
MUSINGS FROM THE OIL PATCH

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Note: Musings from the Oil Patch reflects an eclectic collection of stories and analyses dealing with issues and developments within the energy industry that I feel have potentially significant implications for executives operating and planning for the future. The newsletter is published every two weeks, but periodically events and travel may alter that schedule. As always, I welcome your comments and observations. Allen Brooks

Energy Green-Shoots Appearing In Low-Interest Rate World?

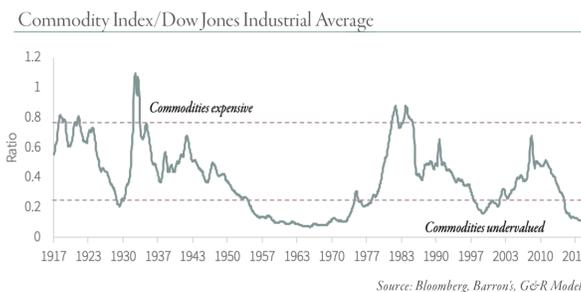
“End the Fossil Fuel Era” is their goal

Is it possible that the despair that has enveloped the exploration and production (E&P) sector, much like a 1950s’ London fog, might be ready to lift? That thought is almost beyond reality, as the predicted future for the energy business – especially the fossil fuel sector – is supposedly very bleak. According to environmentalists, supported by the political class, we must move to a decarbonized economy as quickly as possible. “End the Fossil Fuel Era” is their goal. While that sentiment may be important, possibly a more significant lesson for energy investment sentiment was the one learned by John Menard Keynes in 1920 when his speculative currency trading based on long-term research turned a £14,000 (\$51,240) profit into a £13,125 (\$48,404) loss in a matter of days. After revising his investment strategies (becoming more prudent) he amassed a fortune of £57,797 (\$211,537). He said he learned that “markets can stay irrational longer than you can remain solvent.”

During the 100-year span, commodities have been severely undervalued three times before now – 1929, 1965 and 1999

Life, as well as nature, driven by cycles – minutes, hours, days, weeks, months, years, decades and even centuries. The challenge is knowing how long a cycle will last. With regards to energy and commodities, their cycles may have indeterminate lives. A chart showing the relationship between an index of commodities and the Dow Jones Industrial Average over the 100 years of 1917 through 2017 demonstrates this reality. During the 100-year span, commodities have been severely undervalued three times before now – 1929, 1965 and 1999. What do those past lows have in common? First, they happened at the same time there were investment manias gripping the stock market, while a strong belief was that commodities represented the “old economy” and had no place in investor portfolios. Sounds familiar.

Exhibit 1. Commodities Underperformance History



Source: Goehring & Rozencajaj

In 1929, the investment mania was the overall stock market bubble driven by the “new economy” stocks such as communications company RCA (Radio Corporation of America), appliance makers, automobiles, and movie picture makers, to name a few. The mania surrounding these stocks mirrored society’s Roaring Twenties, as commodities sank throughout the decade.

The investment mania reflected the belief that these growth stocks were one-decision stocks – you only needed to buy them

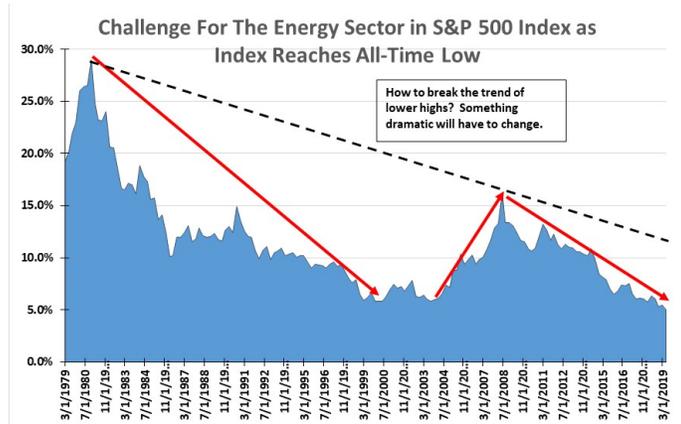
In the mid- to late-1960s, the stock market was driven by the Nifty-Fifty growth stocks, which did include two oilfield service stocks – Schlumberger Ltd. (SLB-NYSE) and Halliburton Company (HAL-NYSE). These stocks, as well as others such as Gillette, Polaroid, and Avon Products and the other 45 growth stocks sold at extremely high price/earnings multiples. The investment mania reflected the belief that these growth stocks were one-decision stocks – you only needed to buy them. As this mania was peaking, commodities were sinking to substantially undervalued status.

The last time an investment mania drove shares to peaks while commodities sank was in the late 1990s. At that time, the dot-com stocks were the darlings of the stock market because they were introducing and popularizing new technologies. Once again, commodities were considered “old economy” and no longer investable. This environment is being repeated at the present time, as FAANG [JB: should we define?] stocks have dominated the growth sector of the stock market, while commodities sink into oblivion.

The energy weighting hit an historic low at the end of the second quarter

We have written in the past about the abysmal performance of the energy sector within the Standard & Poor’s 500 Index. The energy weighting hit an historic low at the end of the second quarter. Energy stocks fell in July by 2.37%, while the S&P 500 rose 1.31%. As August ended, popular trading vehicles for energy and the overall stock market showed that energy fell 8.3% for the month, while the overall index fell 1.7%. Barring a strong recovery for energy shares in September, although the sector is having a good start for the month, energy’s weighting in the S&P 500 Index likely will fall to another new low at the end of 2019’s third quarter.

Exhibit 2. History of Declining Energy Weighting In Index



Source: S&P, PPHB

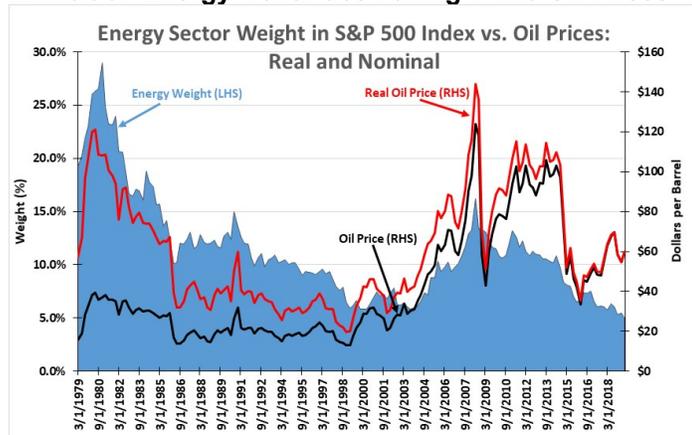
The dismal performance of the energy sector since the last gasp of the first bull market for energy shares in 1979, has largely continued over the subsequent 40 years, interrupted by brief periods of spectacular performance. As Exhibit 2 shows, there was a strong

recovery in energy shares during the years leading up to the Financial Crisis in 2008 and the Great Recession of 2009, in both cases helped by soaring crude oil prices. Even with that earlier weighting lift, and its rapid recovery following the end of the 2009 recession, energy's weighting has slid steadily lower.

Is this disconnect a temporary phenomenon, or a permanent change?

What is confounding traditional energy investors, as well as virtually everyone working in the industry, is the recent disconnect between the energy weighting (energy share performance) in the S&P 500 Index and the performance of crude oil prices – either in nominal or real terms. Is this disconnect a temporary phenomenon, or a permanent change?

Exhibit 3. Energy Continues Falling While Oil Prices Rise



Source: S&P, EIA, PPHB

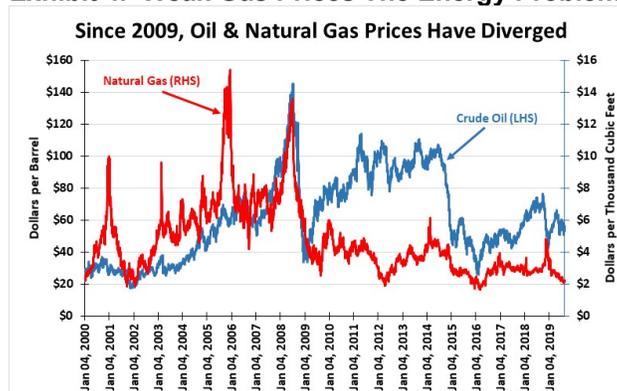
One possibility is that natural gas prices, flirting with decade-low

levels, may be creating weak financial outlooks for E&P and oilfield service companies

If energy shares are not being traded based on the movement of crude oil prices, their performance suggests other considerations are overwhelming the positive impact higher oil prices are having on company operations and profitability. One possibility is that natural gas prices, flirting with decade-low levels, may be creating weak financial outlooks for E&P and oilfield service companies. Exhibit 4 (next page) shows just how dramatically crude oil and natural gas prices have diverged since the end of the Great Recession in 2010.

As the chart shows, during 2009, crude oil prices began to climb, ultimately returning to the \$100-per-barrel level they had reached prior to the 2008 financial crisis. Natural gas prices, on the other hand, after a brief rally, started sliding. The slide, which was broken by periodic uplifts in response to cold winters, ultimately brought them down by nearly two-thirds since late 2009, from \$6 per thousand cubic feet (Mcf) to \$2. During that time, the U.S. began exporting liquefied natural gas (LNG), volumes that have grown steadily over the past three years and are projected to grow further. The continuing surge in natural gas output has not only pushed gas prices lower, hurting gas-focused E&P company financial results, but also depressed drilling and well-completion work.

Exhibit 4. Weak Gas Prices The Energy Problem



Source: EIA, PPHB

To appreciate the severity of energy share underperformance, consider the condition of several energy exchange-traded funds (ETF). These ETFs are a collection of securities that track an index. The best-known example is the SPDR S&P 500 ETF (SPY), which tracks the S&P 500 Index. Two popular energy ETFs are the VanEck Vectors Oil Service ETF (OIH) and the SPDR S&P Oil Exploration & Production ETF (XOP). One measure of the degree of underperformance, or more appropriately investor hate for the companies that compose these indices, is the degree to which investors have shorted the ETFs. Shorting means investors sell an ETF they do not own (borrowing shares from owners), but are willing to risk that the ETF prices could rise before the short-seller can repurchase the shares and return them to their owner, thereby covering their short position. In that case, the short-seller suffers a

Short-squeezes have the potential to become explosive, as short-sellers scramble to repurchase shares

loss, when he was assuming the ETF's price would fall, giving him a profit.

In the case of the OIH, the statistics, as of late August, showed it had a 35% short interest, meaning that over a third of the outstanding ETF shares had been borrowed and sold. The XOP's short interest is significantly higher. Its ratio was 101%, meaning that more than all the outstanding shares of the ETF had been borrowed and sold. What's the significance of these ratios? They signify the potential for a classic "short squeeze," which means that those who had sold the shares short would be forced to compete aggressively to repurchase them if sentiment shifted and the ETF prices began rising. Short-squeezes have the potential to become explosive, as short-sellers scramble to repurchase shares. Their aggressiveness in repurchasing shares reflects the short-seller's exposure to an unlimited potential loss, as share prices could rise forever.

When the conventional thinking shifts, stocks often react violently

The significance of these large short-interest positions is that they reflect what is known on Wall Street as a "crowded trade." It means large numbers of investors are acting on the "conventional" wisdom that oil and gas prices will never improve, and are likely to go lower,

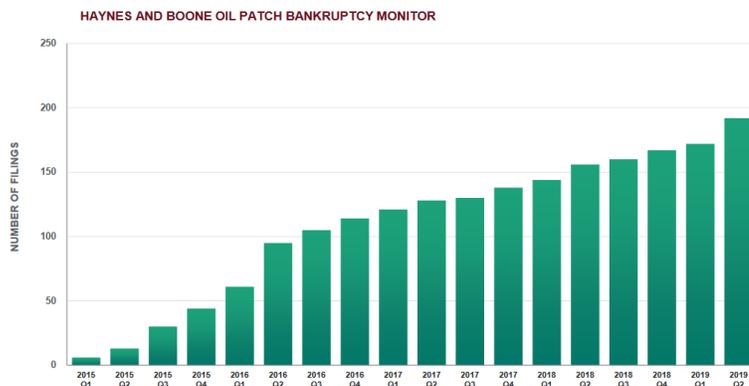
further damaging oilfield activity and the financial results of companies in these sectors. This "group-think" position has a tendency to encourage other investors to jump on board without thinking clearly of the risk they are assuming by embracing popular investment positions. When the conventional thinking shifts, stocks often react violently, in this case to the upside as investors scramble to repurchase shares borrowed and sold short.

Is it possible something might be changing within the energy sector that would cause a reversal in the conventional wisdom about the industry's near-term prognosis? News stories in recent weeks have focused on the natural gas glut in the U.S. that is being exported to the world in the form of lower LNG prices in Asia and Europe. The media has also been writing about the heavy debt loads of many small E&P and oilfield service companies, which is leading to an increase in energy company bankruptcies, a statistic captured and reported by law firm Haynes and Boone. In its quarterly report, the lawyers report the cumulative number of North American E&P bankruptcy filings since the start of 2015. As their tally shows, there was a jump in bankruptcies filed during the second quarter.

As it became evident they would not be able to repay their debts, especially given the amount of money they needed to continue spending to operate, let alone boost output and increase income, bankruptcy was the only option

Exhibit 5. E&P Bankruptcies Have Been Growing

2015-2019 CUMULATIVE NORTH AMERICAN E&P BANKRUPTCY FILINGS



Source: Haynes and Boone

When the number of bankruptcies is plotted by quarters, one can see the jumps recorded in each year's second quarter. While an interesting pattern, it likely reflects the realization by managements and their bankers and bond owners that the magnitude of fundamental improvement anticipated at the end of the prior year was not materializing. In other words, the expected recovery was not going to bail out the companies plagued by severely leveraged balance sheets. As a result, as it became evident they would not be able to repay their debts, especially given the amount of money they needed to continue spending to operate, let alone boost output and increase income, bankruptcy was the only option.

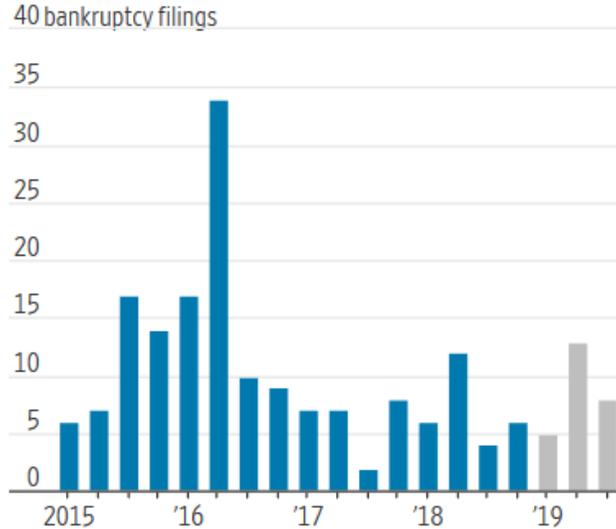
Investors want to see a change in the DNA of E&P managers, who have always been lured by the siren song of higher commodity

prices to ramp up their capital spending

The recent financial performance of the 40 U.S. shale oil companies is much better than even in the days of \$100 oil in early 2014

The key to the group's performance was that of one company, EOG Resources, who

Exhibit 6. 2Q2019 Saw E&P Bankruptcies Jump North American oil-and-gas-producer bankruptcies*



Source: Haynes and Boone

It has been the over-leveraged financial condition that has caused investors to shun energy company equities. Too much debt has spurred investors to pressure managements to reduce their capital spending to within their cash flows, and to even give some of that surplus cash flow back to shareholders in the form of dividends and/or share repurchases. While companies have declared their embrace of “living within cash flows,” investors remain skeptical they actually will. Investors want to see a change in the DNA of E&P managers, who have always been lured by the siren song of higher commodity prices to ramp up their capital spending. Living within cash flows will need to be demonstrated for many quarters. The industry’s traditional DNA is to spend as much as possible in growing reserves (asset value) and increasing production (income and profits), which is expected to translate into higher share prices, the ultimate goal of E&P CEOs. This DNA needs to be changed.

The recent improvement in oil prices and reduced industry capital spending has begun to turn the tide of profitability, or at least has improved companies’ free cash flows. Recently released studies by Rystad Energy and RBN Energy demonstrate the improvement. A third report by the Sightline Institute and the Institute for Energy Economics and Financial Analysis (IEEFA) showed improvement in the second quarter of 2019 by companies focused on fracking operations, but its conclusion was that the companies continue disappointing investors by producing too much natural gas (glut) and not enough cash flow.

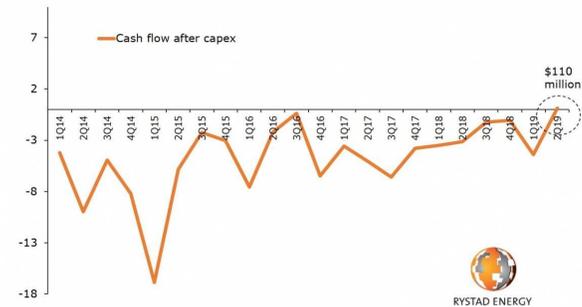
reported \$1.1 billion in free cash flow for the quarter

While no one is handing out trophies to E&P managers for their improvement, it is important to note the trajectory of the cash flow after capex numbers for these companies. In fact, the recent financial performance of the 40 U.S. shale oil companies is much better than even in the days of \$100 oil in early 2014. Following the crash of oil prices at the end of 2014 and in early 2015, it was not surprising that this group of companies lost nearly \$18 billion in the first quarter of 2015. After nearly reaching breakeven in 3Q2016, for the group to actually report \$110 million of positive free cash flow is significant.

This is an industry with a questionable long-term outlook

Exhibit 7. Rystad Energy E&P Universe Finally In Black

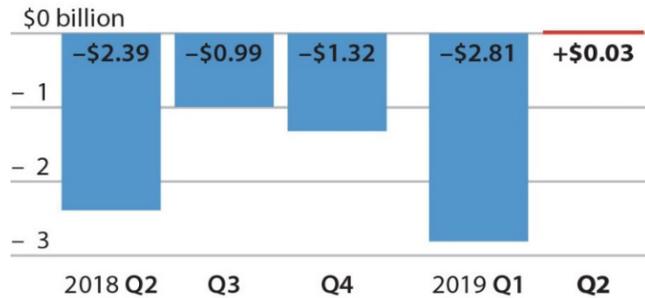
US shale oil peer group cash flow statement evolution
Cash flow after capital expenditure (capex). Billion USD



Based on a peer group of 40 dedicated US shale oil companies
Source: Rystad Energy research and analysis
Source: Rystad Energy

As mentioned above, the improved financial results of fracking companies did not completely wow some analysts, especially the Sightline and IEEFA people. Their report highlighted that the group of E&P companies reported only \$26 million in free cash flows from April through June 2019, which contrasts with the group's over \$100 billion in long-term debt. The key to the group's performance was that of one company, EOG Resources (EOG-NYSE), who reported \$1.1 billion in free cash flow for the quarter, a swing of nearly \$1.5 billion from the prior quarter.

Exhibit 8. Profitability Didn't Alleviate Investor Criticism Free Cash Flow at 29 Fracking Companies

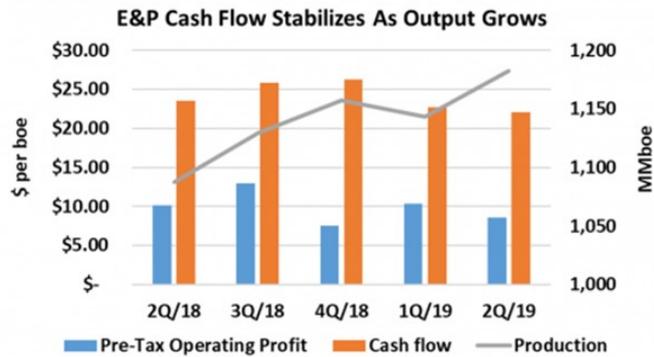


Sources: Morningstar; company reports
Source: IEEFA.org

Given the group’s weak financial performance, the ability of companies to tap debt and equity markets is nearly non-existent. Although the IEEFA analysts acknowledged the improvement in cash flows, they warned investors to continue to remain skeptical that any meaningful cultural change has occurred and to treat the sector as highly speculative. This attitude is representative of the conventional wisdom surrounding energy, and E&P companies in particular. With global energy demand uncertain due to the trade war and deteriorating economic growth in Europe and Asia, and prospects that fossil fuels will remain under intense environmental attack, with the support of politicians in many countries around the world, this is an industry with a questionable long-term outlook.

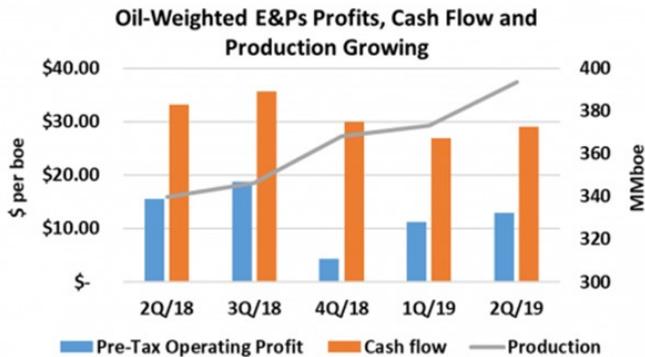
Despite the industry “doom and gloom” outlook from many, Rusty Brazier’s RBN produced a report showing the improvement in financial and operational performance. The report contained a number of charts showing the overall sector’s results, and also by segmenting the universe of companies by whether they were oil-focused, diversified, or gas-focused. Each group showed noticeably different results, largely due to weak natural gas prices.

Exhibit 9. Improved E&P Results And Production



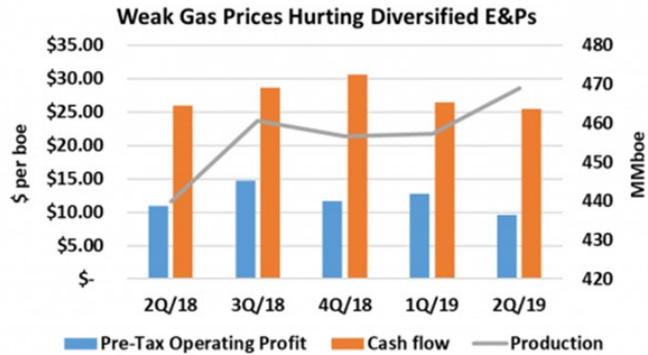
Source: RBN Energy

Exhibit 10. Oily E&Ps Are Improving Faster



Source: RBN Energy

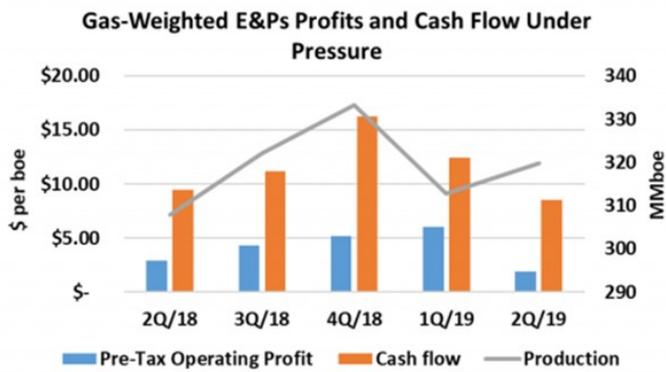
Exhibit 11. Gas Prices Holding Back Some E&Ps



Source: RBN Energy

The uncertainty about the degree of success of the new religion for how E&P companies should operate, and its sustainability, will limit their share price improvement

Exhibit 12. Weak Gas Prices Hit Gassy E&Ps



Source: RBN Energy

We thought the RBN report’s conclusion was noteworthy. The RBN analyst wrote:

“There’s clearly a divergence between investors’ apparently dim view of the E&P industry and the quarterly results, which seem to show a sector that, while challenged by relatively weak commodity prices, remains generally stable and operationally profitable. As we’ve blogged about often, most E&Ps have been working hard to manage their capital outlays and reduce costs in order to return as much money as possible to shareholders. Still, Wall Street seems to see an industry on the precipice. We will continue to monitor the progress of our E&P universe in the coming quarters and see which side is right.”

The uncertainty about the degree of success of the new religion for how E&P companies should operate, and its sustainability, will limit their share price improvement. At some point, investors will determine that the new religion is governing the sector’s outlook and that the shares are worthy of higher valuations. When this happens, we fully expect energy share prices to jump, given the extent that

investors have dismissed the potential for any improvement in the industry's fortunes. The 101% short position of the XOP signals that it won't take much for a swing in sentiment to change the energy share price narrative. An exogenous event, or merely the passage of time under the new DNA – which will it be?

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