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Innovation Fueling Growth: The Case for Natural Gas

Author:

Ryan Issakainen
Senior Vice President
Exchange Traded Fund Strategist
First Trust Advisors L.P.

Over the last century, the US natural gas industry has vacillated between periods of scarcity and periods of oversupply, often the result of government regulation and price controls. Today, the US marketplace is once again awash in natural gas supply, but this time around, its causes are much healthier. Gains in productivity, driven by innovation and fostered by the repeal of price controls two decades ago have proven to be a game changer for the industry. Cheap, clean, and domestically abundant natural gas now fuels a powerful, long-term investment thesis for natural gas ETFs, such as the First Trust ISE Revere Natural Gas Index Fund (FCG), which we believe stands to benefit from increased flows of capital into the natural gas industry, along with a growing trend of mergers & acquisitions among natural gas companies.

A Brief Review of Government Regulation and Price Controls

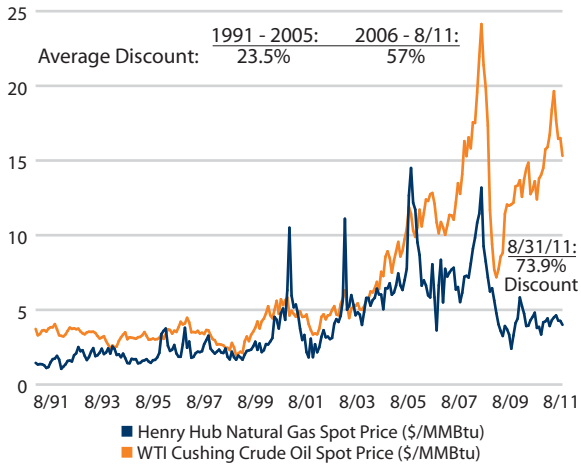
While market forces are primarily responsible for natural gas prices today, this has not always been the case. In 1954, concerns about monopolistic characteristics of the natural gas industry led the US Supreme Court to rule that natural gas companies would be subject to regulatory oversight by the Federal Power Commission (FPC). The FPC promptly introduced price ceilings on natural gas, which were determined by production costs plus a "fair" profit, rather than its market value. In the decades that followed, these regulations held natural gas prices artificially low, particularly for natural gas sold across state lines, which was subject to FPC price ceilings, unlike intrastate natural gas, which was not. As a result, economic incentives to develop new resources were greatly diminished, as was the motivation to develop interstate pipelines.

By the 1970s, demand for artificially cheap natural gas continued to grow, as competing crude oil prices moved higher, resulting in natural gas shortages in non-producing states. This led President Jimmy Carter to include provisions restricting the use of natural gas for electricity generation in the National Energy Act of 1978, which also relaxed some of the price controls on the interstate sale of natural gas. Not surprisingly, these new regulations resulted in a vastly oversupplied natural gas market by the early 1980s. Recognizing the failure of price controls and overregulation to protect consumers, Congress repealed restrictions on the use of natural gas for power generation and phased out price controls by the late 1980s.[1] Finally, after four decades of government intervention, the free market was allowed to function.

Natural Gas is Cheap

During most of the last two decades, there has been a relatively close relationship between the prices of natural gas and crude oil (see chart 1). In comparing their relative cost per unit of energy output ($/MMBtu), the spot price of Henry Hub Natural Gas traded at an average discount of 23.5% versus the spot price of WTI Cushing Crude Oil from 1991-2005.[2] However, during the last 5 years, this relationship has broken down, with natural gas trading at an average discount of 57% from 2006-2011(YTD). As of 8/31/11, natural gas was trading at a 73.9% discount to crude oil.

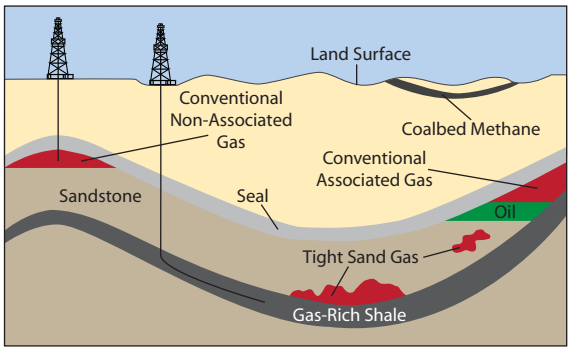
Chart 1



Source: Bloomberg

While instability and fears of supply disruption in producing regions have been largely responsible for elevated oil prices, technological innovation, resulting in tremendous productivity gains, is the key factor in explaining the relatively low price of natural gas over the last 5 years. The combination of hydraulic fracturing (or "hydro-fracking") and horizontal drilling has dramatically improved efficiency and unlocked an enormous resource base for natural gas producers. Unlike conventional vertical wells, which can effectively tap into certain pockets of natural gas but only punch through a small cross-section of relatively thin gas-rich shale, producers utilizing these unconventional techniques drill horizontally along a layer of shale deposits, injecting fluids under high pressure to release the natural gas trapped inside (see diagram below).

Diagram 1



Source: U.S. Energy Information Administration and U.S. Geological Survey

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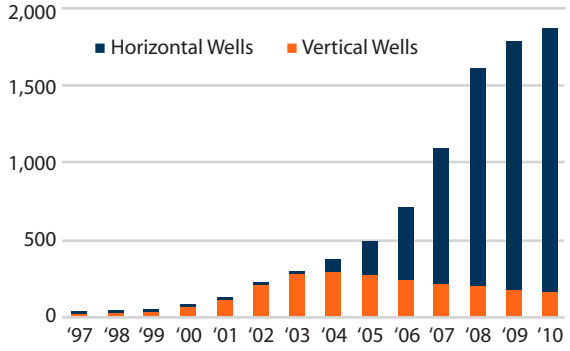
The Barnett Shale formation in Texas provides a good example of how these techniques have disrupted the previous model of production. From the late 1990s through 2005, vertical wells accounted for the vast majority of Barnett Shale natural gas production. However, in subsequent years, the shift to horizontal wells has been dramatic, increasing from under 400 wells in 2004 to 10,000 wells in 2010, resulting in an explosion in the volume of natural gas produced (see Chart 2).[3]

Chart 2

Annual Barnett Shale Natural Gas Production by Well Type
Billion Cubic Feet (Bcf)



Source: U.S. Energy Information Administration

Natural Gas Resources are Abundant

Technological advancements in natural gas production have not only improved efficiency, they have also dramatically expanded estimates of domestic natural gas supply. In its biennial report for 2006, the Colorado School of Mines "Potential Gas Committee" estimated that the "US Future Supply" of natural gas totaled 1532 trillion cubic feet (Tcf). When the committee released its 2010 report earlier this year, the US Future Supply was estimated to be 2170 Tcf, an increase of 42% from 4 years prior. For natural gas companies, an increase in the quantity of recoverable gas not only increases the potential value of their assets, it also bolsters the long-term viability of the entire natural gas industry.

Natural Gas is Cleaner

While governments around the world enforce increasingly strict regulation of carbon emissions, natural gas provides substantial advantages over coal and petroleum. For equivalent amounts of energy output, natural gas emits 41% less carbon dioxide than coal, and 27% less than fuel oil.[4] While renewable energy sources, such as wind and solar power, currently remain too expensive for widespread implementation, switching to natural gas provides a much more economically viable way to meet regulatory pressures. Tempering some of the environmental enthusiasm for natural gas are concerns about the potential impact of hydro-fracking on the local water table, which is an issue currently being studied by the EPA.

Mergers & Acquisitions

As large integrated oil and natural resource companies consider the potential for growth in the natural gas industry, many have begun acquiring natural gas resources. Over the past 12 months, energy exploration and production companies (and their assets) have been among the most frequent targets for acquisition, with 557 deals announced totaling $104 billion worldwide. The average premium at which these deals were announced was about 23%.[5] Cash-rich companies looking to increase their natural gas asset base are further incentivized by relatively low natural gas prices and reasonable equity valuations.

Natural Gas ETFs

For investors looking to benefit from the long-term secular growth of the natural gas industry, there are two types of ETFs to consider: ETFs that provide exposure to natural gas via futures contracts, and ETFs that provide exposure to natural gas-related equities (see "Inside First Trust ETFs," April 2011 for a closer look at these two structures).

Because our investment thesis is based on the long-term, productivity-fueled growth of the natural gas industry, rather than a short-term bet about the direction of natural gas prices, we believe it makes more sense to invest in ETFs that hold natural gas exploration and production companies, such as the First Trust ISE Revere Natural Gas Index Fund (FCG). This fund invests in an equal-weight portfolio of 30 such companies, blending some of the larger energy companies (many of which are actively increasing their natural gas resources), with small and medium-sized companies (several of which could make attractive M&A targets). Most importantly, unlike ETFs tied to natural gas futures contracts, we believe this fund stands to benefit from the aforementioned gains to productivity and efficiency, along with demand-driven increases to the price of natural gas, each of which may result in better cash flows and earnings for its underlying holdings.

[1]Naturalgas.org provides a more detailed summary of the history of natural gas regulations in the US.

[2]Averages based on monthly prices obtained from Bloomberg. According to US Dept of Energy tables, 1 barrel of crude oil contains 5.8 MMBtus of energy output.

[3]U.S. Energy Information Administration

[4]According to the US Energy Information Administration.

[5]Data obtained from Bloomberg, as of 9/29/2011.

RISKS

The fund's shares will change in value, and you could lose money by investing in the fund. One of the principal risks of investing in the fund is market risk. Market risk is the risk that a particular stock owned by the fund, fund shares or stocks in general may fall in value.

The fund's return may not match the return of the ISE-REVERE Natural Gas Index™. The fund may not be fully invested at times. Securities held by the fund will generally not be bought or sold in response to market fluctuations. The fund may invest in small capitalization and mid capitalization companies. Such companies may experience greater price volatility than larger, more established companies.

Investors buying or selling fund shares on the secondary market may incur customary brokerage commissions. Investors who sell fund shares may receive less than the share's net asset value. Shares may be sold throughout the day on the exchange through any brokerage account. However, shares may only be redeemed directly from the fund by authorized participants, in very large creation/redemption units.

You should be aware that an investment that is concentrated in stocks in the natural gas industry involves additional risks, including limited diversification. The companies engaged in the natural gas industry are subject to certain risks, including price and supply fluctuations, increased interest rates, and fuel prices which will vary with supply and demand factors including weather and general economic and political conditions.

The fund is classified as "non-diversified." A non-diversified fund generally may invest a larger percentage of its assets in the securities of a smaller number of issuers. As a result, the fund may be more susceptible to the risks associated with these particular companies, or to a single economic, political or regulatory occurrence affecting these companies.

You should consider a fund's investment objectives, risks, and charges and expenses carefully before investing. Contact First Trust Portfolios L.P. at 1-800-621-1675 or visit www.ftportfolios.com to obtain a prospectus or summary prospectus which contains this and other information about a fund. The prospectus or summary prospectus should be read carefully before investing.