

Energy Market Update: More Red Flags on Fracking

Cash Flows Still Negative – Disappointing Results for U.S. Frackers Continued Through Q4 2018

By some measures, America's fracking industry had a banner year in 2018. Shale companies produced more oil and gas than ever, lifting total US output to all-time highs while squeezing the nation's net energy imports to their lowest point since 1970.

Key Findings

- Even after three years of oil price increases, US fracking-focused oil and gas companies continued their 9-year losing streak through 2018.
- These small and mid-sized US E&Ps reported \$6.7 billion in negative cash flows through December.
- E&Ps dipped into cash reserves by \$8.4 billion in 2018 to fund capital expenditures and shareholder payouts.

But these results hid a grim irony: **record-setting production didn't lead to financial success.** To the contrary, America's frackers spilled alarming volumes of red ink in 2018.

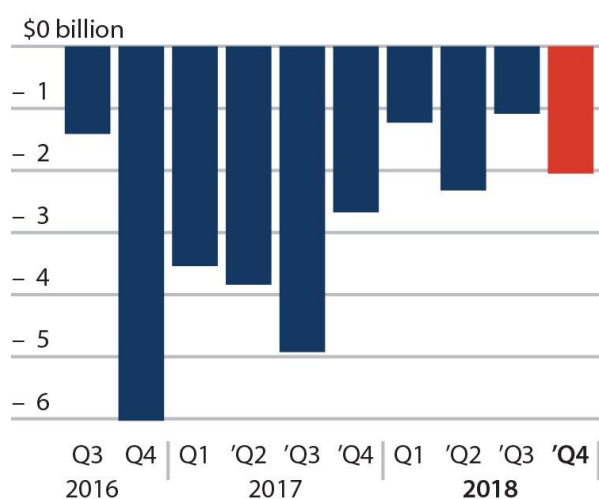
A cross section of 29 publicly traded, fracking-focused oil and gas companies posted \$6.7 billion negative free cash flows in 2018. Said differently, these companies spent \$6.7 billion more on drilling than they realized from selling oil and gas. During the fourth quarter alone, this cross-section of publicly traded exploration and production companies outspent their operating cash flows by more than \$2 billion. (See Data Appendix.)

Many investors had predicted that 2018 would be the year when America's shale industry finally produced cash as well as hydrocarbons. The conditions seemed ripe. By the third quarter of the year, the price of oil had risen to its highest level since 2014. At the same time, the oil and gas industry had spent more than a decade improving its technology, learning to produce more oil at a lower cost.

Despite these advantages, the fracking sector still wasn't able to generate cash. Financial performance varied across the sector, but successes were rare. Only 7 companies in our sample succeeded in generating positive cash flows over the preceding year.

These disappointing results come on the heels of a decade of bleak financial performance. **Since its inception, the fracking sector has consistently failed to produce enough cash to satisfy its voracious appetite for capital.** From 2010 through 2018, the companies in our sample had an aggregate negative cash flow of \$181 billion.

Free Cash Flow of 29 Fracking Companies



Sources: Morningstar; company reports

Because of their negative cash flows, many oil and gas companies have turned to debt and equity for capital infusions to keep their businesses afloat. In the process, these companies have racked up enormous debts: by the end of 2018, our cross-section of fracking-focused companies owed \$116 billion in long-term debt, virtually unchanged over the last five years.

The fracking sector's 2018 cash flows actually represented an improvement over 2016 and 2017. In those years, companies in our sample collectively outspent their cash flows by \$15.3 billion and \$15.0 billion, respectively. The run-up in oil prices during early 2018 helped oil and gas companies narrow their cash flow losses, particularly during the third quarter of 2018.

The ongoing wave of oil and gas bankruptcies represents another red flag for the fracking sector. All told, 167 oil and gas companies declared bankruptcy from January 2015 through December 2018, affecting more than \$95 billion in total debt.¹ In 2018, oil and gas bankruptcies involved nearly \$13.2 billion in debt, up from \$8.5 billion the prior year.

Signs now suggest that investors are losing patience with fracking companies. Consider:

- Companies raised about \$22 billion from equity and debt financing in 2018, less than half the total in 2016 and almost one-third of what they raised in 2012.²

¹ Haynes & Boone, LLP, [Oil Patch Bankruptcy Monitor](#), January 7, 2019.

² Olson, Bradley and Elliott, Rebecca. WSJ.com. ["Frackers face harsh reality as Wall Street backs away."](#) 2/24/19

- As of February, exploration and production companies hadn't raised any new capital from the bond markets since the prior October.³
- The sovereign wealth fund of Norway—the world's largest sovereign wealth fund, controlled by a nation that is heavily dependent on oil revenues—recently decided to divest from oil and gas exploration and production companies.⁴ The fund has now excluded investments in all but two of the US shale producers in our sample.⁵

Wall Street's growing reluctance to finance fracking has forced shale-focused E&Ps in our sample to find alternative means of sustaining their operations. All told, the companies in our sample drew down their cash reserves by \$8.4 billion. Many companies have raised additional cash through asset sales.

Frackers' persistent inability to produce positive cash flows should be a grave concern to investors. A healthy industry would generate enough cash not only to sustain its own capital spending, but also to pay off debt and reward stockholders—all while maintaining or even increasing its output to support rising stock prices. Until fracking companies can demonstrate that they can produce cash as well as hydrocarbons, cautious investors would be wise to view the fracking sector as a speculative enterprise with weak and uncertain fundamentals.

Data and Methods

This report tracks the financial performance of 29 US-focused oil and gas exploration and production companies. The analysis started with the list of stocks held as components of the SPDR S&P Oil & Gas Exploration & Production ETF (ticker symbol XOP), and then excluded companies that:

- lacked comprehensive income or cash flow data for 2010 through 2018;
- declared bankruptcy at some point between 2010 and 2018;
- derived significant revenues from midstream (transportation) or downstream (refining and petrochemicals) operations; or
- had significant revenues from exploration and production operations outside the US.

The final list includes 29 US-focused oil and gas exploration and production companies. For most companies, this report relies on financial data downloaded

³ Egan, Matt. CNN Business. "Why oil companies have suddenly gone missing in the bond market." 2/5/19.

⁴ Norway, Royal Ministry of Finance. "Energy stocks in the Government Pension Fund Global." 3/08/19.

⁵ Norway, Royal Ministry of Finance. "Energy stocks in the Government Pension Fund Global." 3/08/19.

from Morningstar during February and March of 2019. Those data are reported here without revision. For Southwestern Energy, Pioneer Resources, and Cabot Oil and Gas, data was supplemented from other sources, including 10-Ks and prior downloads of Morningstar data. For a limited number of companies, Morningstar's quarterly data on revenues, stock sales, and stock repurchases don't match up with annual totals. In those cases, we report Morningstar's numbers without correction, recognizing that there will be small discrepancies between quarterly and annual totals.

Data Appendix

Selected Annual Financial Data, Selected Fracking Companies

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Basic Information									
Total Revenues	\$ 127,675	\$ 120,684	\$ 112,010	\$ 129,767	\$ 141,416	\$ 81,432	\$ 66,002	\$ 88,853	\$ 119,934
Net Income	14,356	16,351	11,713	17,467	11,710	(67,479)	(33,917)	205	10,283
Long Term Debt	72,894	78,453	98,511	101,828	114,843	120,922	116,604	115,811	115,670
Cash End of Period Balance	12,917	9,521	8,711	15,127	25,685	13,420	23,329	19,112	10,791
Distributions									
Dividends Paid to Stockholders	(2,482)	(2,633)	(3,138)	(2,809)	(3,357)	(3,494)	(2,210)	(2,605)	(2,932)
Net Stock Issuance (Buybacks)	4,338	2,477	274	1,444	(2,001)	10,492	21,519	1,675	(6,517)
Net Inflows from (Distributions to) Investors	1,856	(156)	(2,864)	(1,365)	(5,358)	6,998	19,309	(930)	(9,449)
Free Cash Flow									
Operating Cash Flow	47,542	54,567	57,811	68,631	72,128	29,413	23,926	36,812	57,148
Capital Expenditure	(67,946)	(73,752)	(91,065)	(83,196)	(96,290)	(61,875)	(39,317)	(51,797)	(63,836)
Free Cash Flow (FCF)	(20,404)	(19,185)	(33,253)	(14,565)	(24,159)	(32,461)	(15,392)	(14,983)	(6,690)

All figures in million U.S. dollars.

Selected Quarterly Financial Data, Selected Fracking Companies

	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4
Basic Information										
Total Revenues	\$ 17,900	\$ 18,830	\$ 22,166	\$ 20,454	\$ 20,886	\$ 25,279	\$ 27,854	\$ 28,454	\$ 31,489	\$ 31,886
Net Income	(5,360)	(10,250)	(2,862)	(270)	(2,891)	6,110	3,010	923	3,345	3,025
Long Term Debt	117,504	116,604	114,492	115,841	115,698	115,811	117,750	115,949	119,297	115,670
Cash End of Period Balance	25,185	23,089	22,831	21,593	18,788	19,174	18,110	15,076	13,278	9,634

Distributions										
Dividends Paid to Stockholders	(557)	(493)	(710)	(613)	(602)	(668)	(713)	(695)	(702)	(783)
Net Stock Issuance (Buybacks)	4,842	3,334	930	(71)	504	(529)	(2,822)	(907)	(1,891)	(1,469)
Net Inflows from (Distributions to) Investors	4,285	2,841	220	(684)	(98)	(1,197)	(3,535)	(1,602)	(2,593)	(2,252)

Free Cash Flow										
Operating Cash Flow	7,647	7,714	8,658	7,923	8,862	11,367	12,794	13,529	15,456	15,362
Capital Expenditure	(9,057)	(13,744)	(12,200)	(11,764)	(13,791)	(14,041)	(14,028)	(15,850)	(16,541)	(17,413)
Free Cash Flow (FCF)	(1,412)	(6,032)	(3,541)	(3,841)	(4,926)	(2,675)	(1,230)	(2,322)	(1,087)	(2,050)

All figures in million U.S. dollars.

Free Cash Flow, Selected Fracking Companies

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total Since 2010
Anadarko Petroleum Corporation	\$ 239	\$ (3,145)	\$ 1,097	\$ 1,167	\$ (1,042)	\$ (7,944)	\$ (505)	\$ (1,022)	\$ (254)	\$ (11,409)
Antero Resources Corporation	(263)	(637)	(1,350)	(2,137)	(3,088)	(1,332)	(1,254)	(210)	(129)	(10,400)
Apache Corporation	(5,643)	2,875	(960)	279	(3,007)	(2,141)	481	(332)	(127)	(8,575)
Cabot Oil & Gas Corporation	(372)	(389)	(276)	(170)	(243)	(206)	22	134	211	(1,289)
Callon Petroleum Company	40	(21)	(82)	(105)	(138)	(138)	(69)	(190)	(144)	(847)
Carrizo Oil & Gas Inc.	(225)	(314)	(488)	(421)	(453)	(300)	(362)	(928)	(520)	(4,011)
Chesapeake Energy Corporation	(8,396)	(8,547)	(11,905)	(2,994)	(1,984)	(2,537)	(2,324)	(1,747)	(267)	(40,701)
Cimarex Energy Co.	119	(367)	(535)	(300)	(579)	(324)	(96)	(182)	(119)	(2,383)
Concho Resources Inc.	(1,482)	(546)	(1,536)	(518)	(843)	(981)	(1,074)	(838)	(164)	(7,982)
Continental Resources, Inc.	(430)	(968)	(2,486)	(1,176)	(1,361)	(1,223)	(39)	126	541	(7,016)
Denbury Resources Inc.	(143)	(234)	(329)	174	147	308	(30)	(89)	184	(12)
Diamondback	(51)	(56)	(127)	(784)	(1,091)	(486)	(859)	(2,413)	(1,918)	(7,785)
EOG Resources, Inc.	(2,873)	(2,372)	(2,118)	269	402	(1,418)	(224)	141	1,692	(6,501)
EQT Corporation	(457)	(359)	(579)	(601)	(1,037)	(1,217)	(1,525)	(1,120)	(756)	(7,651)
Hess Corporation	(962)	(1,957)	(2,022)	(839)	(757)	(2,340)	(1,456)	(992)	(158)	(11,483)
Laredo Petroleum	(304)	(363)	(564)	(412)	(855)	(317)	(142)	(182)	(167)	(3,306)
Marathon Oil Corporation	2,334	3,538	(344)	827	327	(1,909)	(65)	144	481	5,333
Matador Resources Company	(133)	(99)	(184)	(188)	(319)	(289)	(320)	(521)	(915)	(2,968)
Murphy Oil	900	(288)	(485)	48	(670)	(1,381)	(326)	118	(678)	(2,762)
Noble Energy, Inc.	61	(424)	(717)	(1,010)	(1,365)	(917)	(190)	(698)	(943)	(6,203)
Oasis Petroleum	(263)	(438)	(659)	(1,756)	(530)	(460)	(199)	(140)	(155)	(4,600)
PDC Energy Inc	(169)	(314)	(485)	(245)	(392)	(194)	(1,028)	(160)	(248)	(3,235)
Pioneer Natural Resources Company	89	(760)	(1,218)	(730)	(1,210)	(1,138)	(564)	(608)	(541)	(6,680)
QEP Resources, Inc.	(472)	(138)	(1,504)	(411)	(1,184)	(758)	(541)	(1,375)	(484)	(6,867)
Range Resources Corporation	(220)	(568)	(852)	(416)	(226)	(339)	(79)	(332)	30	(3,002)
SM Energy Company	(172)	(873)	(592)	(277)	(1,063)	(511)	(2,261)	(463)	(616)	(6,828)
Southwestern Energy Company	(430)	(444)	(454)	(248)	292	(218)	(95)	(171)	(67)	(1,835)
Whiting Petroleum Corporation	74	(612)	(774)	(1,073)	(1,153)	(1,446)	42	(279)	134	(5,087)
WPX Energy, Inc.	(800)	(365)	(725)	(518)	(737)	(305)	(310)	(654)	(593)	(5,007)
Total, Selected E&Ps	\$(20,404)	\$(19,185)	\$(33,253)	\$(14,565)	\$(24,159)	\$(32,461)	\$(15,392)	\$(14,983)	\$(6,690)	\$ (181,092)

All figures in million U.S. dollars.

Selected Fracking Companies, Ranked by 2018 Cash Flows

	2018
EOG Resources, Inc.	\$ 1,692
Continental Resources, Inc.	541
Marathon Oil Corporation	481
Cabot Oil & Gas Corporation	211
Denbury Resources Inc.	184
Whiting Petroleum Corporation	134
Range Resources Corporation	30
Southwestern Energy Company	(67)
Cimarex Energy Co.	(119)
Apache Corporation	(127)
Antero Resources Corporation	(129)
Callon Petroleum Company	(144)
Oasis Petroleum	(155)
Hess Corporation	(158)
Concho Resources Inc.	(164)
Laredo Petroleum	(167)
PDC Energy Inc	(248)
Anadarko Petroleum Corporation	(254)
Chesapeake Energy Corporation	(267)
QEP Resources, Inc.	(484)
Carrizo Oil & Gas Inc.	(520)
Pioneer Natural Resources Company	(541)
WPX Energy, Inc.	(593)
SM Energy Company	(616)
Murphy Oil	(678)
EQT Corporation	(756)
Matador Resources Company	(915)
Noble Energy, Inc.	(943)
Diamondback	(1,918)
Total, selected E&Ps	\$ (6,690)

All figures in million U.S. dollars.

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