

Shale Producers Find They Have Little Wiggle Room in 2022

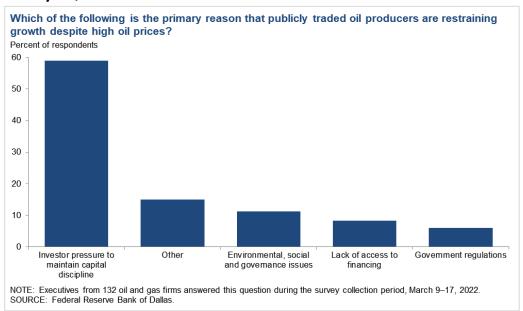
Investor Pressure to Maintain Capital Discipline Keeps Output in Check

Executive Summary

Publicly traded oil and gas producers are not responding to higher oil and natural gas prices as they once did. Despite high prices, oil and gas executives are now reluctant to ramp up drilling and rapidly increase output. As a result, U.S. producers are unlikely to take effective action to ameliorate the current undersupplied global crude and natural gas markets because of investor pressure.

The recently published Federal Reserve Bank of Dallas Energy Survey reveals the primary motivation behind the restraint: fear of upsetting investors. (See Figure 1.) Almost 60 percent of the executives surveyed cited investor pressure to maintain capital discipline as the chief reason the industry is keeping output growth in check. Only 6 percent blamed government regulations—the lowest response of any answer.

Figure 1: Special Survey Question and Response From Dallas Fed Energy Survey 1Q22



The pendulum has clearly swung: The chief goal of the U.S. oil and gas industry is no longer production growth that's fueled by borrowing and new equity raises from capital markets. Instead, publicly traded domestic producers are sticking to strict

capital expenditure plans, allowing operating revenues to balloon due to higher prices, and using the abundant free cash flows to pay down debt and reward shareholders.

2022 Capital Expenditure Outlook

Our sample of 27 U.S. publicly traded shale producers illustrates the trend in 2022 capital expenditures. Collectively, the operators have earmarked \$35.2 billion for capital expenditures to fund 2022 drilling and completion campaigns that augment existing production levels and offset natural declines, up 8 percent compared to the \$32.6 billion spent a year ago.

Before the collapse in crude demand caused by COVID-19, our sample companies' year-over-year changes in capital expenditures tended to track closely with year-over-year changes in West Texas Intermediate (WTI) crude oil prices. Figure 2 highlights the parity of oil prices and capital expenditures between 2017 and 2019, when changes for average WTI crude oil prices and total sampled capex were not separated by more than 2 percentage points.

But as IEEFA has recounted in several prior reports and commentaries, producers were spending more than their annual operating cash flows during these years. Our note, In a Tumultuous 2020, Shale Firms Slashed Capex To Generate Cash,¹ documented that the 30 companies we tracked (fewer now, due to mergers) had collectively reported negative free cash flows of \$158 billion between 2010 and 2020.

So now, the shale-focused oil and gas producers are keeping capital budgets well below their operating cash flows at the urging of the remaining investors left in the wake of diminished company valuations and capital outflows.

¹ IEEFA. In a Tumultuous 2020, Shale Firms Slashed Capex to Generate Cash. March 2021.

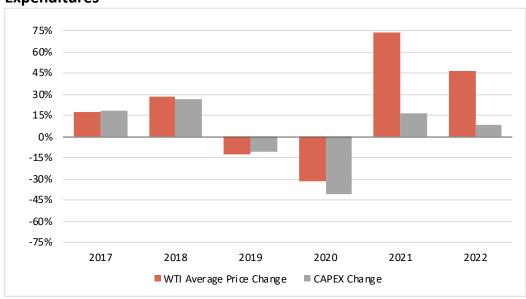


Figure 2: Year-Over-Year Percentage Changes in Oil Prices and Capital Expenditures

Source: Company reports and Energy Information Administration.

The widening gap between changes in capital expenditures and changes in oil prices will have consequences for future oil and gas output, since capital expenditure levels directly dictate future production levels.

U.S. producers were poorly positioned to respond to the recent hike in oil and natural gas prices because they had depleted their drilled but uncompleted well inventories to hold down their costs—even without considering other issues that are hindrances to production growth such as supply chain disruptions, labor shortages, inflation and wariness of acting while commodity prices fluctuated wildly. After capital destruction in years past, the wariness of both the debt and equity markets now presents a more challenging environment for raising capital.²

The industry has painted itself into a corner.

The point of highlighting this diverging pattern is not to imply the US shale producers need to drill more to catch up with historical trends. Instead, we interpret the current conditions to suggest that the rhetoric that the U.S. needs to be more accommodating to energy producers to alleviate prices is a red herring.

The industry has entered a phase of slowing growth where it can no longer offer a response commensurate with a surging price signal. Ultimately, the realization that

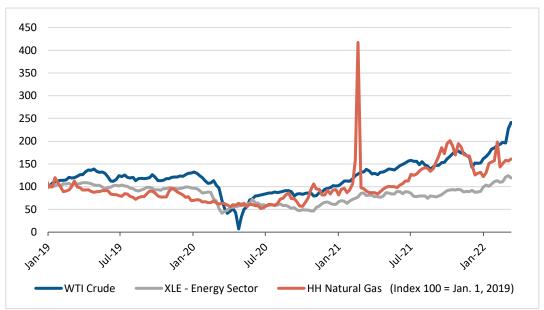
 2 Dallas Morning News. Why Texas frackers won't be riding to the rescue: It's profit-taking time. April 1, 2022.

future recoveries across the industry happen at a more gradual pace (like what we are seeing today) also acts a governor to valuations across the industry. The industry has painted itself into a corner where capital is costlier due to a diminished outlook for growth and investor returns.

Energy Sector's Underperformance Relative to Commodities

So far this year, the energy sector has chalked up the best performance when compared against the 10 other sectors of the Standard & Poor's 500-stock index. The stock market performance of the energy sector, however, has underperformed compared with the price increases in the commodities that the companies produce and distribute.

Figure 3: Spot WTI Crude Oil, Henry Hub Natural Gas, and Energy Sector Price Performances



Source: Energy Information Administration and Yahoo Finance.

Figure 3 compares spot prices for WTI Crude Oil and Henry Hub Natural Gas with the energy sector (i.e., the Energy Select Sector SPDR Fund, XLE). Although the energy sector has shown some underperformance through the years, recent data show the gap is widening. The relative underperformance by the energy complex, as represented by the Energy Select Sector SPDR Fund, may be an indicator that lower returns and higher volatility are embedded as a discount that will persist while the industry charts a course through a volatile and uncertain future.

Investors appear skeptical that they will be rewarded with higher returns via share performance and are demanding more now in terms of dividends and share buybacks from oil and gas producers to compensate for the outlook. Clearly, the climate—and oil and gas producers' responsibilities to address the issues they created—are affecting the long-term investment thesis for the industry.

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2022 Production Outlook

The most recent short-term projections compiled by the Energy Information Administration (EIA) estimate U.S. crude production could grow by 7.6 percent, or 850,000 barrels/day, in 2022. The EIA views natural gas production increasing at a slower pace this year, estimating 3.3 percent, or 3.1 billion cubic feet per day, in 2022. Taken together, the EIA's projections for 2022 oil and gas production imply a 5.1 percent increase in oil equivalent.

Our sample of 27 publicly traded U.S. oil and gas producers, which collectively produced one-third of U.S. total production on a barrel-equivalent basis in 2021, presents a trajectory similar to EIA production projections. Specifically, the operators announced plans to collectively increase production to 9.9 million barrels of oil equivalents per day, an increase of 5.5% over the 9.4 million barrels of oil equivalents produced in 2021.

A comparison of our sample's data and projections provided by the companies' management teams for both production and capital expenditures is quite revealing. Although 10 companies are anticipating spending increases of less than 10%, almost twice that number—19 companies—are expecting production to increase by less than 10%.

The key takeaway is that inflation in the form of rising costs for oilfield goods and services are bearing down on incremental margins. Because a dollar of capital spending doesn't go as far as it used to, oil and gas output is now growing more slowly than capital budgets. In this context, prices cycling to the next bear market may usher in greater value destruction industry-wide than previous cycles.

Table 1: Shale Producer Budget Projections

Capital Expenditures (\$ million)	2021	2022 Guidance	Y/Y Chg.
Antero Resources Corporation	716	758	6%
Apache Corporation	1,113	1,600	44%
Callon Petroleum Company	578	725	25%
Centennial Development Corporation	327	395	21%
Chesapeake Energy	735	1,650	124%
CNX Resources	466	485	4%
Continental Resources	4,998	2,300	-54%
Coterra Energy	728	1,450	99%
Devon Energy	2,007	2,050	2%
Diamondback Energy Inc.	1,593	1,825	15%
EOG Resources Inc.	3,850	4,500	17%
EQT Corporation	1,055	1,375	30%
Gulfport Energy Corporation	302	360	19%
Hess Corporation	1,747	2,600	49%
Laredo Petroleum Inc.	1,191	520	-56%
Marathon Oil Corporation	1,046	1,200	15%
Matador Resources Company	733	730	-0.5%
National Fuel Gas	782	738	-6%
Northern Oil and Gas	593	383	-36%
Oasis Petroleum Inc.	213	295	39%
Ovintiv	1,530	1,500	-2%
PDC Energy Inc.	582	700	20%
Pioneer Natural Resources Company	3,287	3,450	5%
Range Resources Corporation	419	470	12%
Ranger Oil Corporation	256	408	59%
SM Energy Company	677	750	11%
Southwestern Energy Company	1,032	1,950	89%
Total	32,557	35,165	8%

Source: Company reports.

Table 2: Shale Producer Production Estimates

Production (000 boe/day)	2021 Average	2022 Guidance	Y/Y Chg.
Antero Resources Corporation	545	550	1%
Apache Corporation	386	417	8%
Callon Petroleum Company	96	121	27%
Centennial Development Corporation	61	64	6%
Chesapeake Energy	462	680	47%
CNX Resources	590	269	-54%
Continental Resources	300	382	27%
Coterra Energy	634	666	5%
Devon Energy	571	585	2%
Diamondback Energy Inc.	375	377	0%
EOG Resources Inc.	829	883	7%
EQT Corporation	848	913	8%
Gulfport Energy Corporation	167	167	0%
Hess Corporation	315	335	6%
Laredo Petroleum Inc.	82	84	3%
Marathon Oil Corporation	348	345	-1%
Matador Resources Company	86	104	20.4%
National Fuel Gas	143	155	8%
Northern Oil and Gas	54	73	35%
Oasis Petroleum Inc.	58	68	16%
Ovintiv	534	511	-4%
PDC Energy Inc.	195	195	0%
Pioneer Natural Resources Company	617	635	3%
Range Resources Corporation	355	357	0%
Ranger Oil Corporation	28	39	38%
SM Energy Company	141	144	3%
Southwestern Energy Company	567	783	38%
Total	9,388	9,901	5%

Source: Company reports.

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The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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