

The Implications of the Exxon Mobil Transaction and AAM's Natural Gas Forecast

We believe the Exxon Mobil acquisition of XTO is the beginning of profound changes that will take place involving natural gas and the companies that help produce the hydrocarbon. In this article, we review the implications of that transaction, provide the rationale behind our \$5 natural gas forecast for 2010 and recommend several issues that should perform well in this commodity environment.

IMPLICATIONS OF EXXON MOBIL'S ACQUISITION OF XTO

We believe that the acquisition of XTO by Exxon Mobil (XOM) is the beginning of many profound changes that will take place involving natural gas. We believe the most important lesson of this acquisition is what the company is *NOT* acquiring. This purchase of XTO is an indirect acknowledgement by Exxon Mobil that meaningful future growth will likely not come from regions where hydrocarbons are controlled by a state-run oil company. In other words, expect Supermajors¹ to be active buying companies or assets of companies in Organization for Economic Cooperation and Development (OECD) countries.

The second and most obvious thought from the transaction is that Exxon Mobil wanted more exposure to the U.S. unconventional natural gas market. It was late to the game and the easiest way to get access to these assets in this market was to purchase the best unconventional operator. Additionally, as has been well documented, Exxon Mobile intends to leverage XTO's expertise in unconventional natural gas production in the acreage it owns in Germany, Poland, South America and Canada.

The third item to take away from the transaction by Exxon Mobil is that management does not believe that upcoming liquefied natural gas (LNG) projects will flood the natural gas market and cause the price to collapse as many market pundits have suggested. Exxon Mobil is one of the leaders in

the space with at least a minority interest in such mega-projects as Ras Laffan, Papua New Guinea and Gorgon and with many other investments in LNG terminals around the world. Given the \$41 billion investment in XTO, Exxon Mobil must be highly confident that unconventional natural gas will at the very least complement its equally large LNG investment.

Some Lingering Questions

We believe the unknown that will affect the most companies in the oil and gas sector is Exxon Mobil's capital plans with regard to domestic natural gas production. Will it hold back capital to limit production and increase natural gas prices? Or will it increase capital and increase production (to offset declines in other parts of it's portfolio), thereby lowering prices and hurting high cost competition?

The obvious question everybody is asking is, who's next? Other Supermajors are likely experiencing similar difficulties in getting access to reserves around the world, which is limiting growth opportunities. Those companies are likely having discussions about making a similar acquisition that would provide the same type of benefits. Larger potential targets have been well documented such as Chesapeake Energy, Devon Energy, Encana, Anadarko Petroleum. Of these companies, we believe that Devon Energy and Encana make the most sense given each of those companies' assets, management teams, balance sheets and structures. The fixed income market seems to disagree with us however; since the Exxon Mobil/XTO transaction was announced Anadarko has been the best

¹ Exxon Mobil, Royal Dutch Shell, BRPLD, Chevron Corp, ConocoPhillips, Total S.A.

performer in the investment grade space outside of XTO. Admittedly, Anadarko has large acreage positions in the Haynesville and Marcellus shales, but they also have many of the conventional natural gas wells that are not very desirable. Chesapeake has the best assets of the group, but its \$12 billion of debt and joint ventures with BP, Statoil and Plains complicates matters (**Exhibit 1**).

Exhibit 1:

Ticker	Coupon	Maturity	Spreads to Treasury			Comments
			12/7/2009	12/15/2009	Bps Δ	
APC	6.950%	6/15/2019	175	122	(53)	200K acres in Haynesville; 200K in Marcellus; mgmt is transaction oriented
DVN	6.300%	1/15/2019	115	103	(12)	200K acres in Haynesville; Ootla Acreage near XOM; CEO is 67.
ECACN	6.500%	5/15/2019	145	124	(21)	325K acres in Haynesville; 220K in Ootla
CHK	6.875%	11/15/2020	465	439	(26)	585K acres in Fayetteville; 440K in Haynesville; 1.2MM in Marcellus 3 JVs complicate any transaction

Source: AAM, Deutsche Bank

Assuming that the best of the unconventional assets end up in the Supermajors within the next several years (recall it only took about two years to consolidate the Supermajors at the end of last decade), we wonder if natural gas prices become more stable long term as fewer players control supply. We believe that volatility may decline as consolidation advances. But, if there is a disruptive innovation on the demand side (i.e., advancement of cross country electric transmission system, natural gas or electric fueled automobiles, etc.) volatility should come rushing back.

Finally, we question who the buyers may be for all of these assets currently for sale? Currently, ConocoPhillips has \$10 billion of non-core assets for sale, Suncor has \$4 billion of Rockies natural gas assets on the market and Devon has up to \$11 billion of non-North American onshore assets for sale. We believe that finding a buyer is going to be more difficult than originally anticipated. Perhaps the spread compression of the bonds for these companies based on a completed sale and improved balance sheet was premature?

What Makes this Unconventional Gas So Desirable?

Unconventional or shale natural gas is low cost, is in great supply and it is located within the contiguous U.S. (lower 48 states). As a result, this resource is in great demand. The costs of a natural gas shale well per unit of production are about 50% of the marginal cost of conventional natural gas wells in the U.S.. Also, relative to the largest ten regions by production volume, the shale plays are less expensive by up to 10%-50% (**Exhibit 2**).

Exhibit 2:

Top 10 U.S. Natural Gas Fields Ranked by Production as of 2007			
	Production (Bcfd)	% of 2007 U.S.	Price Req'd to Achieve 10% IRR
San Juan Basin Gas Area	3.6	6.9%	\$5.00
Newark East (Barnett Shale)	3.0	5.8%	\$4.20
PRB Coalbed	1.2	2.3%	\$5.40
Jonah	1.0	1.9%	\$5.40
Hugoton Gas Area	1.0	1.9%	\$5.50
Pinedale	0.9	1.6%	\$3.60
Carthage	0.6	1.2%	\$6.00
Natural Buttes	0.5	0.9%	\$5.00
Wattenburg	0.5	0.9%	\$6.10
Prudhoe Bay	0.5	0.9%	\$4.00

More production will come from lower cost natural gas shale plays. The affects will be a steeper supply cost curve.

Top Domestic Shale Plays			
	2010 Est. Prod	% of 2007 U.S.	Price Req'd to Achieve 10% IRR
Barnett Shale (Tier 1)	2.4	5.8%	\$4.20
Fayetteville Shale	2.2	4.2%	\$4.80
Haynesville Shale	3.0	5.8%	\$3.50
Marcellus Shale	2.0	3.4%	\$3.90

Companies w/conventional assets will be marginal cost suppliers and should help set the price. The companies with shale assets will generate greater margins.

Source: AAM, EIA and Ultra Petroleum

Additionally, the vast amounts of shale natural gas have resulted in supply of at least 100 years based on consumption patterns. According to the Energy Information Agency (EIA), after deducting the amount of natural gas the U.S. consumed, proved reserves (actual pipe behind the reserves) increased by 13% in 2008. Moreover, the vast majority of shale natural gas is not “proved” yet, so it is not included in the EIA proved figure.

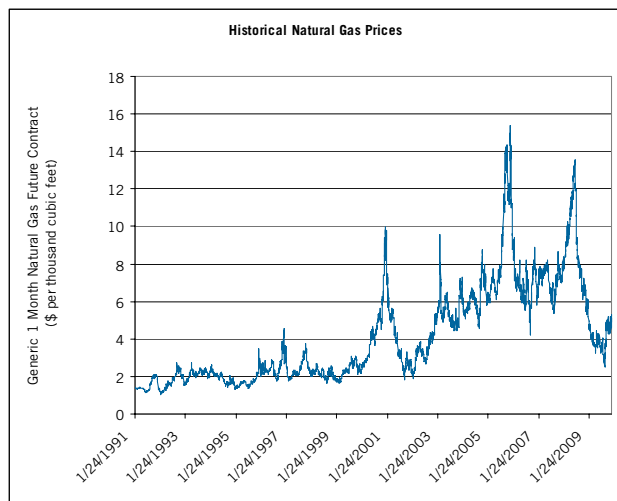
Finally, relative to other regions, the unconventional gas in the U.S. is located in the politically and operationally low-risk states. Given the desire by many countries to limit or shut off access to their natural resources (U.S., Nigeria, Venezuela, Russia, etc.) to outsiders, finding large and accessible reserves for the Supermajors is becoming increasingly difficult.

NATURAL GAS FUNDAMENTALS

Price Outlook

Predicting the price of natural gas has proven to be an exercise in futility in recent years due to concerns over supply (Shale and LNG), wild weather (hurricanes Katrina and Rita), the Great Recession and market manipulation in the early part of the decade. However, we are using \$5 per million cubic feet (mcf) in 2010, which is below the one month future price of \$5.45 per mcf, but is approximately 25% greater than the average price for 2009. We are basing this forecast on a slight increase in supply, less production from lower cost plays and weaker weather related demand (**Exhibit 3**).

Exhibit 3:



Source: AAM, Bloomberg

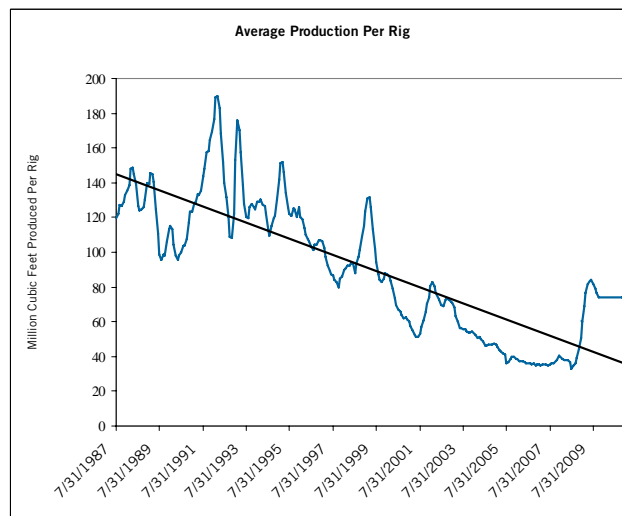
Supply

We expect supply to increase by less than 2% in 2010 based on slightly increased domestic production and flat LNG imports. We expect production in 2010 to increase modestly to 58.1 billion cubic feet per day (bcf/d) from the 57.8 bcf/d averaged so far in 2009. This production level is based on the following assumptions:

1. Drilling rig efficiency continues to decline as the rig count increases. According to data from the EIA and Baker Hughes,

average production as of September 2009 is 81.4 million cubic feet per day (mmcf/d) per rig. We expect this figure to decline to close to 74.3 mmcf/d per rig. This efficiency decline resembles the decline experienced in 2003 when the U.S. was emerging from a recession and natural gas drilling activity increased (**Exhibit 4**).

Exhibit 4:



Source: AAM, Energy Information Administration (EIA), Baker Hughes

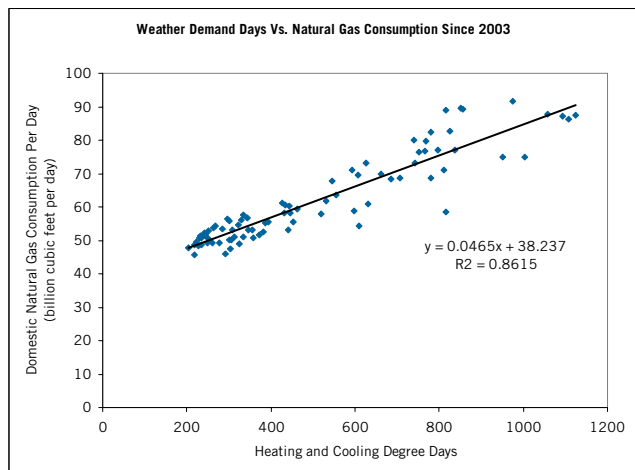
2. The Baker Hughes natural gas rig count averages just over 780 in the U.S. in 2010, a slight decrease from the average natural gas rig count this year of 793.
3. Additionally, we expect LNG imports in the U.S. to be similar to the levels experienced in 2009. We anticipate LNG contracts in Japan and South Korea to continue to get priced off of crude oil, which is trading at 13 times the price of natural gas. This represents a 100% premium to natural gas given the 6:1 energy content of oil to natural gas.
4. Finally, we believe some low cost natural gas may be shut-in in the near-term as operators met their lease requirements in

2009. New leases commonly expire if production is not established within five years, and sometimes as quickly as three years plus a two-year option. We believe operators rushed to meet this requirement during the land rush of 2006-2009 and this event probably won't recur in 2010.

Demand

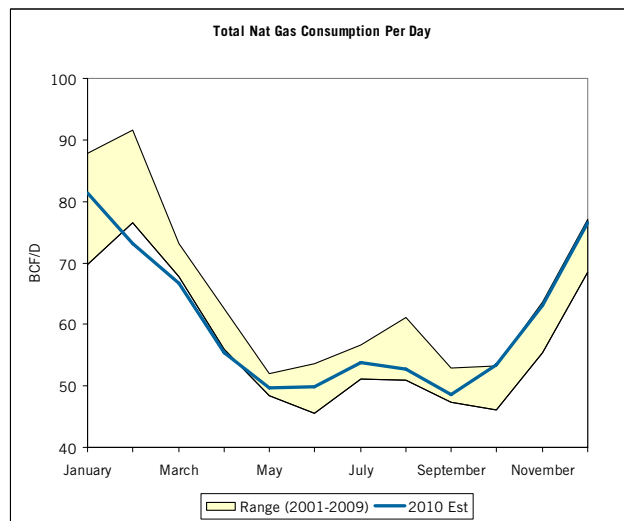
We expect consumption of natural gas in 2010 to decline 5% from 2009 levels based on average weather degree days as defined by the National Oceanic and Atmospheric Administration (NOAA). Volatility of domestic natural gas consumption can be explained almost entirely by changes in weather related demand. In reviewing data since 1973, changes in weather degree days explained more than 76% of the volatility in natural gas consumption. Regressing that data since 2003 reveals that the relationship has become even stronger at 86%. We believe the change in correlation coefficient makes sense given that the non-industrial component of natural gas consumption now makes up 71% of total consumption versus the 54% in 1973. Based on that relationship and forecasting an average amount of weather degree days in 2010, we expect consumption to be off slightly in the upcoming year (**Exhibit 5 and 6**).

Exhibit 5:



Sources: AAM, EIA and National Oceanic and Atmospheric Administration(NOAA)

Exhibit 6:



Sources: AAM, Energy Information Administration (EIA)

BONDS WE EXPECT TO OUTPERFORM IN THIS ENVIRONMENT

The Exxon Mobil transaction positively affected spreads in the energy space with 10-yr issues tighter by an average of 15 basis points (this excludes XTO, which was quoted about 80 basis points tighter). Nevertheless, there are pockets of value. We continue to recommend Weatherford (WFT) bonds as the company will benefit from greater capital spending from the upstream in 2010 and its bonds still offer good relative value. More specifically, we recommend the WFT 6's due 2018, which are currently offered at +180. While WFT has higher yielding paper, we believe the market may have a greater appetite for the lower dollar price of this specific issue. We also continue to recommend adding the Cenovus (CVECN) 6.75's due 2039 currently offered at +149. Cenovus is the oil-related company recently spun-off from Encana. It has good assets, a solid credit profile, low finding costs and should benefit by strong oil prices.

AAM THOUGHT LEADERSHIP

The Implications of the Exxon Mobil Transaction and AAM's Natural Gas Forecast

Written by:

Patrick J. McGeever
Vice President, Corporate Credit

For more information, contact:

Joel B. Cramer, CFA, *Director of Sales and Marketing*
joel.cramer@aamcompany.com

Greg Curran, CFA, *VP, Business Development*
greg.curran@aamcompany.com

30 North LaSalle Street
Suite 3500
Chicago, IL 60602
312.263.2900
www.aamcompany.com

This information was developed using publicly available information, internally developed data and outside sources believed to be reliable. While all reasonable care has been taken to ensure that the facts stated and the opinions given are accurate, complete and reasonable, liability is expressly disclaimed by AAM and any affiliates (collectively known as 'AAM'), and their respective officers and employees. Any opinions and/or recommendations expressed are subject to change without notice.

This information is distributed to recipients including AAM, any of which may have acted on the basis of the information, or may have an ownership interest in securities to which the information relates. It may also be distributed to clients of AAM, as well as to other recipients with whom no such client relationship exists. Providing this information does not, in and of itself, constitute a recommendation by AAM, nor does it imply that the purchase or sale of any security is suitable for the recipient.