

Natural Gas As The Beat Goes On

One of Mother Nature's least endearing qualities is she is not at all averse to showing us who is boss. Consider this passage from [October 2013](#):

Even though storage in the Department of Energy's Eastern Consuming region is 6.9% below year-ago levels, unless we have a much colder than expected winter that strains delivery capacity, prices are unlikely to advance significantly.

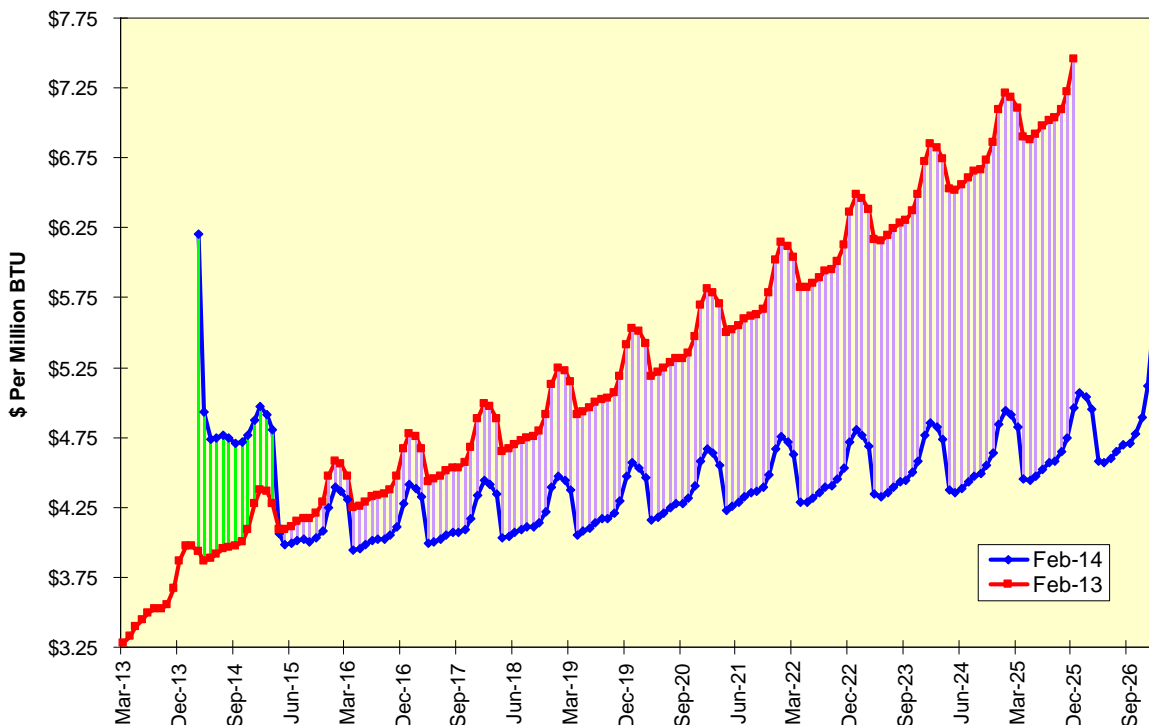
With apologies to various Biblical prophets, that certainly came to pass in what has felt like the end of days. Natural gas-weighted heating degree-days in the East North Central, Mid-Atlantic and West North Central regions are running 114, 82 and 103 HDD over normal. A heating degree-day is defined as $\max(0, 65^\circ - \text{Actual})$.

Well, what are we going to do, sit in a snow bank and cry about it? No, we are investors! Cold investors, maybe, but investors nevertheless, so when life hands us a lemon, we eat it, peel and all and ask for another one. Let's update the forward curve of natural gas versus year-ago levels and take a look at which industry groups are helped and hurt by the higher price of eighteen-month natural gas strips.

Pay Today, Get Tomorrow

As noted [Monday](#) in the case of agricultural futures, commodity markets have this way of spiking higher during either supply disruptions or demand surges. Those higher prices tend to be self-correcting as demand surges and logistical problems are temporary by their very nature. Moreover, higher prices signal suppliers to ramp production higher. As a result, the current jump in natural gas prices pushed prices higher versus year-ago levels out to April 2015, at which point they are significantly lower going out to the mid-2020s. (Did I just write "mid-2020s?" I did. When I began my career as an economist, all forecasts ended in the year 2000. It was like some medieval map showing sailors falling off the edge of the ocean.)

Year-Over-Year Change In The Natural Gas Forward Curve
Higher Now, Lower Later



Positive Impact

One of the surprising conclusions I reached when crude oil started to break out to new highs in 2004 was the old [connection](#) between higher crude oil prices and lower stock prices was dead. I reached the same conclusion for [gasoline](#).

Is the situation similar for natural gas? Yes; if we look at the statistically significant weighted partial contribution of natural gas strip prices to each industry group in the S&P 1500 Supercomposite, we see it is a positive 0.58%. Each 1% increase in the strip price, about \$0.046 per million BTU, should lead to a gain of 0.58% in the stock market, all else held equal.

The reason, obvious from the table below, is higher natural gas prices have a very strong and concentrated positive effect on the energy sector while their negative effects are dispersed over some unrelated groups. As more and more industrial activity in the U.S. is linked to energy production, this effect will continue.

Natural Gas Beta-Weighted Impact On S&P 1500							
	SPR	NG	Weighted		SPR	NG	Weighted
	Weight	Beta	Beta		Weight	Beta	Beta
Multiline Insurers	0.7%	0.043	0.0003	Oil & Gas Exploration	2.4%	0.150	0.0036
Healthcare Services	0.56%	0.042	0.0002	Integrated Oil & Gas	4.23%	0.026	0.0011
Insurance Brokers	0.34%	0.033	0.0001	Oil & Gas Equipment	1.58%	0.061	0.0010
Environmental Services	0.28%	0.031	0.0001	Oil & Gas Drilling	0.37%	0.089	0.0003
Office Electronics	0.09%	0.098	0.0001	Drug Retailers	0.74%	0.040	0.0003
Technology Distributors	0.12%	0.054	0.0001	Oil & Gas Storage	0.39%	0.046	0.0002
Industrial REITs	0.1%	0.058	0.0001	Coal & Cons. Fuels	0.10%	0.134	0.0001
				Agricultural Products	0.20%	0.045	0.0001
				Independent Power Producers	0.10%	0.054	0.0001
Subtotal:	2.2%		-0.10%	Subtotal:	10.12%		0.68%
				Total:	12.33%		0.58%

In addition, investment decisions are not made on those higher spot prices sticking out so prominently in the first chart but rather on forward strips. Making investment decisions on 30 or 60-day prices would be like expecting investment decisions to be made on the overnight federal funds rate, and who would be silly enough to assume that? Markets see the lower forward prices extending out to those, yes, mid-2020s and understand the present price spike is a short-term phenomenon.

You may not feel the same way about your home heating bill, though.