Kathy Hipple, IEEFA Financial Analyst
Tom Sanzillo, IEEFA Director of Finance
Clark Williams-Derry, IEEFA Energy Finance Analyst
February 2020

Institute for Energy Economics and Financial Analysis
IEEFA.org

Oil Majors' Shrinking Capex Signals Industry in Decline

Executive Summary

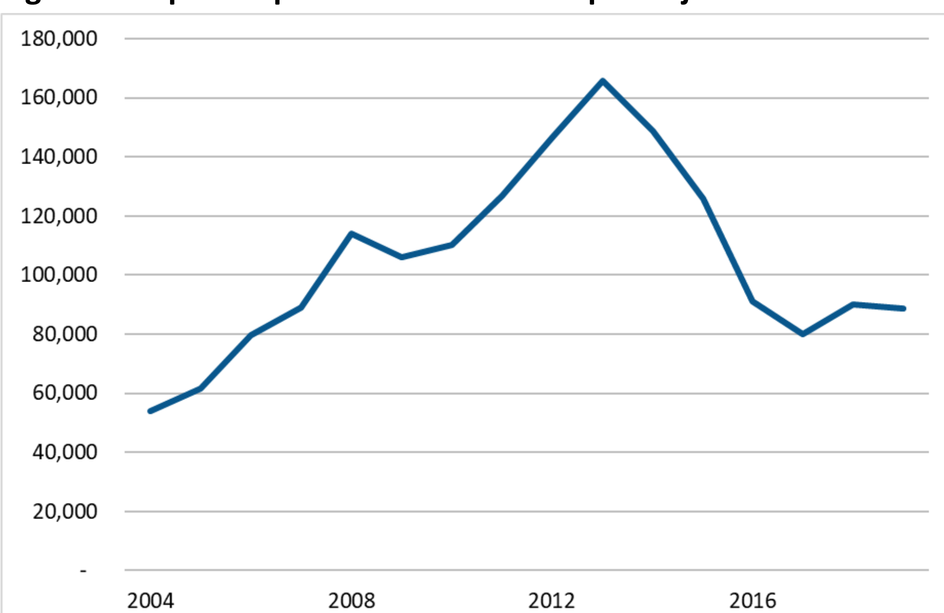
Faced with a convergence of market forces, the world's five leading integrated oil and gas companies are reducing their historically robust levels of capital spending.

In 2019, the five largest integrated oil and gas companies—ExxonMobil, Shell, Chevron, Total and BP—spent a total of $88.7 billion on capital projects, down nearly 50 percent from the $165.9 billion they spent in 2013. Not since 2007 have the capital expenditures, or capex, among the five companies been so low. The trend is an unwelcome warning to a mature industry with declining prospects in its traditional businesses—oil and gas exploration and production, refining and petrochemicals.

Key Findings

- Capital Expenditures (capex) among the 5 largest oil and gas companies have nearly halved since 2013.
- ExxonMobil, Chevron, Total, Shell and BP spent $88.7 billion in 2019 to fund capital projects, down from $165.9 billion in 2013.
- Capex is at levels not seen since 2007.
- The declining capex signals the oil and gas industry is mature and declining, with fewer growth prospects.

Figure 1: Capital Expenditures for Five Supermajors: 2004-2019



Source: Company sources and Morningstar.

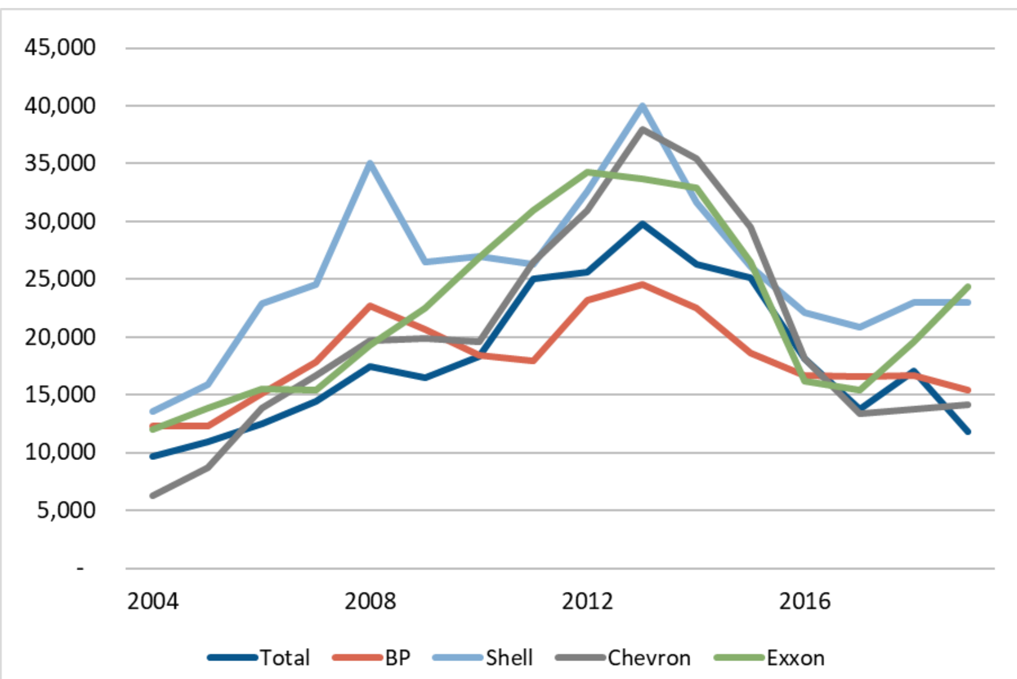
Capex is cash used to invest in long-term assets. It is a crucial gauge of how companies view their future growth prospects. This is especially true for capital-intensive industries such as the oil and gas sector.

The world's largest publicly-traded oil and gas companies' annual capex budgets are massive, in the tens of billions, even as they reduce annual allocations. These capex budgets are spent on billion-dollar projects that take years to develop and are expected to be cash-producing assets for decades.

Capex among the oil majors, collectively, has been declining over the past several years, see Figure 1. But the five oil majors have taken divergent approaches toward capital investments. ExxonMobil has in the last few years increased its capex, spending $24.4 billion in 2019. The company plans to increase capex in 2020 to more than $30 billion in what has been described as a counter-cyclical strategy.

While Exxon Mobil's 2019 capital budget is 93 percent of its ten-year average of $26.1 billion, Chevron and Total, by contrast, have reduced their capex budgets compared to their 10-year averages. Chevron's 2019 capex was $14.1 billion, approximately 60 percent of the nearly $24 billion 10-year annual average. Total's reduction in capex is even more dramatic, declining to $11.8 billion in 2019, just over half its $21.1 billion 10-year annual average.

Figure 2: Capital Expenditures for Five Supermajors, Total, BP, Shell, Chevron and ExxonMobil, 2004-2019 (in millions)



Source: Company sources and Morningstar.

The drastic reduction in capex over the past six years is driven by a convergence of trends shaping the industry and the trajectory of its capital spending:

- **The industry has fewer growth prospects** in historically prolific oil and gas exploration and production (E&P). The days of consistent, long-term 20 percent returns are behind them, and unlikely to return. The promise of petrochemicals as the next high-return opportunity for the supermajors is proving elusive as chemical margins declined in 2019 and the financial outlook is, at best, mixed. The industry claims it is motivated by capital discipline and higher levels of diligence, but another explanation is a lack of viable investment prospects.

- **Supermajors have less cash** to spend on long-term investments. Revenues and profits have been squeezed since oil prices dropped in 2014. The industry is still struggling to recover from the drop in oil prices from more than $100/barrel in 2014 to $29/barrel in 2016. Falling natural gas prices have been even more dramatic. Long-term low prices mean revenues and profit margins are squeezed, leaving less cash available for capex.

- **The Reserve replacement**—long the measure of industry success[1]—**is now honored in the breach.** Capex spent on replacing reserves is not the signature metric used by companies to assess their viability. Investors are focusing on cash flow and profits rather than reserve replacement and production increases. Free Cash Flow (FCF) has become the crucial metric**.**

- **The energy sector is declining overall.** The energy sector (which does not include renewable energy) now accounts for approximately 4+ percent of the S&P 500, down from 28 percent of the index in the 1980s. Simply put, a declining industry requires less capex.

- **Cash to shareholders has become a priority.** Over the past decade, the five oil majors collectively rewarded shareholders with $536 billion in dividends and share buybacks, while generating $329 billion in free cash flow over the same period.[2] The companies made up the $207 billion cash shortfall—equal to 39 percent of total shareholder distributions—primarily by selling assets and borrowing money.

- **The pace of the energy transition is unclear.** The oil majors, with the notable exception of ExxonMobil's doubling down on exploration and drilling, have reduced their capex budgets as they assess the global economy that is becoming less dependent on their primary products—oil and gas. The capital markets are shifting toward two energy economies. One is based on fossil fuels and the other on renewable energy. The majors are treading carefully as they navigate this shifting landscape.

- **Investments in renewable energy have been minimal**, even among the European oil majors—Shell, BP and Total—that have made public announcements about their efforts to embrace new energy initiatives. The large oil companies are struggling to understand how their business models

[1] OGJ.com. Rystad: Oil and gas resource replacement ratio lowest in decades. October 9, 2019.
[2] IEEFA.org. Living beyond their means: Cash flows of five oil majors can't cover dividends, buybacks. January 2020.

> can support renewable energy initiatives that offer 6-12 percent returns on investment (ROIs)—far lower than the traditionally abundant, but increasingly scarce, 20+ ROIs of oil and gas production. The risk-return proposition of renewable energy is a completely different business model than the boom-bust cycle of oil and gas exploration and production. These broader investment issues—and implications for lower energy costs as a driver of increased economic growth—are slowly working their way through the economy and public perception.

Conclusion

Capex is declining precipitously among the five largest publicly-traded oil and gas companies. Capex spending in 2019 among the oil majors—ExxonMobil, Shell, Total, BP and Chevron—is approximately $89 billion, roughly the same levels as 2007, and half the $166 billion spent in 2013. The industry is experiencing a convergence of factors that have placed a brake on the fast-paced capex spending of decades past. The convergence suggests the industry has reached a mature and declining phase, with a weak financial outlook. The ramifications of the decline in capex indicate an industry with lower production levels going forward and a smaller return on capital invested.

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

About the Authors

Kathy Hipple

Kathy Hipple, a financial analyst at IEEFA, teaches the finance sequence at Bard's MBA in Sustainability and is the founding partner of Noosphere Marketing. Hipple has written extensively about sustainable, responsible and impact finance and investing. As Vice President at Merrill Lynch for 10 years, she placed fixed income securities with international institutional clients, and advised international life insurance companies and pension funds. She later founded Ambassador Media, a local search firm in New York City, and served as its CEO. She has served on several boards, including the national Local Search Association and Bennington County's Meals on Wheels.

Tom Sanzillo

Tom Sanzillo, director of finance for IEEFA, is the author of several studies on coal plants, rate impacts, credit analyses and public and private financial structures for the coal industry. He has testified as an expert witness, taught energy-industry finance training sessions, and is quoted frequently by the media. Sanzillo has 17 years of experience with the City and the State of New York in various senior financial and policy management positions. He is a former first deputy comptroller for the State of New York, where he oversaw the finances of 1,300 units of local government, the annual management of 44,000 government contracts, and where he had oversight of over $200 billion in state and local municipal bond programs and a $156 billion pension fund.

Clark Williams-Derry

IEEFA Energy Finance Analyst Clark Williams-Derry served as director of energy finance and research director for the Sightline Institute, a multi-issue sustainability think-tank based in Seattle for 18 years, where his research focused on U.S. and global energy markets. He was also a senior analyst for Environmental Working Group.