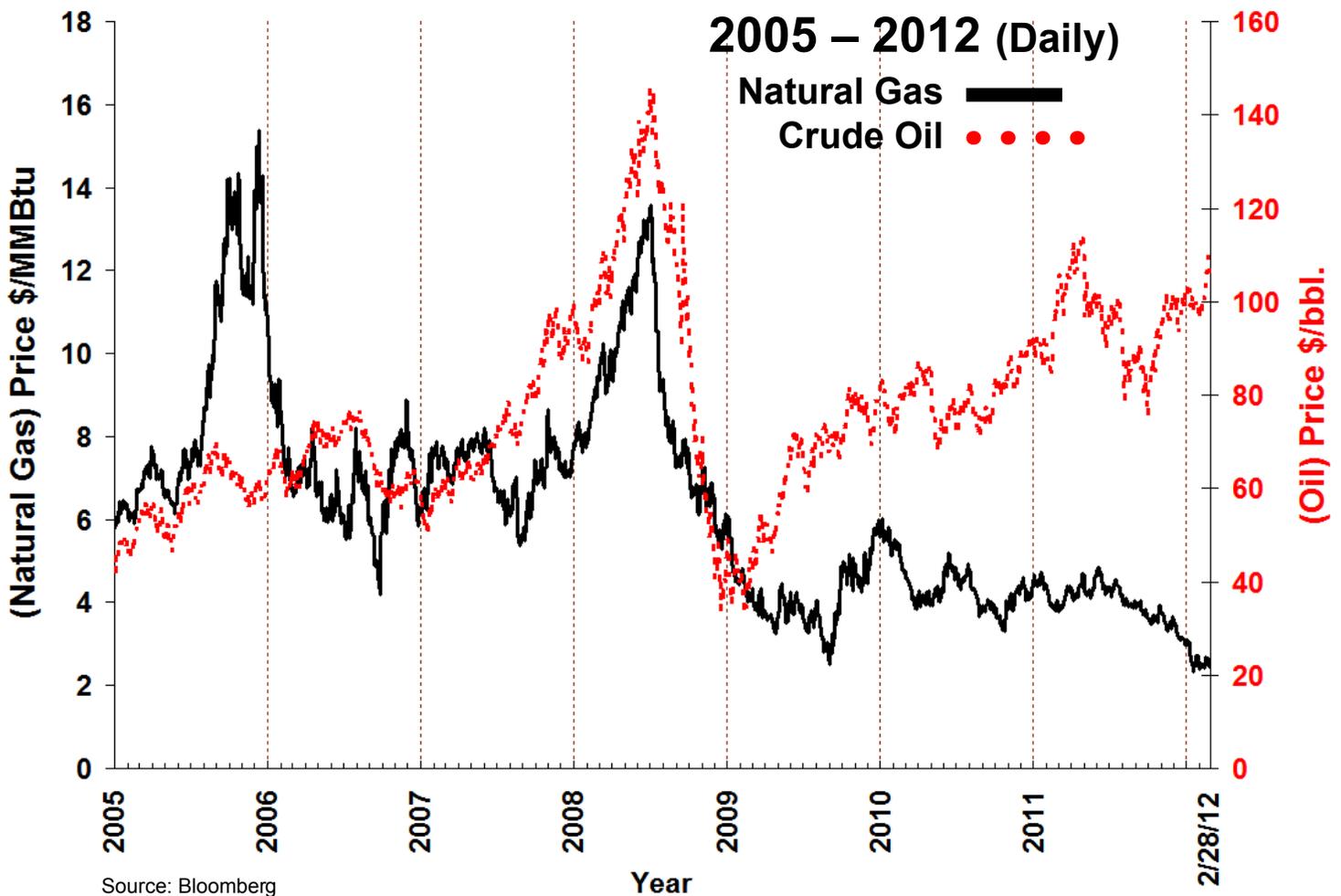


How Shale Gas Benefits the Consumer



I read a lot of stories in the paper about gas companies getting rich off of shale gas. Once in a while, I'll read a story about a farmer (landowner) who is buying a new tractor with the money he got from signing a gas lease, but usually the focus is on the companies doing the drilling and how much money they are making and taking home to places like Texas and Oklahoma where their corporate headquarters are. Seems to me the newspapers are ignoring one of the key beneficiaries of this whole discovery: the consumer of natural gas.

The chart above shows natural gas spot prices at the Henry Hub, and the price of crude oil since 2005. While the price of crude oil is back above \$100/barrel, the price of natural gas is flirting with all-time lows. This should

translate into significant savings for those of us who heat our homes and cook our food with natural gas.

Has it?

I live in a 100-year-old farmhouse in Western Pennsylvania heated by natural gas. Looking back at my gas bills over the last six years, I see that my charges break down into three categories: a customer charge, a delivery charge, and a commodity charge. The customer charge is a flat monthly fee and does not vary with the volume or price of gas delivered, so I've pulled it out of the following table. Comparing my bills from November 2006 with November 2008 and November 2011 looks like this:

	Cost per CCF at 11/2006 rates	Cost per CCF at 11/2008 rates	Cost per CCF at 11/2011 rates	Difference per CCF between 2011 and 2006	Difference per CCF between 2011 and 2008
Delivery Charge	\$0.47689	\$0.48894	\$0.47703	\$0.0001	-\$0.0119
Gas Cost Adjustment	-\$0.05922	\$0.0485	-\$0.04978	\$0.0094	-\$0.0983
Commodity Charge	\$0.82952	\$1.11984	\$0.55133	-\$0.2782	-\$0.5685
Total	\$1.2472	\$1.6573	\$0.9786	-\$0.2687	-\$0.6787

Focusing on the bottom line in 2011, I saved 27 cents per hundred cubic feet (CCF) of gas used compared to 2006 and 68 cents per CCF compared to 2008. On average, I use 1,800 CCF per year, so my annual savings on gas in 2011 was \$483 compared to 2006, and \$1,220 compared to 2008. My house may be larger than average; a quick survey around the office highlighted that most of my coworkers use between 700 and 800 CCF per year. Using 750 CCF as an annual usage figure, their savings would have been \$201 compared to 2006 and \$509 compared to 2008. You can take your gas bill, which should give you an estimated annual usage figure, and estimate pretty closely how much you've been saving on gas compared to 2006 or 2008.

Historically, the price of natural gas and crude oil have pretty much moved in lockstep; as one went up so did the other, until about 2009. Then the price of crude oil moved up and is now near its 2008 highs, while natural gas prices went down and are at ten-year lows. That was the impact of shale gas. So while you are paying more to fill the tank of your car, you are paying less to heat your house, if you have natural gas heating.

Natural gas is an input for many of the products consumers buy, including electricity, steel, fertilizer, and plastics. So, a decline in natural gas prices should result in lower costs for a wide variety of goods. Quantifying the impact on the prices of all those products is difficult because so many other factors are involved. Seeing the difference in your gas bill is pretty straightforward.

Don't let the popular media fool you into thinking that only the gas companies are benefitting from shale gas. The consumer clearly is, too, and his gas bill is the most obvious of the benefits.

A note on measuring natural gas quantities: There are two common ways of measuring quantities of natural gas bought and sold: volume and energy content. Volume is measured in cubic feet with the most common denominations being hundreds of cubic feet (CCF) and thousands of cubic feet (MCF). Energy content is measured in British Thermal Units (BTUs), with the most common denominations being 100,000 BTUs (a Thermal Unit or Therm) and a million BTUs (abbreviated MBTU or MMBTU). The energy content of a cubic foot of natural gas varies from about 900 BTUs to 1,050 BTUs, but a decent approximation is that one cubic foot of gas provides 1,000 BTUs of energy. So a Therm is roughly equal to a CCF, and an MCF is roughly equal to an MBTU or MMBTU. Wholesale pricing is usually in dollars per MMBTU. Retail pricing on your gas bill varies. We've seen dollars per MCF, dollars per CCF, dollars per Therm, and dollars per MMBTU.

– Ron Muhlenkamp

The comments made by Ron Muhlenkamp are his opinion and are not intended to be investment advice or a forecast of future events.



Muhlenkamp & Company, Inc.
5000 Stonewood Drive, Suite 300
Wexford, PA 15090
(877) 935-5520
www.muhlenkamp.com