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Shale Producers Spilled $2.1 Billion in Red Ink Last Year

Disappointing 2019 Results Cap a Decade of Losses for North America's Shale Industry

Summary

A cross-section of 34 North American shale-focused oil and gas producers spent $189 billion more on drilling and other capital expenses over the past decade than they generated by selling oil and gas, an IEEFA analysis finds. These results included a disappointing $2.1 billion in negative free cash flows in 2019. (See Appendix Table 1.)

This dismal financial performance came despite rapid growth in North American production of both oil and gas. The shale revolution has propelled the U.S. into becoming the world's most prolific oil producer. Yet in financial terms, this production boom has been an unrelenting financial bust.

Key Findings

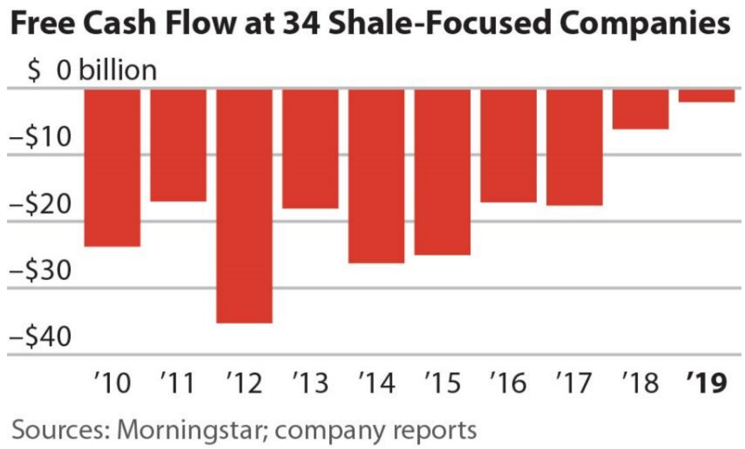
- A cross-section of North American fracking-focused oil and gas companies reported $2.1 billion in negative free cash flow in 2019.
- Over the decade, these companies reported negative free cash flows every year, totaling $189 billion.
- Disappointing cash flows have soured investors on the sector, constraining the oil and gas industry's ability to tap debt and equity markets.

Free cash flow—the amount of cash generated by a company's core business, minus its capital spending—is a crucial gauge of financial health. Positive free cash flows enable firms to pay down debt and reward stockholders. Negative free cash flows, by contrast, force companies to fund their operations by dipping into cash reserves, selling assets, or raising new money from capital markets.

As a group, these shale-focused companies racked up negative free cash flows in every single year over the last decade. The cash flow losses narrowed in 2019, as the companies collectively trimmed capital spending by nearly $8 billion year-over-year. But even with those capex cutbacks, IEEFA's sample ended 2019 with negative cash flows for the year.

Looking at quarterly results, IEEFA's cross-section of fracking-focused enterprises achieved modest positive free cash flows in the second and fourth quarters of 2019. But those gains were outweighed by the losses in the first and third quarters. In the fourth quarter, the companies in IEEFA's sample recorded aggregate positive cash flows of $848 million, following negative cash flows of $1.2 billion in the prior quarter. (See Appendix Table 2.)

Negative free cash flows might have been expected during the oil price rout of 2015 and 2016. Yet even after oil prices rebounded in 2017, few fracking-focused companies were able to generate free cash flows. Only six companies in IEEFA's sample reported cumulative positive free cash flows from 2017 through 2019. Even in 2019, when negative free cash flows narrowed to their lowest levels of the decade, only 12 of the 34 companies managed to report positive free cash flows.



Analysis

Oil markets have erupted in turmoil over the past few weeks. International efforts to contain the COVID-19 virus have sharply reduced global oil demand, even as both Saudi Arabia and Russia have boosted production. The twin shocks of falling demand and rising supply have sent oil prices plummeting to their lowest levels since early 2016—triggering a sell-off in oil and gas stocks to their lowest levels in well over a decade.

Yet the oil and gas industry's financial underperformance began long before the advent of the coronavirus crisis or the Saudi-Russia oil price war. The S&P energy sector—which includes oil and gas companies, but excludes renewable energy—was far and away the worst performer in the S&P 500 over the past decade, placing dead-last among all sectors for stock price returns in both 2018 and 2019.

These dismal returns stemmed from mounting financial pressures and a deteriorating outlook for the oil and gas sector. Cash flow losses were just one of many signs of distress among IEEFA's sample of 34 North American shale-focused companies. Other challenges included:

- **High and rising debt**. Total long-term debt rose to $106 billion at the end of 2019, an increase of $1.5 billion from the prior year, and the highest level since 2015. If these companies are unable to produce significant cash flows over the next several years, they may be unable to pay off their debts as they mature, which could trigger debt write-downs or bankruptcies.

- **Disappointing revenue.** Despite higher production levels, total 2019 revenues among this cross-section of companies fell by $5.6 billion year-over-year.

- **Significant net losses**. Collectively, these companies reported net losses of $6.7 billion in 2019, largely due to accounting impairments and write-downs of oil and gas assets.

- **Declining cash balances.** These 34 companies spent down their cash reserves by $14.4 billion from 2016 through the end of 2019. At the end of 2019, cash reserves among these companies were at their lowest level since 2012.

Persistently poor financial results have soured investors on the shale industry, making it harder for shale enterprises to raise new money from debt and equity markets. From 2010 through 2017, these companies collectively raised an average of $8.7 billion of net new cash from equity investors per year. But by 2018, investor sentiment had shifted away from shale, with the companies in our sample netting just $730 million in cash from equity investors in 2018, and $1.4 billion in 2019.

New debt financing for these shale-sector companies has also collapsed. From the end of 2010 through the end of 2017, IEEFA's cross-section took on $44.7 billion of net new long-term debt. Since then, their new debt financing has shriveled to just $1.6 billion over two years.

Negative cash flows, coupled with dwindling access to new capital from debt and equity markets, forced many shale-focused companies to fund operations by drawing down cash reserves or selling assets. Yet shedding assets and burning through cash will likely further weaken these companies' financial prospects.

Moving forward, the oil and gas sector's financial distress will likely accelerate. Although cash flow losses from fracking have narrowed in the last two years, North America's shale industry has never succeeded in producing positive free cash flows for any full year since the practice of fracking became widespread. No matter what the selling price for oil and gas, fracking-focused companies spent more on drilling and other capital projects than they were able to generate from their core operations.

In order to attract significant new capital investment, the shale industry must prove that it can produce robust, consistent cash flows. Yet if history is any guide, generating positive free cash flow will be outright impossible at today's prices. The industry may attempt to shore up its short-term performance by cutting capital spending to the bone. Yet capex cuts, in turn, will send clear powerful signals to investors that North America's shale oil and gas production is poised to shrink.

In production volumes, North America's oil and gas sector has succeeded well beyond expectations. Yet fracking has failed as a financial endeavor: even after a decade of technical improvements and increasing investor scrutiny, most shale-focused companies still burn through more cash than they produce. And while investors may once have held out hope that the industry would eventually turn the corner, recent market turmoil suggests that the odds of success are receding quickly. When and if global oil markets stabilize, investors should remain deeply skeptical of a shale-sector turnaround, given the industry's financially feeble performance over the past decade. Cautious investors would be wise to view shale-focused companies as high-risk enterprises characterized by disappointing performance, weak financial fundamentals, and an essentially speculative business model.

Data and Methods

This report tracks the financial performance of 34 oil and gas exploration and production companies that operate principally in North America. As of November 2019, all of the companies on this list were components of either the SPDR S&P Oil & Gas Exploration & Production ETF (ticker symbol XOP), the Van Eyk Vectors Unconventional Oil & Gas ETF (ticker symbol FRAK), or both. The list of companies from those two ETFs was further narrowed by excluding firms that:

- Had an IPO date within the preceding 5 years;
- Declared bankruptcy at some point during the preceding 5 years;
- Engaged in a spin-off or de-merger that significantly changed the company's business model or revenue sources during the preceding 5 years;
- Derived much of their revenues from midstream (transportation) operations, downstream (refining and petrochemicals) operations, drilling and oilfield services, or from exploration and production operations outside North America;
- Do not make significant capital expenditures on "fracking," defined as horizontally drilling and hydraulically fracturing oil and gas wells within shale basins; or
- Did not have full financial data available on Morningstar as of mid-March 2020.

Cash flow and capex data were downloaded from Morningstar during mid-March 2020, were cross-checked with data from 10-Q filings and 10-K filings, and supplemented with data from 10-Q filings.

The list of companies included in this report does not match up with previous quarterly fracking reports in this IEEFA series. Each quarter, IEEFA adjusts the companies covered in its fracking analysis to account for mergers, acquisitions, bankruptcies, accounting changes, and data availability. This report includes results from companies based in Canada that report financial results denominated in Canadian dollars. Canadian currency was converted to U.S. dollars based on exchange rate data from the St. Louis Federal Reserve Bank and the Bank of Canada.

Note that the sum of quarterly totals for 2018 and 2019 may not match the annual totals for those years. These differences were due to rounding errors, fluctuating U.S.-Canadian currency exchange rates over the course of the year, and, in some cases, by differences in data definitions resulting from differences between U.S. GAAP and international financial reporting standards.

Appendix

Table 1: Selected Annual Financial Data, 34 Shale-Focused Oil and Gas Companies (in millions USD)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Basic Information										
Total Revenues	$100,794	$109,019	$101,315	$117,925	$131,813	$76,038	$61,807	$86,501	$118,276	$112,672
Total Costs excluding tax provision	$63,236	$61,441	$60,391	$69,854	$77,878	$67,762	$57,536	$58,610	$71,483	$74,440
Net Income	$12,611	$18,231	$7,847	$15,570	$13,750	($57,566)	($31,876)	$272	$7,844	($6,700)
Long Term Debt	$59,640	$64,236	$85,015	$88,983	$101,557	$106,788	$103,849	$104,361	$104,477	$105,958
Distributions										
Dividends Paid to Stockholders	($233)	($277)	($255)	($238)	($213)	($312)	($294)	($410)	($188)	($146)
Net Stock Issuance (Buybacks)	$5,696	$4,420	$4,340	$6,871	$8,028	$13,298	$23,417	$5,532	$918	$1,510
Net Inflows from (Distributions to)	$5,463	$4,143	$4,085	$6,633	$7,815	$12,986	$23,123	$5,122	$730	$1,364
Cash End of Period Balanc	$8,570	$6,452	$5,619	$10,783	$17,802	$13,093	$21,496	$14,990	$10,545	$7,065
Free Cash Flow										
Operating Cash Flow	$41,187	$52,517	$48,823	$59,282	$65,270	$33,146	$23,215	$35,832	$55,114	$51,212
Capital Expenditure	($64,985)	($69,538)	($84,101)	($77,361)	($91,565)	($58,205)	($40,370)	($53,465)	($61,288)	($53,323)
Free Cash Flow (FCF)	($23,797)	($17,021)	($35,278)	($18,077)	($26,291)	($25,059)	($17,156)	($17,632)	($6,173)	($2,113)

Source: Morningstar and company financial reports.

Table 2: Selected Quarterly Financial Data, 34 Shale-Focused Oil and Gas Companies (in millions USD)

	2017-09	2017-12	2018-03	2018-06	2018-09	2018-12	2019-03	2019-06	2019-09	2019-12
Basic Information										
Total Revenues	$20,093	$25,019	$27,496	$28,170	$31,023	$31,533	$27,741	$29,344	$27,174	$28,348
Total Costs excluding tax provision	$14,464	$16,607	$16,104	$16,927	$17,562	$20,732	$17,801	$18,081	$18,696	$19,823
Net Income	($2,286)	$3,934	$2,606	$596	$2,916	$1,781	$1,577	$3,394	$217	($11,897)
Long Term Debt	$103,205	$104,502	$106,936	$105,153	$108,198	$104,251	$104,264	$102,772	$102,349	$106,002
Distributions										
Dividends Paid to Stockholders	($75)	($120)	($54)	($44)	($41)	($61)	($32)	($32)	($43)	($40)
Net Stock Issuance (Buybacks)	$536	$739	$3	$549	$316	$47	$342	$765	$0	$399
Net Inflows from (Distributions to) Investors	$461	$619	($51)	$505	$275	($14)	$310	$733	($43)	$359
Cash End of Period Balance	$13,511	$15,039	$14,862	$12,547	$11,136	$10,528	$8,004	$8,313	$6,535	$7,067
Free Cash Flow										
Operating Cash Flow	$9,124	$10,533	$12,358	$13,135	$14,933	$14,687	$11,827	$14,341	$12,473	$12,574
Capital Expenditure	($13,424)	($13,416)	($13,959)	($15,084)	($16,257)	($15,997)	($14,336)	($13,571)	($13,685)	($11,726)
Free Cash Flow (FCF)	($4,299)	($2,848)	($1,599)	($1,949)	($1,323)	($1,306)	($2,511)	$772	($1,211)	$848

Source: Morningstar and company financial reports.

Table 3: Free Cash Flow, 34 Shale-Focused Oil and Gas Companies 2017-2019 (in millions USD)

		2017-2019
AETUF	Arc Resources Ltd	($97)
APA	Apache Corporation	($553)
AR	Antero Resources Corporation	($658)
CHK	Chesapeake Energy Corporation	($2,654)
CLR	Continental Resources Inc.	$922
COG	Cabot Oil & Gas Corporation	$1,001
CPE	Callon Petroleum Company	($498)
CPG	Crescent Point Energy Corp	$172
CXO	Concho Resources Inc.	($1,406)
EOG	EOG Resources Inc.	$3,574
EQT	EQT Corporation	($809)
ERF	Enerplus Corp	$139
FANG	Diamondback Energy Inc.	($5,299)
GPOR	Gulfport Energy Corporation	($1,875)
HES	Hess Corporation	($2,337)
HPR	HighPoint Resources	($494)
LPI	Laredo Petroleum Inc.	($543)
MRO	Marathon Oil Corporation	$820
MTDR	Matador Resources Company	($1,810)
NBL	Noble Energy Inc.	($2,167)
OAS	Oasis Petroleum Inc.	($271)
PDCE	PDC Energy Inc.	($440)
PE	Parsley Energy Inc. Class A	($3,606)
PVAC	Penn Virginia Corporation	($235)
PXD	Pioneer Natural Resources Company	($417)
QEP	QEP Resources Inc.	($1,858)
RRC	Range Resources Corporation	($487)
SM	SM Energy Company	($1,282)
SPGYF	Whitecap Resources Inc	($267)
SWN	Southwestern Energy Company	($373)
TRMLF	Tourmaline Oil Corp	($282)
WLL	Whiting Petroleum Corporation	($195)
WPX	WPX Energy Inc.	($1,352)
XEC	Cimarex Energy Co.	($281)
Total, selected E&Ps		***($25,918)***

Source: Morningstar and company financial reports.

About IEEFA

The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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