Pzena Investment Management

Fourth Quarter 2014 Commentary

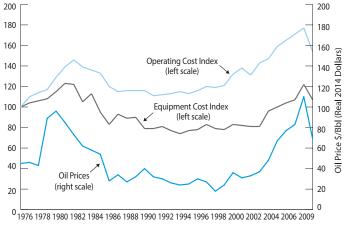
The markets are in the early stages of correcting for an oversupply of oil. There will be winners and losers, with the long-term oil price dictated by the economics of supply.

The price of oil has been cut in half in the last six months, sending shock waves through the industry and slicing equity valuations across the energy sector. Investors are at a crossroads, with the big question being whether this is a buying opportunity or if caution is warranted. We view recent developments as the inevitable beginning of a classic market adjustment to a supply/demand imbalance, and believe we are in the early stages of the cycle as energy companies around the world struggle with the impact of lower oil prices. While this rebalancing will take time, we don't expect the current cycle to be as long as the oil slump of the 1990s. Thus, it is imperative to focus now on the likely winners and losers, paying particular attention to businesses that have operational and financial flexibility to withstand additional volatility and that can adapt to the new realities.

Supply Drives Price

In the near term, the price of oil can swing wildly from small changes in supply and demand, with no natural bottom or top that is easily ascertainable. That is why over the past thirty years there have been only two periods during which the price of oil has not moved by more than 40% over a two-year period.

Figure 1: Costs Are Sensitive To The Price of Oil



Source: Energy Information Administration and Pzena Investment Management Over the long-term, changes in supply tend to have much larger swings than changes in demand. Most investors, however, spend their time focused on short-term moves while losing sight of the true driver of long-term oil prices – the economics of supply.

Over the long-term, oil prices revert to the level at which new projects needed to satisfy marginal demand earn an adequate return on investment. Not even OPEC has the ability to keep prices above or below the market's natural clearing price indefinitely. After a long stretch of low oil prices and underinvestment in the 1990s, prices rose dramatically, providing oil companies with the cash flow needed to help supply catch up with global demand. We view the recent oil price slump as a clear sign that prices stayed too high for too long, leading to the current oversupply of oil. The resulting price correction is the market's process of reducing the level of capital investment such that supply better matches demand.

We believe it will be the persistence of low oil prices and a sharp reduction in industry cash flow that produce the cuts in capital spending necessary to bring the markets back into equilibrium. Although in the context of the nearly 100 million barrels of oil consumed per day the magnitude the oversupply of about 3 million barrels is quite small (compared to an oversupply of 10 million barrels per day and 60 million barrels of demand in the 1980's), we believe it will still take a few years for the market to fully adjust. Behavior changes slowly as companies take time to internalize and reflect lower long-term oil prices in their forecasts. Oil price hedges, long-dated offshore projects for which capital spending is largely immutable, and simple oil price optimism are all likely to contribute to a slower decline in supply growth than most anticipate.

The Normal Price of Oil

To estimate the long-term price of oil, our main focus is on the industry's marginal sources of non-OPEC supply - U.S. shale, Canadian tar sands, and offshore deepwater wells, noting that 84% of 2014 global oil supply growth came from U.S. shale. Each source has projects with a wide range of underlying costs; however we estimate that, on average, these supply sources require \$80 per barrel, \$100+per barrel, and \$80 per barrel, respectively, in order to earn an adequate return based on today's industry cost structure.

We also know from history that costs are sensitive to changes in the commodity price (Figure 1). As the industry adapts, companies make adjustments and are able to earn acceptable returns on new projects at lower oil prices. Should input costs drop by as much as 25% from current levels, a long-run oil price of \$60 per barrel would still allow marginal

suppliers to earn their cost of capital.

Clearly, \$100 per barrel was too high of a price to remain in equilibrium – there was simply too much supply created. As the costs begin to fall with reduced activity levels and lower prices, the economic incentive to drill will require lower prices than historically. In addition, the long-term trend in the price of oil indicates the normal price today should be approximately \$70 per barrel (Figure 2). Thus, we continue to believe that the long-term range of oil prices should be somewhere between \$60 and \$80 per barrel.

Investment Outlook

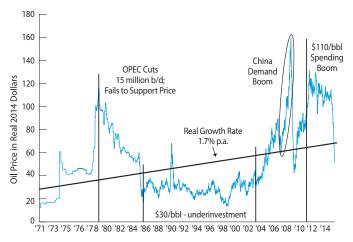
Given the range of potential outcomes for the normal oil price and the likelihood of continued volatility, it is important to focus on finding good businesses at attractive valuations that can withstand financial and operating stress. It is particularly critical to be wary of companies where leverage puts the equity at risk. In the wake of the dramatic drops in most energy company valuations there is a lot to choose from in all the major energy categories: integrated oil, exploration & production (E&P), services, offshore drillers, and refiners (Figure 3).

Integrated Oil

Key Investment Question: How large an impact will operating cost reductions, capital spending cuts, and long-dated project completions have on cash flow?

Background: We continue to find integrated oil companies attractive for the long-term and defensive in the current environment. These companies have the lowest leverage of the energy segments, a diversified non-oil earnings base, significant opportunities for operating and capital cost reductions, and trade at a historically low price-to-book multiple relative to the

Figure 2: Historical Trend Indicates \$70/bbl Normal Oil Price Exponential Curve Fitted to the Oil Price from 1971 to Present in 2014 Dollars



Source: Energy Information Administration, Pzena Analysis

market. Additionally, the companies have significant long-dated capital projects near completion on which the marginal returns on capital are believed to be quite high, which should support cash flows independent of oil price movement. Taken together, integrated oil's meaningful dividend yields, attractive valuation on normal earnings, and relatively strong cash flow support make their total return prospects attractive.

Exploration & Production Companies

Key Investment Question: What is the value of these companies' assets across the range of oil prices, and which have the balance sheet strength to survive a protracted period of low oil prices?

Background: Due to their underperformance vis-a-vis integrated oil companies, many exploration and production (E&P) companies are now in the first quintile of our screening model. These companies are engaged in the development of oil and gas resources without any exposure to refining or chemicals businesses. Although the nature of their businesses can vary widely, these companies typically have higher leverage than integrated oil companies, higher growth rates, lower returns on capital, and tend to have a higher mix of oil production than integrated oil companies. Given the greater sensitivity of their cash flow and earnings to the price of oil compared to integrated oil companies, it is important to identify E&Ps with strong balance sheets and assets that are deeply discounted in the current price environment.

Services Companies

Key Investment Question: What activity levels and pricing should services companies expect within our normal oil price expectations, and what is their ability to withstand substantial near-term weakness in their business?

Background: Services companies are the contractors of the oil and gas industry that provide the drilling, completion, and well maintenance work for both integrated oil and E&P companies. Large-cap services (Continued on page 20)

Figure 3: A Range of Investment Opportunities

	Services					
ı	ntegrated Oil	E&P	Large Cap	Small Cap	Offshore Drillers	Refiners
Oil Beta	0.38	0.77	0.75	1.13	0.97	0.72
25-Yr Return on Tangible Capital	9.8%	8.5%	15.4%	8.5%	9.4%	8.6%
Debt to Equity**	29.0%	39.9%	43.2%	44.8%	61.2%	37.8%
Performance Oct. 1, 2014 to Year End	1 (9.4%)	(26.7%)	[23.3%]	(46.2%)	(18.8%)*	7.8%
Price to Tangible Book Value**	1.5x	1.5x	4.1x	1.4x	0.7x	2.0x

^{*}Offshore drillers were down 45.4% in 2014. The majority of share price weakness occured before the oil price collapse.

Source: Pzena Investment Management, Company Filings, FactSet

^{**}Debt, equity, and tangible book value as of latest reported quarter; stock price as of January 9, 2015.

companies are somewhat diversified through their various offerings and geographic exposures, although they are highly levered to global oil and gas activity levels that are sensitive to commodity price. Their leverage profile is similar to the largest E&P companies, but they have better returns on capital across a cycle, leading to higher multiples of book value. Small and mid-cap services companies typically carry more leverage, offer only a few services, exhibit greater customer and geographic concentration, and have lower returns on capital than their large-cap peers, making them more highly exposed to the activity levels and economics of specific resource basins. Both groups of companies are likely to face pricing pressure as activity levels decline.

Offshore Drillers

Key Investment Question: Will oil price weakness and offshore drilling rig oversupply have a less severe impact than currently anticipated?

Background: Offshore drillers provide drilling services to national oil companies, integrated oil companies, and E&Ps globally. Although these companies are the cheapest on a tangible book basis, their high leverage, fixed cost structure, and undifferentiated product offering make them particularly risky if oil prices remain at today's levels for a prolonged period. Additionally, regardless of oil price movements, this industry

segment is approaching a multi-year oversupply situation. We continue to monitor the sector for an indication that day-rate and utilization levels have stabilized but believe that considerable negative pricing and earnings revision risks remain for the sector.

Refiners

Background: Refiners, which make a spread on the processing of crude oil into refined products for the transportation, industrial, and chemical industries, have performed very well with the oil price collapse. Although we continue to look at refining companies trading at distressed valuations around the globe, such research activity is largely independent of the recent move in oil prices.

Conclusion

High oil prices fueled a massive wave of global investment that has resulted in an oversupply of oil. We expect the market must operate on a go-forward basis at oil prices lower than recent history where marginal sources of supply earn the cost of capital to meet marginal demand. We are in the early stages of this market rebalancing, and companies will take time to adjust to the new operating environment. This affords investors time to assess which companies can navigate the near-term volatility and successfully adapt to the new realities.

DISCLOSURES

Past performance is no guarantee of future results. The historical returns of the specific portfolio securities mentioned in this commentary are not necessarily indicative of their future performance or the performance of any of our current or future investment strategies. The investment return and principal value of an investment will fluctuate over time.

The specific portfolio securities discussed in this commentary were selected for inclusion based on their ability to help you understand our investment process. They do not represent all of the securities purchased, sold or recommended for our client accounts during any particular period, and it should not be assumed that investments in such securities were, or will be, profitable.