

Our View: What Was Equinor Thinking?

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The Norwegian state-owned oil company Equinor has revealed a loss of \$20.4 billion on its investments in oil and gas exploration in the United States.¹ Following the announcement of the loss this spring, the company commissioned an in-depth review of its US activities by PWC, which was supplemented by a ninety-seven-page supporting document prepared by Rystad Energy, the Norwegian consulting firm.

The fifty-eight-page PWC analysis makes for painful reading. According to PWC, Equinor invested \$40 billion in the United States, primarily in offshore and onshore oil and gas production. The firm spent over \$10 billion in acquiring assets in US shale oil and gas. Between 2007 and 2019, it recorded an accounting loss of \$21.5 billion on its US business, \$9.2 billion of which was tied to its shale activities.²

PWC acknowledges that many companies took positions in what the report calls “onshore activities” and have since recorded losses. The firm adds,

An entire industry effectively formed a consensus that an oil price above 100 USD was a “new normal.” This assumption fueled investments, created a heated market, and ultimately turned the onshore industry into a victim of its own success.

However, Equinor’s move to the United States was rational in 2005 when the program began, as the PWC authors noted:

Around 2005, anticipated economic growth in China, India, and Brazil was firming the industry’s expectations for an increase in the global demand for oil. Markets doubted OPEC’s ability to expand production as it had in the past, and the market expected an oil supply shortage in the long-term.³

At that time, the Norwegian Petroleum Directorate reported that the Norwegian Continental Shelf (dubbed “NCS”) offered little potential for future growth. Drilling efforts were low, and there had been few discoveries. Statoil (now Equinor) thus turned to other areas where its expertise at developing large offshore projects fit. The United States offered one of the few real opportunities because most other countries with potential denied access to international companies:

The US was open for business, offering access to resources and assets. The GoM [Gulf of Mexico] was seen as an attractive place to invest based on expectations of high value creation in the deepwater basins, a good strategic fit with Equinor’s capabilities as an offshore operator, favorable economic terms and low country risk. Equinor set a strategy to build a portfolio at scale in the GoM, through exploration partnerships, acquisitions, and competitive lease sales.⁴

Statoil moved past its core competence in 2008, though, by entering onshore US shale production. The firm initially allied itself with Chesapeake Energy, PWC states. This alliance was viewed as “an important step in Equinor’s ambition to grow its international business, to get access to global unconventional gas

¹ “\$30,000 turkey highlights Equinor’s ‘control problems in U.S.,” Reuters, October 9, 2020 [<https://tinyurl.com/y2klhvlo>].

² PWC, “Equinor in the USA, Review of Equinor’s US onshore activities and learnings for the future, prepared for Equinor ASA’s board of directors,” October 9, 2020 [<https://tinyurl.com/y2uwqc2w>], p. 4.

³ PWC, p. 14.

⁴ PWC, p. 14.

opportunities, and to strengthen its US gas position overall.”⁵ With this strategic move, Equinor became one of the first international companies to enter the unconventional area. It did so, though, at the time when natural gas prices were trading at almost \$14 per million cubic feet, an all-time peak.

Equinor then turned from natural gas to oil:

In 2011, the oil price set new records, averaging 111 USD per barrel of oil (bbl). Both Equinor and the industry in general predicted prices to continue increasing for the foreseeable future. That summer Equinor presented a new strategy. By pursuing growth opportunities through exploration and business development, the company set an ambition to increase its daily production by around 30%, to above 2.5 million boe per day by 2020. Growth in onshore unconventional oil and gas resources was one of the key elements of the strategy.⁶

To implement the strategy, Equinor acquired Brigham Exploration in 2011. Brigham was the first company to succeed in producing crude oil from fracked horizontal wells. (Russell Gold describes Brigham’s initial achievement toward the end of 2008, just as financial markets crashed, in *The Boom*.⁷) A key paragraph in the PWC executive summary captures Equinor’s mistakes in acquiring Brigham:

Equinor’s growth strategy and production targets drove behavior at all levels of the company. The company made acquisitions and investments in US onshore based on an expectation that the oil price would increase for the foreseeable future. Investments were not sufficiently tested for robustness at a low-price scenario. The business case for acquiring Brigham was marginal and relied on upsides, which Equinor ultimately was unable to realize. There was a push from executive management for the acquisition to go through, and a mindset of “what does it take to win?”

The PWC summary understates Equinor’s error, though, because its acquisition decision was made just when global markets had been disrupted by the collapse of Libyan oil production and the IEA’s failed intervention in June 2011, three months before the purchase. Equinor did not just buy at the peak of the market but at the top of the commodity supercycle.

The company’s choice was supported by the actions of other firms, according to the Rystad report issued by Equinor. The view of markets, though, was quite different. Indeed, the acquisition may rank as one of the most naive made in the oil sector in this century.

Rystad summarized the financial community’s opinion of the Brigham acquisition in its report:

- All banks had unchanged recommendations for their Statoil target pricing compared to their previous target pricing, implies a neutral valuation.
- Several analysts noted that the deal was expensive compared to previous transactions in the Bakken and that it required high oil prices to create value.
- Most analysts acknowledged the deal as the right strategic move in the continuation of Statoil’s strategic decision to move into shale.⁸

The price paid by Equinor for Brigham may have satisfied analysts. It differed, though, from the market’s view. Figure 1 (page 3) shows the price curve used by Equinor and the actual Brent price from 2011 to the present. It also displays the forward price curves for Brent and WTI at the time of the acquisition.

The divergence of the actual Brent price from the Equinor forecast stands out. Equinor’s bet on the commodity supercycle was a dud. While its executives might plead that they did not know the future, they

⁵ PWC, p. 16.

⁶ PWC, p. 16.

⁷ Russell Gold, *The Boom* (New York: Simon & Schuster, 2014), p. 54.

⁸ Rystad, p. 85.

could have observed the forward price of Brent and WTI at the time of the merger, as the PWC authors explain:

Equinor’s valuation further relied on the company’s expected future oil price. At the time of the acquisition, the oil price averaged around 110 USD/bbl. The business case was based on the oil price increasing to a long-term level of around 125 USD/bbl by 2020. Figure 6 [Figure 1 here] shows the expected price compared to the actual development in price⁹

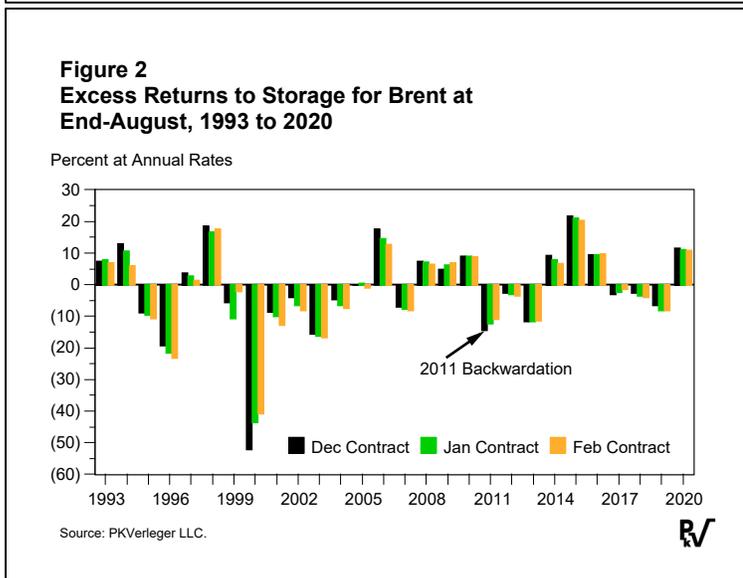
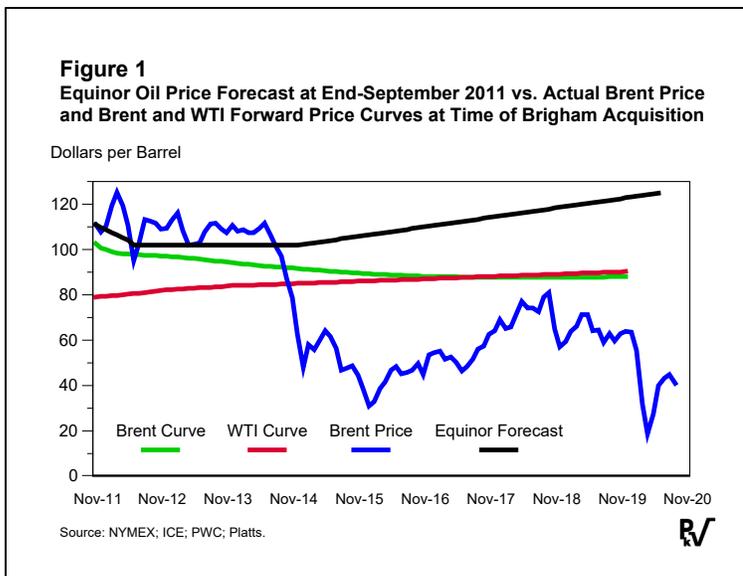
The PWC accountants did not include the forward price curves even though they are instructive. Four features stand out.

First, US prices were \$23 per barrel below the Brent price, and the Brent price was \$10 lower than the threshold price of \$110 used by Equinor. Going forward, the end-2019 price for WTI was \$90 per barrel at the end of September 2011, while the end-2019 Brent price was \$88. Based on the graph published by PWC, Equinor expected a price of \$122.

Second, the backwardation in the Brent forward price curve warned that the high prices at the time of the Brigham offer were temporary. The backwardation observed in Brent

suggested a tight market. The tightness was, in fact, unusual, as can be seen from data on excess returns to storage computed by PKVerleger LLC.¹⁰ Figure 2 above shows excess returns to storage for Brent at the end of August for the December, January, and February contracts by year from 1993 to 2020.

The excess returns data show that markets were tighter in 2011 than in twenty-six of the other twenty-nine years. Markets were tighter in 1996 as oil exporters struggled to squeeze them as Iraq production returned.¹¹ Markets were also tighter in August 2000 as oil-exporting countries limited production to



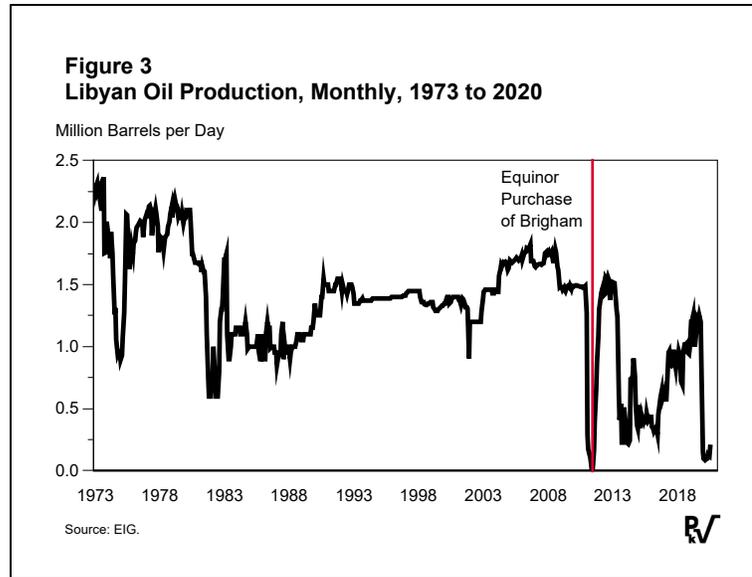
⁹ PWC, p. 18.

¹⁰ Excess returns to storage are a Keynesian concept that measures the relative tightness of the market by showing the annualized rate of return a trader could make by purchasing a commodity, selling a future against it, and storing. At annual rates, the excess returns measure the curvature of the forward price curve and allow comparisons of situations at different times in which price levels can vary widely.

¹¹ “Markets Retain Short-Term Focus,” *Oil Market Intelligence*, August 1996, p. 1.

restore price levels from the depths reached during the Asian financial crisis. Finally, markets were a little tighter in 2003.

The unusual tightness in 2011 compared to the three previous years was explained by the collapse in Libyan production. As shown in Figure 3, Libya produced no oil in July and August 2011, contributing to Brent's high spot price and extreme backwardation. Equinor apparently used this distorted price curve as the basis for the Brigham acquisition.



Third, the lower WTI price in 2011 (\$84 per barrel) reflected the ban on exporting US crude that existed at the time. While efforts were being made to lift the ban, there was no guarantee Congress would act. Indeed, more than three years would pass before it was removed. By September 2014, for example, Brent was quoted at \$97 per barrel, while Bakken, the crude produced by Equinor's Brigham subsidiary, could only receive \$87.

The Rystad analysis notes this difficulty in a slide titled, "Three severe disappointments in oil price development." The first disappointment is labeled "Multi-year price discounts to WTI and Brent" of Bakken crude. These were the discounts caused by transportation costs and surplus light oil in the United States.¹²

Finally, while the word "OPEC" does not appear in the PWC report, the profitability of Equinor's acquisition depended critically on the organization's willingness to "make way" for US shale production. As noted here in the past, high-cost US producers can survive only if oil-exporting nations cut output to maintain market balance. Equinor obviously gave no thought to this factor.

Shareholders in Equinor, of course, bore the burden of its ill-fated foray into shale. Equinor shares traded for almost \$22 when it decided to acquire Brigham and go deep into shale. Most recently, they sold for \$14.17, a decline of thirty-six percent. The share price decrease might have been smaller or dividend payments to shareholders larger had the company's executives not been so irrationally exuberant.

¹² Rystad, p. 79.