a return to moderate growth. But it must occur within cash flow, and owners and lenders will demand that a disproportionate amount of free cash flow is returned to them. Until then, the companies need to adjust to this new reality while and if they still can. If they don't, the market will do it for them.

Many shale oil companies will not survive this downturn. Private equity funds, which, in general, have focused on more marginal projects and have pursued debt-financed growth strategies, need to be reimagined as well. This is a good thing. The transition to Shale 2.0 will be better for all constituents, eventually.

A Few Words on Shale Gas

If there is a beneficiary in all of this, it is the shale gas industry. The impending decline in associated gas production and the longer-term restructuring of the shale oil industry should help the natural gas market in the intermediate-term and in the long run.

In addition, the shale gas industry is a few years ahead of the shale oil industry in terms of restructuring because most participants have already been starved of external capital. As a result, the industry has much lower decline rates, in the 20-35% range generally, and it is much more consolidated. The reality is that most natural gas companies, with the exception of some of the PE-backed operators, have already transitioned to the Shale 2.0 business model, focusing on generating free cash flow instead of production growth.

When natural gas prices move back toward the marginal cost of supply, at \$2.70-3.00/mcf, we expect the shale gas companies to continue to focus on generating free cash flow to pay down debt and eventually return capital to shareholders – despite the fact that shale gas is low cost globally, in contrast with the shale oil industry. Long the hated

stepchild of the oil and gas industry, natural gas producers are farther along the evolutionary curve toward Shale 2.0. They have already written the playbook for their oil brethren to follow.

Conclusion

In our <u>original white paper on Shale 2.0</u>, we concluded with one of our favorite Yogi Berra quotes: "When you arrive at a fork in the road, take it." Our advice then is the same that it is today. Take a different path – one that works across a full economic cycle.

Following the recovery in 2016, the shale oil and private equity industries had a choice. Unfortunately, they chose the difficult route. With the capital markets now closed, and many companies standing at the precipice, something says that they will have fewer choices this time around.

The markets have a funny way of getting to the right outcome.

Welcome to Shale 2.0

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