

PARALLELS IN US NATURAL GAS: 2012 AND 2016 BUILD SEASONS

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OVERVIEW AND CONCLUSION

Cultural viewpoints (including variables selected, organized, and assessed) regarding the past and present or focused on an anticipated future reflect opinions, not science. Moreover, marketplaces “themselves” are not unchanging or Natural phenomena. In any case, marketplace history does not necessarily repeat itself, whether entirely, partly, or at all.

The United States natural gas build season spans roughly from the end of calendar March to the end of calendar October. America’s natural gas 2016 inventory build season, including its price trends, although it has several more months to run, nevertheless presents several parallels with 2012’s build season. Assuming inventory forecasts for the balance of the 2016 build season come true, one crucial similarity between 2012 and 2016 will be substantially diminishing US natural gas oversupply over the course of build season.

The winters of 2011-12 and 2015-16 not only ended with massive supplies, but also completed long-running major bear trends. In commodity arenas, all else equal, and absent some revolutionary developments on the supply or demand side, there is some tendency for gigantic oversupply (mammoth inventories) accompanied by sustained depressed prices eventually to be reversed by falling production, increasing demand, or both. In natural gas, if prolonged bullish weather patterns appear (such as a torrid summer or frigid winter), they obviously can help to minimize the bearish oversupply situation or transform it to a bullish one.

Also, although natural gas price trends do not always closely intertwine with those of the petroleum marketplace (or commodities “in general”), or with other financial playgrounds such as stocks, currencies (especially the US dollar), and American government and other benchmark interest rates, they can entangle with them. In second half 2012, important stock and commodity marketplaces rallied and the dollar paused in its appreciation. In mid-first quarter 2016, a similar “overall” phenomenon occurred. In both time periods, ongoing or anticipated (eventual) monetary easing by key central banks likely assisted the bull moves in stocks and commodities, including natural gas.

Finally, at times the CFTC’s Commitments of Traders reveals patterns for noncommercial participants (investors, speculators) in natural gas relevant for assessing price trends. The net noncommercial positions in the later stages of the bear trends which ended in 2012 and 2016 present roughly similar patterns.

From the historical distance (price move) perspective, ten major NYMEX natural gas bear moves prior to 2014-16’s tumble traveled an average of 65.9 percent. For the seven collapses beginning with the December 1996 one, the average downturn is 70.4pc. From the time parameter, the average decline for the 10 big bear moves was about nine and three-quarter months. For the most recent seven major bear moves preceding the one that began in February 2014, the duration averages about eleven and one-quarter.

The collapse from 2/24/14’s 6.493 major high to 3/4/16’s 1.611 low was 75.2 percent and just over 24 months. Thus the price move traveled moderately farther than average. Significantly, the

two year decline since February 2014's summit was more than twice as long as average major bear trends, surpassed only by the January 2010 to April 2012 crash (during which the price fell 68.9pc). Thus from the interrelated price and time variables (nearest futures continuation basis), and though history is not destiny, a major change from the long-running bear trend that commenced in February 2014 probably occurred following 3/4/16's low.

Also note that March 2016's 1.611 level stands within a range of other important support. Recall not only 4/19/12's major low at 1.902, but also the double bottom of 1.85 (1/28/02)/1.76 (9/26/01), a trough at 1.735 on 9/5/96 alongside a low at 2/24/97 at 1.68, and 1998-99's bottom (8/27/98 at 1.61/2/26/99 at 1.625). Also, the March 2016 trough did not break 12/18/15's interim low at 1.684 by much.

Moreover, from a calendar day viewpoint, March 4 is within several days of the February dates for the important late February bottoms of 1997 (2/24/97 at 1.68) and 1999 (2/26/99 at 1.625). In addition, the March 2016 low is a two year diagonal time move relative to the late February 2014's pinnacle.

"US Natural Gas: Traveling Forward" (6/13/16) emphasized: "The United States natural gas (NYMEX nearest futures continuation basis) major bear trend that followed 2/24/14's major peak at 6.493 ended with 3/4/16's 1.611 bottom. What if a torrid summer 2016 dramatically reduces the stock build total and thus helps containment fears for end build season 2016 to disappear? Then prices likely will not revisit the 1.60/1.90 range, but instead will maintain their ascent toward [the significant resistance range of] 3.10/3.45... The US natural gas supply/demand perspective over the so-called long run is moderately bullish. Assuming normal winter 2016-17 weather, moderate US economic growth, and no renewed collapse in the overall commodities complex (particularly petroleum), gas prices probably will march higher."

US NATURAL GAS INVENTORIES: RAISING THE CURTAIN

In the ensuing analysis for US working gas inventories, historic bcf levels are from the Energy Information Administration ("EIA"). Recent bcf history comes from its Short-Term Energy Outlook, ("STEO", Table 5a, 6/7/16, next release 7/12/16). The following discussion adjusts some of the June 2016 STEO's build season inventory estimates to account for inventory developments. Builds during calendar June 2016 have been smaller than the EIA's June 2016 STEO had forecast.

Detailed historical analysis of working natural gas inventories enables audiences to ascertain the degree of tightness in America's overall supply/demand situation. Although arithmetical (bcf) levels are important, review from the days coverage perspective generally offers greater insight. After all, supply and demand levels in commodity playgrounds can evolve over time, sometimes significantly.

However, the days coverage perspective of course does not provide a complete viewpoint on the natural gas inventory situation and related price risks. So fundamental considerations related to days coverage should be interpreted alongside the potential for inventory containment problems (supply relative to arithmetic storage capacity availability).

End March 2016 gas inventories of 2492bcf were very high, establishing a new end March record for the 1990-present scene. In days coverage terms, end March 2016's 33.1 days exceeded the 1990-present average for end March by almost eleven days, and that of 2006-present by about eight days. However, even if one sticks with the EIA's June 2016 STEO estimate of 4161bcf (rather than reducing it), end October 2016's resulting 54.3 days coverage level is about average. In any event, modest days coverage level for October 2016 nevertheless does not eliminate a containment danger.

NATURAL GAS BUILD SEASON 2016 IN CONTEXT

REVISITING HISTORY: END MARCH AND END OCTOBER GAS STOCKS

In the following discussion regarding US end calendar March working gas inventories, the indicated "year" for a given March derives from the calendar year of the preceding October. Thus the 2473bcf (in actual calendar March 2012) for the 2011 "year" is from the end October 2011 to March 2012 winter draw season. March 2016's 2492bcf inventory at the end of winter 2015-16 (for the 2015 "year") slightly surpassed 2012's, thus establishing a new bcf record for the 1990-2015 era. However, 2015's 33.1 days coverage resides in second place relative to 2011's 36.9 days.

Both the March 2012 and March 2016 inventories dwarfed average levels. The long run (1990-2015) end month arithmetic (bcf) average for calendar March is 1387bcf, with 22.2 days the end March days coverage average. The medium run (2006-15) end March days cover average is 25.0 days, 2.8 days greater than 1990-2015's.

What does a survey of end October inventory history unveil? Focus especially on the days coverage variable. Changing demand trends affect days coverage. The long run (1990-2015) average inventory is 3340bcf and 53.6 days coverage. The record high bcf level was 2015's 3953bcf, with 2012's 3929bcf in second place. The peak days coverage was 1990's huge 66.0 days, with 2009's 60.7 days the runner-up. The 2015 arithmetic level represented 52.5 days coverage (one day less than the long run average), with 2012's equal to 56.3 days (a modest 2.7 days above normal). Natural gas consumption climbed from about 59.4bcf/day for full calendar year 2006 to 69.8bcf/d in 2012 to 75.3bcf/d in 2015. The medium run (2006-15) days coverage for end October is 55.5 days, 1.9 days above the 1990-2015 time span.

From 1990-2015, the average days coverage increase from end March to end October is about 31.3 days. For about the past decade of build seasons (2006-15), the average days coverage increase from end March to end October is about 31.0 days.

2012 AND 2016 BUILD SEASONS

What was the natural gas inventory build season pattern for 2012? What have they been for 2016 to date, and what will they be thereafter? For June 2016, the analysis below takes the most recent weekly data and adds an estimate for the last week of the month. Since sometimes stocks increase during calendar November, that month is included below.

The EIA's June 2016 STEO predicted inventory for June 2016 and thereafter. The EIA forecasted working natural gas inventories would ascend to 4161bcf at end October 2016 (STEO, Table 5a).

Relative to calendar year 2016 consumption of about 76.6bcf/day (up 1.8 percent year-on-year), days coverage at the close of the 2016 build season will be about 54.3 days (4161bcf divided by 76.6bcf/day).

For the week ending 6/24/16, United States working gas in underground storage (Lower 48 states; EIA) was 3140bcf. If stocks increase another 35bcf to end June 2016, inventories will be 3175bcf. The EIA's June 2016 STEO gave 3263bcf, but national weather was hotter than normal. So likely end June 2016 stocks fell about 88bcf beneath that prediction. The table above accordingly reflects an 85bcf cut (rounding down from 88bcf) for each month of the EIA's July through November predictions. Thus the table below gives end October 2016 inventory of 4076bcf and 53.2 days coverage. The EIA likely will adjust its forecast to some extent in July and subsequent STEOs.

	Calendar 2012 Build Season		Calendar 2016 Build Season	
	<u>Inventory (BCF)</u>	<u>Days Coverage</u>	<u>Inventory (BCF)</u>	<u>Days Coverage</u>
March	2473	36.9	2492	33.1
April	2611	37.4	2633	34.4
May	2887	41.4	2980	38.9
June	3115	44.7	3175	41.4
July	3245	46.5	3352	43.7
August	3406	48.8	3556	46.4
September	3693	52.9	3839	50.1
October	3929	56.3	4076	53.2
November	3799	54.5	3948	51.5

Concentrating on the days coverage dimension, calendar 2012 build season dramatically slashed its oversupply. Calendar 2012 build season days coverage rose only 19.4 days, far less than the roughly 31.0 days average expansion. End October 2012's 56.3 days coverage surpassed the long run (1990-2015) 53.6 day average by only 2.7 days, the medium run (2006-15) 55.5 day average by less than a day.

Assuming inventories follow the pattern indicated, end calendar 2016 likewise will "cure" the oversupply problem from the days coverage dimension. Days coverage ascends only 20.1 days from end March to end October 2016, around eleven days less than average. End October 2016 inventories will be slightly below the long run average and 2.3 days beneath the 2006-15's average. From the days coverage viewpoint, although the anticipated end October 2016 days coverage total (taken "alone" and "all else equal") is about neutral (or slightly bullish). However, build season 2016 ends on a more bullish note than did calendar 2012.

The EIA may revise its natural gas inventory estimates partly due to the significant price rally. The EIA's June 2016 STEO (Table 2) forecast calendar 2016 spot Henry Hub prices to average 2.22 per mmbtu (calendar 2015 was 2.63), well below recent levels. Perhaps higher prices will boost production and slice demand a bit (fuel switching from gas to coal). In any case, perhaps the guideline cut for July 2016 and the next several months of gas stocks relative to the EIA's June 2016 estimate will be somewhat less than the 85bcf conjecture. Anticipated weather and other factors of course also will influence EIA and other marketplace predictions.

Yet even if calendar 2016 build season fixes the oversupply issue from the days coverage dimension, containment risks still lurk for some regions. Gas supplies must be stored somewhere. Whatever days coverage happens to be, there can be natural gas oversupply in the actual physical practice (real world) context. Although end October 2016's days coverage will be about average, a 4076bcf total will vault over the prior end October all-time bcf pinnacle (2015's 3853bcf). And with much of summer and early autumn still ahead, future inventories of course are unknown, so stocks may ultimately exceed the 4076bcf estimate.

The EIA estimates the demonstrated maximum working gas storage volume for the lower 48 states. It defines this as the sum of the highest storage inventory levels of working gas observed in each storage reservoir over the previous five year period. Demonstrated underground maximum working gas capacity in the lower 48 states as of November 2015 was 4343bcf ("Underground Natural Gas Working Storage Capacity"; 3/16/16, next release February 2017). This crawled up a meager seven bcf from November 2014's 4336bcf.

Will there be containment problems if end build season 2016 supplies at end October are 4076bcf estimate? At 4076/4343bcf, this equals 93.9 percent of capacity, an elevated total. Since the maximum theoretical storage space may not necessarily be achievable in practice, and as storage space may not be available to all marketplace players hunting for it, the United States may confront natural gas containment problems in some regions.

Many marketplace monitors extend their vision beyond the current build season. Anticipated longer run natural gas inventory levels influence marketplace price trends. What will be the bcf and days coverage levels for March 2017 and October 2017? The EIA may elect to adjust downward its anticipated bcf levels by 85bcf (or some other figure) for these months to account for the smaller than expected June 2016 inventory build. Nevertheless, assume the EIA's June 2016 bcf projection remains intact.

If end March 2017 working gas inventory is the EIA's predicted 1912bcf (Table 5a), then relative to full calendar year 2016 demand of about 76.6bcf/day, that represents 25.0 days coverage. This is a large 8.1 day dive relative to March 2016's 33.1 days. Significantly, it matches 2006-15's 25.0 day end March average height; it climbs only 2.8 days over the 1990-2015 long run average.

The EIA states end October 2017 inventories will be 3841bcf. At this bcf total, build season 2017 probably will not face containment problems. Natural gas days coverage at end October 2017 will be about 49.4 days coverage (3841bcf divided by estimated demand of 77.8bcf/day). Notably, that end October 2017 days coverage is bullish. It falls 6.1 days under the 1996-2015 end October average of 55.5 days and 4.2 days beneath 1990-2015's 53.6 day average. Thus, although much can happen between now and October 2017, the October 2017 natural gas situation appears considerably more bullish than the October 2016 one.

See "US Natural Gas: Traveling Forward" (6/13/16) for further details on natural gas supply/demand and technical analysis. See also "US Natural Gas: Caught in the Middle" (2/1/16) for additional discussion of long run NYMEX natural gas bear price move history (nearest futures continuation).

COMMITMENTS OF TRADERS

At times the CFTC's Commitments of Traders is a helpful indicator for predicting significant trend changes and travels in natural gas marketplaces. Review the benchmark NYMEX and ICE natural gas contracts (futures and options combined) plus the NYMEX European look-alike options contract. In the natural gas complex, sometimes (but not always) key highs and lows in price occur alongside notable levels in the net noncommercial position. One should interpret Commitments of Traders data with care. See "US Natural Gas Bear Trends and the Commitments of Traders" (4/11/16) for an extensive historical study of net noncommercial holdings and actions.

Compare the Commitments of Traders ("CT") patterns in regard to the 2012 and 2016 build seasons.

NYMEX natural gas (nearest futures continuation) peaked 1/7/10 at 6.108. Its major bottom occurred over two years later, at 1.902 on 4/19/12. The net noncommercial long ("NCL") position at the pinnacle was tiny, only 13,000 contracts (.4 percent of total open interest; the net NCL was 27m and .7pc of total OI on 3/9/10). Near the time of the marketplace bottom, the net noncommercial short ("NCS") total was only 15,000 contracts (.3pc of total open interest; 4/24/12). However, the net NCS position pinnacle in the bear price collapse was very large, at 227m contracts and 5.5pc of total open interest. This net NCS pinnacle occurred 11/22/11, several months prior to 2012's major price trough.

In the most recent major bear trend, February 2014's net NCL summit roughly coincided with the NYMEX natural gas 2/24/14 pinnacle at 6.493. The NCL plateau was 2/18/14's approximately 328,000 contracts, 7.7 percent of total open interest of around 4.3 million contracts. The 8.4pc of the following week was the net NCL percentage record for the period starting January 2010, when ICE CT data first appeared.

Significantly, as in the preceding major bear trend of 2010-2012, the peak NCS in the 2014-16 major bear collapse occurred long before the NYMEX natural gas price attained its final low, 3/4/16's 1.611 (and prior to an initial important low, 12/18/15's 1.684). The net NCS high was about 264m contracts, 9.4pc of total open interest (the record net NCS pc since January 2010), on 10/27/15, the day of a minor low at 1.948. Total open interest on 10/27/15 was 2.8 million contracts, far beneath that at the price peak.

Also, as was the case in the later stages of the 2010-12 bear crash, the net NCS tumbled sharply in the final months of the 2014-16 downtrend. The net NCS stood around 195m contracts (7.0pc of total open interest) on 12/29/15. On 2/9/16 net NCS was only 72m (2.6pc of OI). However (contrast 2012), the net NCS then ascended to 131m (4.4pc of OI) on 3/8/16, close in time to 3/4/16's 1.611 price bottom. That fairly high net NCS in March 2016 coincided with the March 2016 major low in price, yet it still was only about half of October 2015's 264m.

As build season 2012 progressed, the position shifted (beginning 5/1/12) to a net NCL one. The net NCL made an initial high at 86,000 contracts (2.0pc of total open interest) on 7/31/12 alongside an interim natural gas high, 7/31/12's 3.277. Although the net NC position became slightly short as prices fell, the net NC total became long and grew as prices ascended during the 2012 build season. The net NCL position reached about 148m contracts (3.4pc of open interest),

with a second elevation at 129m (3.3pc of OI) on 11/27/12 alongside 11/23/12's 3.933 interim top (early in the natural gas draw season).

As winter 2015-16 draw season ended, and as build season 2016 has progressed, there likewise has been a notable shift in the net NC position. On 3/29/16, the net NCS was about 79m contracts; the net NCS slumped to 3m on 6/7/16. The position thereafter became net NC long, reaching 71m (2.3pc of OI) on 6/28/18.

If natural gas prices dip from around current levels (high in rally since 3/4/16 bottom was 7/1/16's 2.998), perhaps as in 2012 the net NCL will fall lower. However, gas continues its bull move as build season progresses, the 2012 pattern suggests the net NCL eventually will surpass its late June 2016 height.

MARKETPLACES AND CENTRAL BANK MONETARY EASING: 2016 AND 2012

As natural gas enters into build season 2016, it is "roughly" trading together with other marketplaces. This linkage occurred in the 2012 build season. The 2012 build season saw renewed rounds of central bank easing. The 2016 natural gas build season arguably will see further central bank accommodation.

Neither the current price linkage of natural gas with other marketplaces nor the potential for further easing mandates a continued rally in natural gas from its March 2016 bottom. But coaches and players should note and evaluate the apparent parallels and assorted marketplace relationships.

Since around mid-2015, various key stock, currency, commodity, and interest rate marketplaces have been "roughly trading together". The same was true in mid-2012.

Natural gas prices often travel substantially independently of both petroleum (and commodities "in general") and so-called "international" or "financial" marketplaces and variables. Trend changes in NYMEX natural gas need not roughly coincide with one in the petroleum complex or commodities in general, or currency, stock, or interest rate playgrounds.

However, especially since mid-to-late June 2014 (NYMEX natural gas nearest futures interim high 6/16/14 at 4.886) and into calendar 2015 (gas interim top 5/19/15 at 3.105), bearish natural gas price movements intertwined with those in the petroleum complex (and commodities in general) and the bull move in the broad real trade-weighted US dollar. Such natural gas retreats to some extent paralleled slumps in emerging marketplace stocks. Note also the timing coincidence between May 2015's natural gas top and the S+P 500's 5/20/15 peak at 2135. In regard to the timing of the S+P 500's May 2015 high, the nominal broad trade-weighted dollar (Federal Reserve, H.10, which has daily data) made an interim low at 112.8 on 5/15/15 before appreciating further.

The recent low in NYMEX natural gas nearest futures, 3/4/16's 1.611, occurred fairly close in time to the first quarter 2016 peak in US dollar and an assortment of notable intertwined 1Q16 lows in other important marketplaces. The trend shifts (price reversals) in first quarter 2016 in various marketplaces assisted the upward move in natural gas that emerged in early March 2016.

**The broad real trade-weighted United States dollar (monthly average) peaked at 101.2 in January 2016; the nominal TWD (which has daily data) established a top 1/20/16 at 126.2 (Federal Reserve, H.10). The broad real TWD fell about 4.8pc to 96.3 in April 2016 (June 2016 about 97.7).

**NYMEX crude oil (nearest futures continuation): bottoms \$26.19 on 1/20/16 and \$26.05 on 2/11/16.

**Broad Goldman Sachs Commodity Index (GSCI): 268 on 1/20/16. January 2016's GSCI low occurred midway between the calendar month times of its 2008-09 bottom (12/24/08 at 308 and 2/19/09 at 306).

**S+P 500: Note the sharp rally from lows of 1812 on 1/20/16 and 1810 on 2/11/16.

**MXEF (MSCI emerging stock markets index; Morgan Stanley): 687 on 1/21/16, 708 on 2/12/16.

**Ten year US Treasury note: 1.53 percent yield low 2/11/16. However, after yields advanced to 2.00pc on 3/16/16 (1.94pc on 4/26/16), they slumped, reaching around 1.40pc on 6/24/16 during the Brexit crisis. The recent UST low stands just above 7/25/12's 1.38pc major low, achieved during the Eurozone crisis.

Compare those marketplaces in mid-year 2012.

**Broad real TWD interim high: 86.1 (monthly average) in June 2012. Subsequent low 83.2 in January 2013 (3.4pc fall); stayed beneath June 2012's height until 86.4 in September 2014.

**NYMEX crude oil interim low: \$77.28 on 6/28/12 (\$84.05 low on 11/7/12).

**NYMEX natural gas: major bottom 4/19/12 at 1.902, interim lows 2.168 on 6/14/12, 2.575 on 8/29/12.

**Broad GSCI: interim low 6/22/12 at 556 (622 low 11/5/12).

**S+P 500 interim lows: 6/24/12 at 1267 and 11/16/12 at 1343.

**MXEF lows: 6/4/12 at 877 and 11/16/12 at 968.

**Ten year UST note; yield low 7/25/12 at 1.38 percent.

In mid-2012, worsening of the Eurozone crisis encouraged renewed monetary easing by key central banks. On 7/26/12, during the Eurozone crisis (and amidst Greek exit fears), the European Central Bank President gave his famed "whatever it takes" speech to protect the Eurozone. The ECB unveiled its outright monetary transactions (OMT) policy 8/2/12. The Bank of England embarked on another round of money printing (quantitative easing) in July 2012. On 9/3/12, the Federal Reserve joined the festivities and declared a third round of money printing (QE3), offering policy guidance (more QE) on 12/12/12. The Bank of Japan added to its already existing lax policy shortly after the December 2012 elections and the advent of "Abenomics". Its accommodative scheme expanded with its Quantitative and Quantitative monetary easing of 4/4/13.

What about the current central bank scene? As in mid-2012, easing potential looms. Maybe such easing will not occur. Or, arguably easing in summer 2016 (or thereafter) will not result in (be associated with) the same marketplace outcomes as in 2012, whether in the directional move sense (as in stocks and commodities "in general" going up in price), or in the ability of one or more of the assorted marketplaces to keep "trading together" (increasing divergence rather than convergence). After all, perhaps nowadays the long-running interrelated global accommodative monetary policies are becoming less powerful, less able to produce the desired results.

In any case, 2012's fear of Greek departure from the Eurozone ("Grexit"; recall the ongoing Eurozone sovereign debt crisis affecting several nations) and its consequences finds its counterpart in 6/23/16's British "leave" vote ("Brexit" referendum) regarding its membership in the the European Union. Also, central bankers (and many other politicians and financiers) are concerned not only about the European Union (and Eurozone), but also about trade and currency wars, as well as growing "populism". Is the post-World War Two global economic (and political) order in jeopardy to some extent? Note the growth of right wing and left wing parties in Europe and elsewhere. In 2016's US presidential saga (2012 also was a US election year), underline the popularity of the likely Republican nominee (Trump) and the support for the runner-up Democratic contender (Sanders).

As in 2012, potential for further central bank easing is fairly high. The Bank of England, according to its Governor, will take "whatever action is needed to support growth". It is preparing to engage in another round of monetary stimulus, which could include interest rate cuts and more QE (Financial Times, 7/1/16, p1; 7/2-3/16, p2). Some conjecture the Bank of Japan, which continues to print money, will consider even more asset purchases or deeper negative rates (Financial Times, 7/2-3/16, p4). The Federal Reserve is not currently engaged in a quantitative easing round. However, its highly accommodative policy (which includes yield repression) remains intact. Fed concerns about international turmoil (such as Brexit fallout) arguably make it less likely for it to boost raise rates soon. Given the Fed's previous hints at raising rates in calendar 2016, such Fed caution appears to many as akin a "relative easing". The European Central Bank continues to print mountains of money. Might the ECB expand that program or cut rates further?

See recent essays such as "US Natural Gas: Traveling Forward" (6/13/16), "China: Behind the Great Wall" (6/7/16), "Base Metals and Other Marketplace Travels" (5/16/16), "Looking Backward, Gazing Forward: US Corporate Profits and Financial Trends" (5/3/16), "Fantastic Voyages: the US Dollar and Commodity Currencies" (4/3/16), "Great Expectations: the Federal Reserve, Inflation, and Politics" (3/20/16), "Hellish Falls, Divine Rallies: Commodities in Context" (3/6/16) for additional analysis of various marketplaces.

MEASURING UP: 2016, 2012, AND TWO OTHER KEY BUILD SEASON RALLIES

For US natural gas "in general", analysis of and comparisons between past and current natural gas price marketplaces can venture beyond the NYMEX nearest futures continuation contract. Wizards can study actual NYMEX contract months (such as September 2016 or October 2017) and intramarket spreads (such as March versus April). Guides can analyze price trends at other key gas delivery locations, as well as intermarket (basis) spreads involving such pricing points. And one can compare natural gas price movements with those of other commodities (such as crude oil) and financial marketplaces.

What does a focus on the NYMEX nearest futures contract build season reveal for build season rallies?

The 2012 build season was not the only build season prior to 2016 to have a significant rally from a major low. Whereas its 1.902 bottom occurred in early spring (4/19/12), 1997's began in late winter, on 2/24/97 at 1.68 (completing a double bottom; previous low 9/5/96 at 1.735). The 1999 bull move also began in late February, on 2/26/99 at 1.625 (its initial bottom occurred at 1.61 on

8/27/98). The 3/4/16 bottom at 1.611 neighbored the 1997 lows in the 160s. Moreover, the 3/4/16 bottom at 1.611 occurred close in calendar date time to (within about a week of) the 1997 and 1999 bottoms.

The end March to end October inventory build in 1997 was about 30.4 days, slightly under the 31.0 day average. Stocks grew 27.0 days during the 1999 build season, slightly less than average. As a footnote, note that build season 2000 stocks also climbed less than normal, only 24.1 days. The natural gas price exploded up to 10.10 on 12/27/00.

How big were the bull moves of the prior moves during their build season rally stage? The bull move that commenced in April 2012 indeed continued after the close of build season 2012 (peaking 2/24/14 at 6.493). The bull move that commenced 2/26/99 (after the initial low 8/27/98) did not end with build season 1999. However, the 1997 build season bull move ended with the October 1997 summit. In any case, although a look forward beyond build season can be enlightening (and exciting), a bull move after the close of (or indeed for the balance of) build season 2016 is not guaranteed. Much can happen on the supply/demand front, particularly during winter 2016-17 and summer 2017 build season.

The 2012 bull move from 4/19/12 to its interim high (shortly after the traditional end of build season) on 11/23/12 was about 106.8 percent and lasted about seven months. The 1997 bull move ran about eight months and 129.2pc to its 10/28/97 plateau at 3.85. The 1999 rally (use late February 1999 as the timing take-off point, but the August 1998 low as the price bottom) likewise marched sharply upward; it rose about 103.4pc over eight months to its 10/28/99 interim high at 3.275. If 2016 build season's build move continues beyond its high to date (7/1/16's 2.998; 86.1pc), the 2012, 1999, and 1997 build season bull moves probably signal a move of at least 100 percent from 3/4/11's 1.611 bottom.

If the 2016 natural gas price climb from 3/4/16 runs seven or eight months, it should end in October or November 2016. The 1997 and 1999 highs occurred in late October. As the 2012 rally started relatively late (in April, rather than in late February or early March), it arguably pushed the price peak further out in time (past late October) into second half November. Important natural gas highs (and lows) tend to occur around contract expiration. Though one should not be dogmatic about marketplace timing (after all, NYMEX natural gas trading has existed for less than three decades), the best conjecture for a 2016 build season price top is around late October 2016.

Yet further bull moves during bull season are not destined. What if demand slumps or supply grows? Suppose the weather cools off during July and August. What if containment worries jump?

Even if 2016 substantially repeats the entire 2012 build and price saga, recall that on 7/31/12, natural gas established an interim top at 3.277. This was a 72.3 rally and about a three and one half month move from the April 2012 bottom). The 86.1pc and nearly four month move from the 3/4/16 low has been a bit greater in distance and time than 2012's April-July rally leg. Nevertheless, the summer 2012 high suggests some potential for an interim price retreat in summer 2016, even if prices thereafter resume their advance.

Significant resistance for NYMEX natural gas (nearest futures continuation) stands in the 3.10/3.45 range. The 5/19/15 interim top at 3.105 was important. There is a crucial price gap from 3.449 (12/19/14's low) to about 3.351 (12/22/14 high; the 1/15/15 high was 3.352. An earlier December 2014 price gap around 4.05 looms above this gap. A 100 percent rally from the March

2016 trough equals 3.222. A one-third retracement of the move from February 2014's 6.493 to March 2016's 1.611 gives about 3.237. A fifty percent fall from the February 2014 peak equals 3.247. Finally, recall the interim high during build season 2012, 7/31/12's 3.277.

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