

Excerpts on Corn from The Hightower Report Market Letter, July 26, 2013

## Potential for Corn Production Losses from an Early Freeze

Pg 1 - Potential Freeze Damage to Corn  
Pg 5 - Prepare for a Freeze Scare for Corn?

### Free Market Letter!

We are creating a new way to communicate special news and announcements to our audience and we want you to **be a part of it**. Just to prove it, we will **send you a free copy** of our Weekly Market Letter!

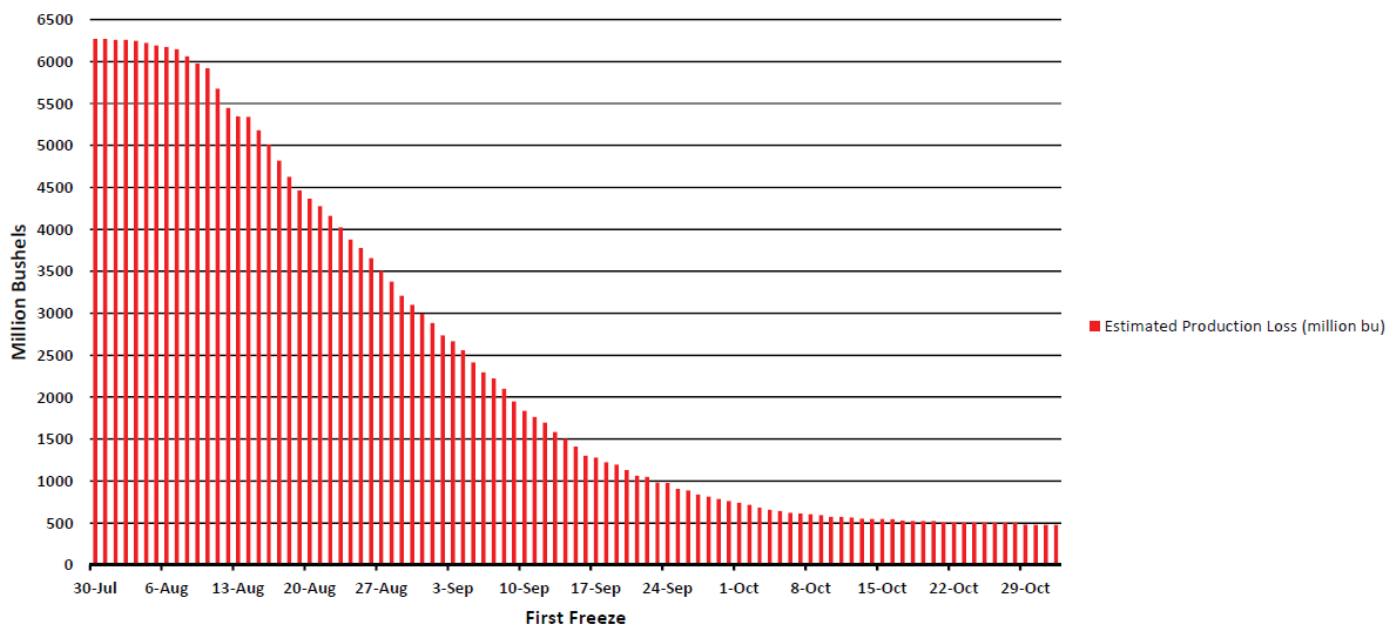
With this year's planting progress far behind the average pace, concerns about potential corn production losses from an early freeze have begun to surface. We decided to research potential crop losses at different probability levels, based on various average first freeze dates in the 5 major corn planting states: Minnesota, Iowa, Illinois, Indiana, and Ohio.

We determined the starting point of first freeze occurrence for each state based on historical data of earliest first fall freeze dates from 1950 to 2013, recorded at over 1,110 weather stations across the 5 states by the Utah Climate Center Database.

We then broke down those dates into 3 probability ranges: 0-10%, 10-50%, and 50-90% according to the NOAA's 1981-2010 U.S. Climate Normals. These percentages represent the chance of a first fall freeze occurring on a specified date or earlier. For example, an October 10th first freeze falling in the 10-50% probability range means that there is 10-50% probability that the first fall freeze will occur by October 10th.

Statewide estimated corn production was calculated using 10-year trend line yield and 2013 planted acreage. Estimated yield reduction was calculated by tracking accumulative Growing Degree Days (GDD)

2013 Corn Probability of First Freeze to Estimated Loss - 5 States Total



# Potential for Corn Production Losses from an Early Freeze *continued*

in each state to determine the percentage of corn in every growth stage at different freeze dates based on USDA planting progress data. From that data, we were able to project potential production losses.

The combined 5-state chart indicates that a first fall freeze occurring on September 17th has the potential to cause a loss of 1279.70 million bushels of production. A normal first fall freeze (50% probability) across each of the 5 states has the potential to cause a total of 664.75 million bushels in production losses. If a "1 out of 10" (10% probability) early fall freeze happens, the 5 states are likely to suffer a total production loss of 964.41 million bushels. Keep in mind that total corn ending stocks for the 2013/14 crop year are currently projected at 1959 million bushels.

For better reference, below are some records of early first fall freeze that occurred during 1950 to 2012 in the 5 states.

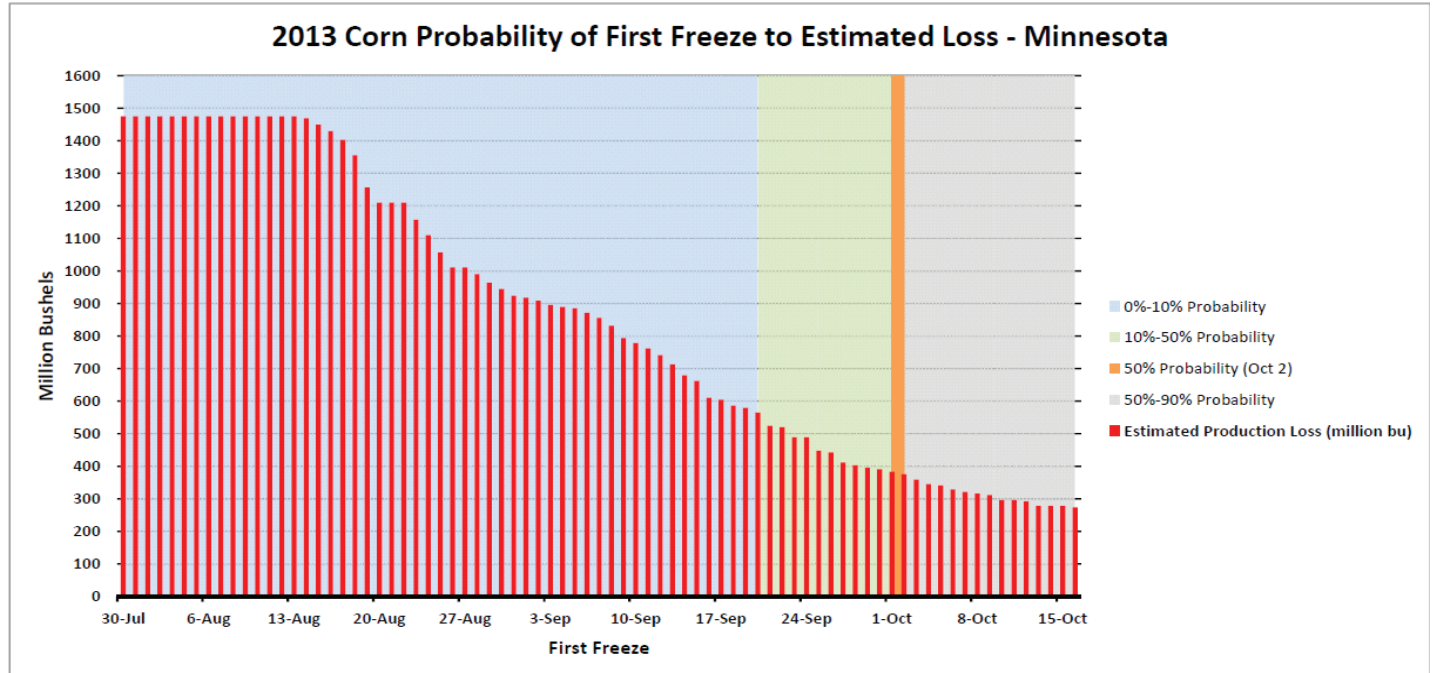
\* **Minnesota:** Normal first freeze - October 2nd. 10% probability first freeze - September 21st. 3 weather stations recorded their earliest first freeze by August 24th in 3 distinct years, and 27 weather stations recorded their earliest first freeze by September 10th in 8 distinct years.

\* **Iowa:** Normal first freeze - October 5th. 10% probability first freeze - September 22nd. 5 weather stations recorded their earliest first freeze by August 30th in 3 distinct years, and 15 weather stations recorded their earliest first freeze between September 1st and September 10th in 3 distinct years.

\* **Illinois:** Normal first freeze - October 15th. 10% probability first freeze - September 30th. 7 weather stations recorded their earliest first freeze by September 15th in 6 distinct years.

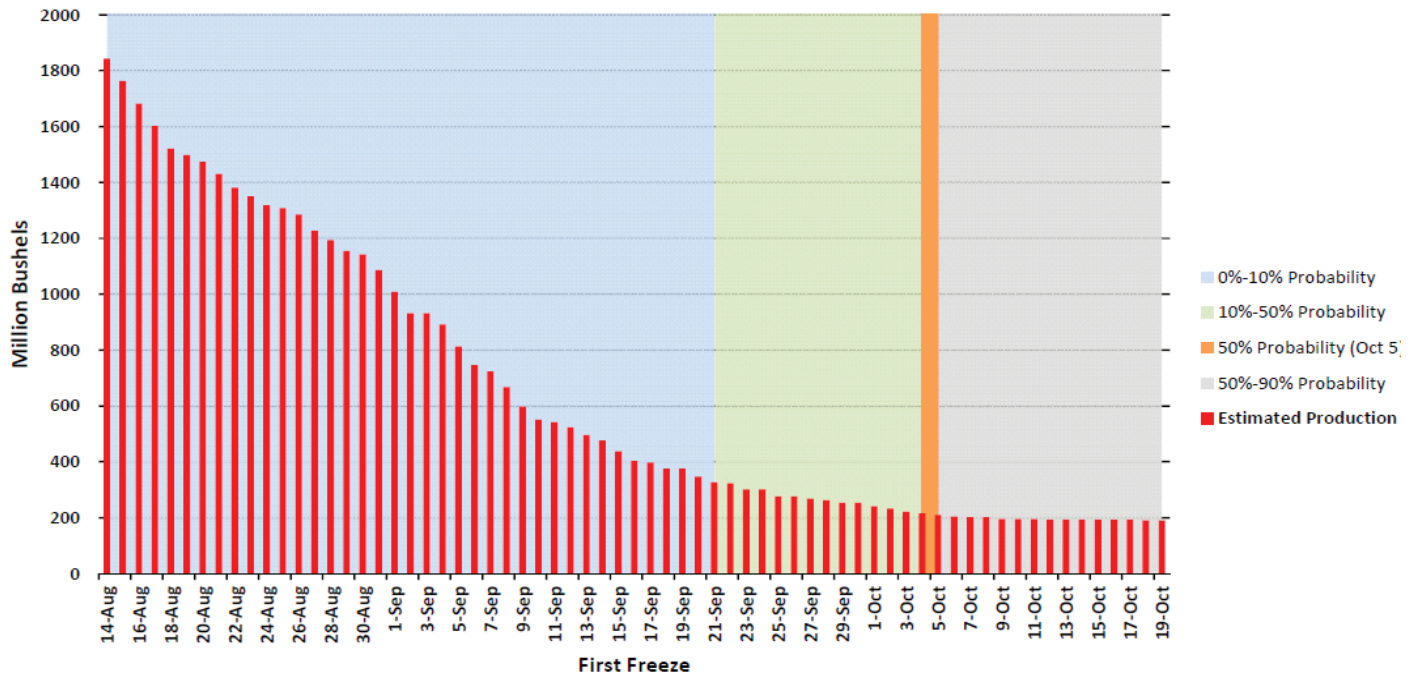
\* **Indiana:** Normal first freeze - October 14th. 10% probability first freeze - October 1st. 18 weather stations recorded their earliest first freeze by September 20th in 7 distinct years.

\* **Ohio:** Normal first freeze - October 16th. 10% probability first freeze - October 2nd. 1 weather station recorded its earliest first freeze by July 30th, and 13 weather stations recorded their earliest first freeze between September 8th and September 20th in 4 distinct years.

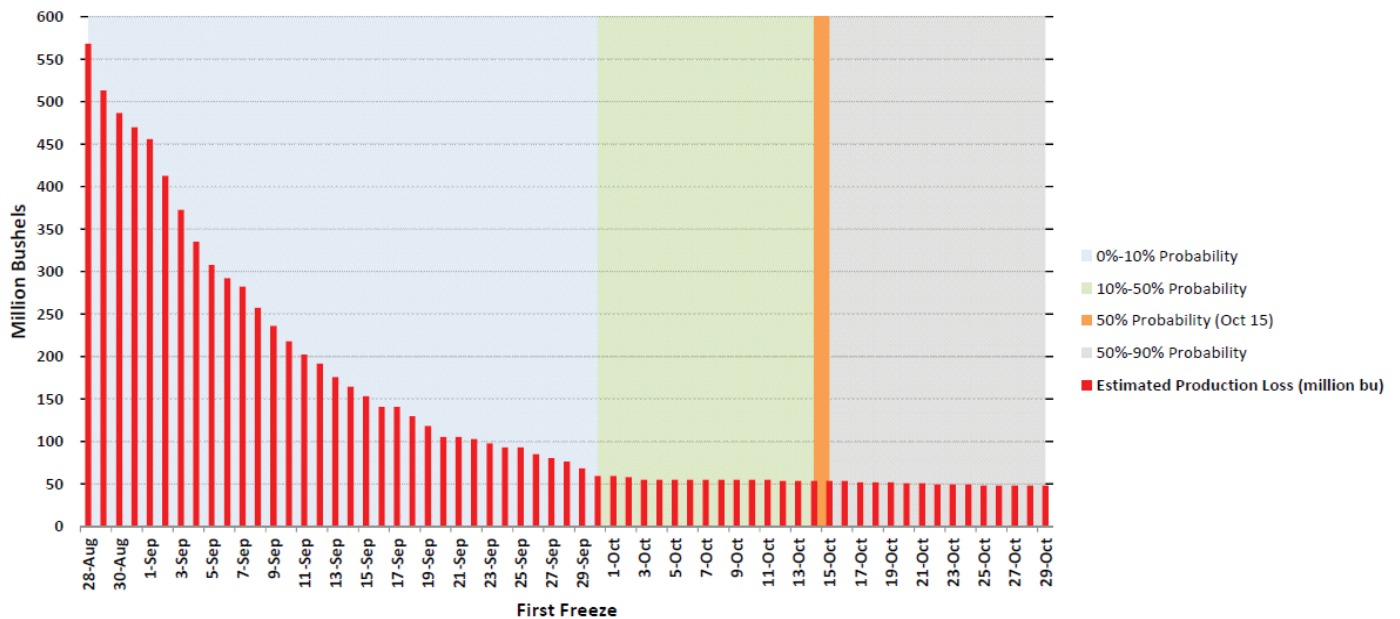


# Potential for Corn Production Losses from an Early Freeze *continued*

## 2013 Corn Probability of First Freeze to Estimated Loss - Iowa



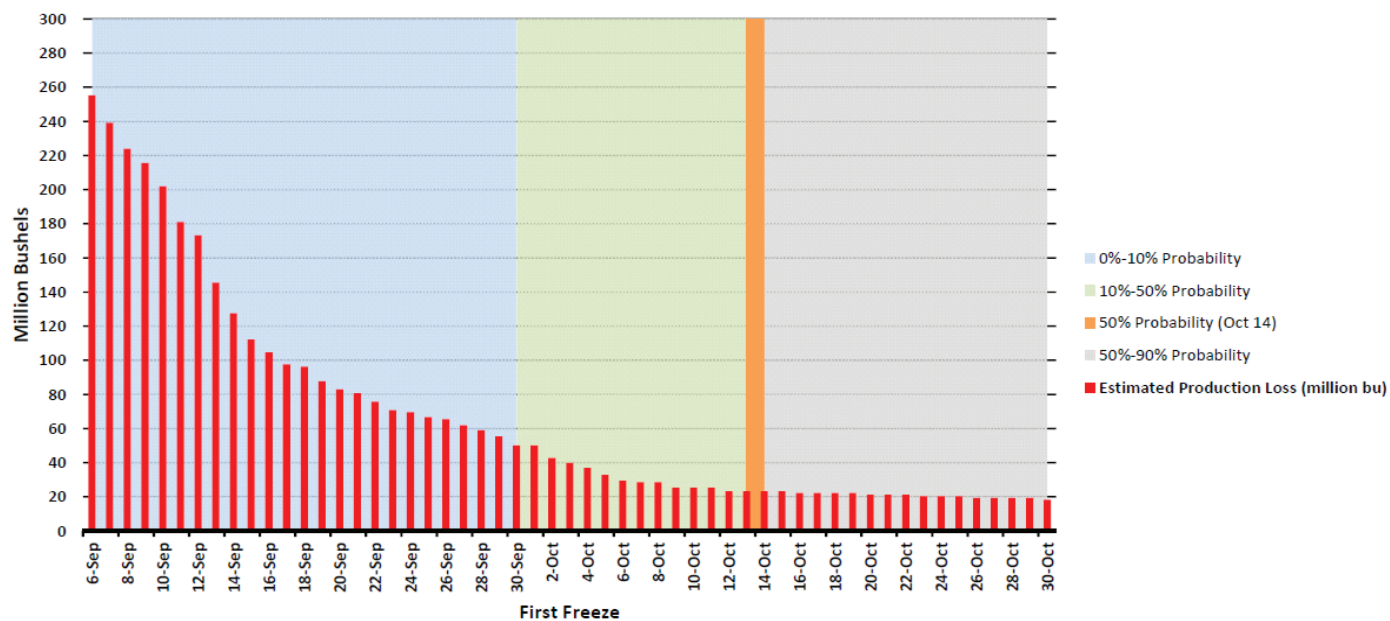
## 2013 Corn Probability of First Freeze to Estimated Loss - Illinois



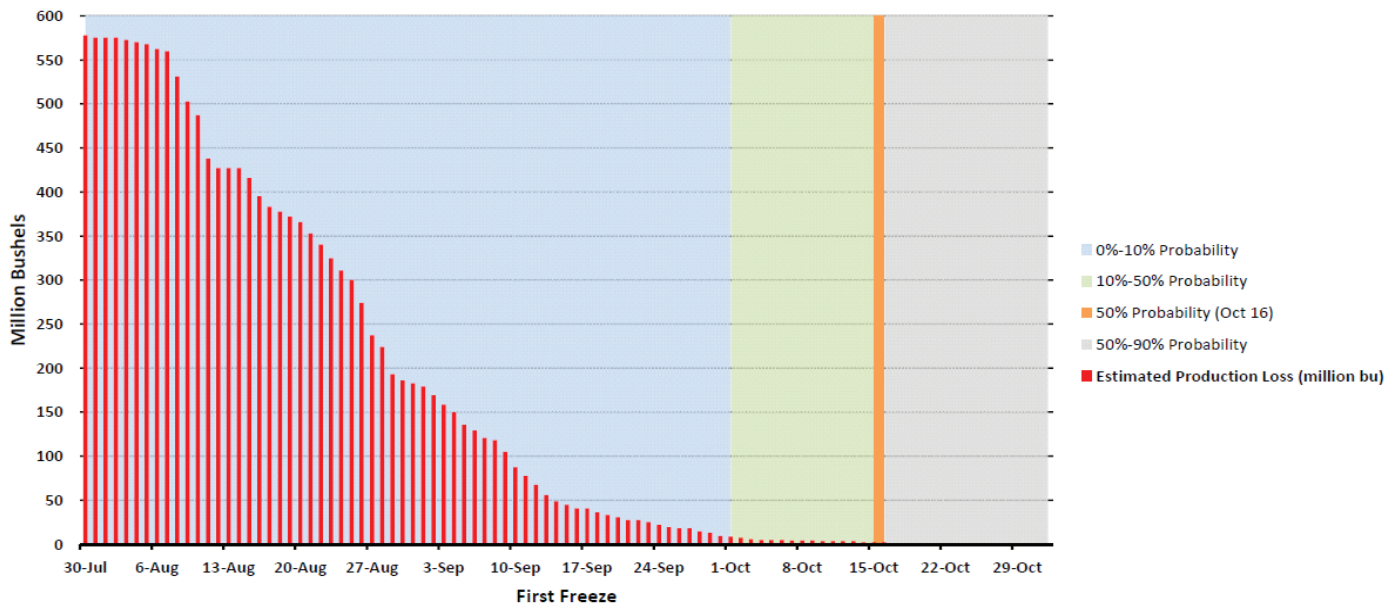


# Potential for Corn Production Losses from an Early Freeze

2013 Corn Probability of First Freeze to Estimated Loss - Indiana



2013 Corn Probability of First Freeze to Estimated Loss - Ohio



# Prepare for a Freeze Scare for Corn?

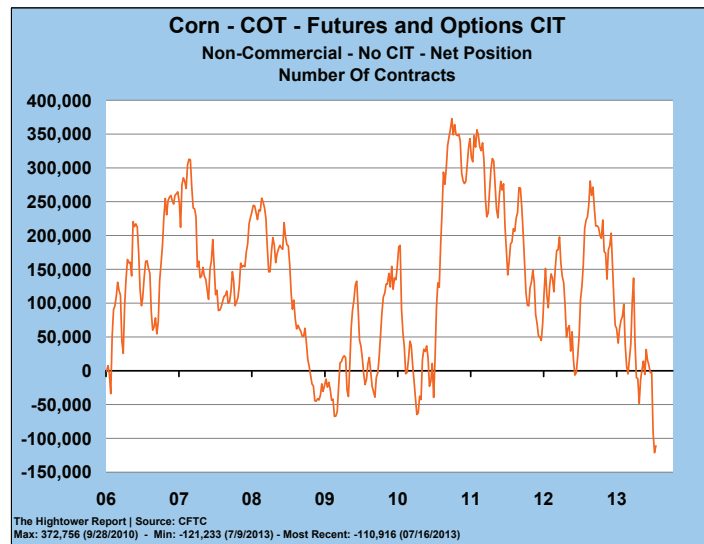
While recent market focus has been on improving crop weather for pollination and the possibility for higher corn yields, this year's late-planted crop could become a more supportive force, especially if temperature forecasts turn cooler for the month of September. In addition, some of the latest planted crops are also sitting in some of the more vulnerable areas for an early freeze. While the research for our article on early freeze problems (page 8) was done for the five primary corn-producing states, Iowa, Minnesota, Illinois, Indiana and Ohio, a large amount of the damage risk this year is in Minnesota and Iowa. A normal first freeze for the select 5 states would have the potential to cause a loss of 664.75 million bushels. Remember, this is the date that has a 50% chance of a freeze occurring in a normal year.

If we see a "1 out of 10" early freeze this year (one with a 10% probability), the 5-state loss could climb up to 964.4 million bushels. Keep in mind, total ending corn stocks for the 2013/14 year are currently estimated at 1.959 billion bushels.

For Minnesota, a normal first freeze this year (October 2nd) could cause a loss of 375.8 million bushels, with a 1-in-10 first freeze date of September 21st potentially causing a loss of 524.7 million bushels. In 8 years since 1950, we have found 27 weather stations reporting their earliest first freeze by September 10th. A September 10th freeze this year for Minnesota could cause damage of 778.8 million bushels.

If Iowa sees a 1-in-10 freeze by September 22nd, it could lose 322.8 million bushels. A freeze on this date for both states could result in a total 2-state corn loss of 843 million bushels.

The short-term fundamentals still look bearish for corn, and we see



the possibility of continued weakness during the next few weeks with the \$4.55 to \$4.45 price zone as the next downside target. However, there are several factors which might limit the downside:

- 1) The corn market remains extremely oversold when we consider typical hedge fund traders. As of July 16th, trend-following funds held a near-record net short position of 110,916 contracts. The jump in open interest since then suggests that today's update may show an even more oversold market.
- 2) Corn is cheap enough for China to be an aggressive buyer. "Unknown destination" bought 211,328 tonnes of corn on Friday morning.
- 3) There may be more than 2 million acres of corn which simply did not get planted this year.
- 4) A normal or earlier than normal first freeze date for Iowa, Minnesota, Nebraska and the Dakotas could spark a major adjustment lower in US production.
- 5) The Western Corn Belt saw below-normal precipitation for parts of July, and it will not take much in the way of dry weather during August to spark lower yield expectations.



*For trade ideas in Corn and other commodities  
go to  
[HightowerReport.com](http://HightowerReport.com) to subscribe to our  
Weekly Market Letter  
and get your first month Free!*



# The Hightower Report's *Weekly Market Letter*

- New, Easy-to-Read Layout
- Short, succinct articles with specific trade strategies
- Market-by-Market summaries, with long/short indicators
- Major Economic Events - and how they will impact the markets
- Overvalue/Undervalued Indicators

**First Month Free!**

**Subscribe Today** for Only \$25  
Per Month

Any reproduction or retransmission of this report without the express written consent of The Hightower Report is strictly prohibited. Violators are subject to a \$15,000 fine.

## THE HIGHTOWER REPORT

Futures Analysis & Forecasting

WEEKLY MARKET LETTER  
futures-research.com

January 11, 2013

### THIS ISSUE

**Fundamental Trades:**

Bullish:	Live Cattle
Bearish:	Crude Oil

**Campaign Trades:**

Platinum & Live Cattle
------------------------

**Visit our Blog!**  
hightowerreport.com

### MAJOR ECONOMIC EVENTS

**January 15**

- Producer Price Index
- Retail Sales

**January 16**

- Consumer Price Index
- Industrial Production

**January 17**

- Jobsless Claims
- Housing Starts
- Philly Fed Survey

**January 18**

- Chines GDP/Retail Sales
- Consumer Sentiment

### Next Week's Economic Focus

Commodity prices got a boost from this week's news of a recovery in Chinese exports and imports during the month of December. While the outlooks for the US and Europe remain suspect, seeing more positive developments out of China should dampen some of the negative sentiment toward copper demand. Adding to the positive sentiment was news that Spain and Italy saw strong demand for their debt during recent auctions. Unfortunately, the New Year failed to bring a complete end to the fiscal cliff debate, which has transitioned into a looming US debt ceiling debate. With several political pundits encouraging the President to unilaterally raise the debt ceiling and leave future ceiling adjustments in his office's hands, one might expect the

GOP to dig in its heels instead of opening up to compromise. One also has to wonder if evidence of lower after-tax income in the first paychecks of 2013 will result in some negative sentiment during the coming weeks. Over the near term it is possible that positive news from China, less uncertainty from Europe and ongoing positive US economic data will provide physical commodities with a positive backdrop. On the other hand, markets like crude oil, soybeans and natural gas continue to face burdensome supply conditions that might be difficult to overcome.

-Dave Hightower

### OUR OPINION... MARKET BY MARKET

Market		*
Stocks	Improvement in China leaves the bulls in control.	L
Bonds	The bear camp retains a fundamental edge.	S
Dollar	Inability to hold rallies hints at an upcoming top.	S
Euro	Favorable auctions reduces risk for fresh longs.	L
Gold	Robust growth views needed to reverse downtrend.	S
Silver	Downside waves not extending with key reversal.	L
Copper	Near-term upside move possible from China news.	L
Crude	March Crude falls at \$95.00 level.	S
Gasoline	Surge in supply & weak demand offer headwinds.	S
Net Gas	Bounce from \$3.10 leaves \$3.50 as next objective.	L
Soybeans	S America weather good; downtrend continues.	S
Corn	Demand & 2013/14 planting seen as negative.	S
Wheat	Export demand still slow; precipitation in the east.	S
Hogs	Production decline seen through mid-February.	L
L Cattle	June and August look too cheap versus outlook.	L
Sugar	Oversold with more positive tone for commodities.	L
Coffee	Funds still hold big net short with shift in supply.	L
Cocoa	Will need signs of tighter supply to turn trend.	S
Cotton	Threat of China selling reserves may pressure.	S

\* For traders, commodities need to be in a market. L = Long, S = Short

141 West Jackson • Suite 4002 • Chicago, Illinois • 60604 • 800-662-9346 • 312-786-4450 • info@HightowerReport.com • @HightowerReport

Trading futures contracts and commodity options involves substantial risk of loss, and thus is not appropriate for all investors. Investors should carefully consider the inherent risks of such an investment in light of their financial condition.

Page 1

Go to **HightowerReport.com** or call 800-662-9346 or 312-786-4450

The information in this report may be considered dated upon its release and should not be considered interpersonal advice. This report is merely an opinion on the market and is a reflection of conditions as of its publication. Market conditions change! Traders should not consider entering positions without their own independent analysis of the market's current situation, nor without further consideration of any changes to the information contained herein that may have occurred since this report was written. The authors are not responsible for any verbal or written claims and opinions that might be provided in conjunction with this report. The trading suggestions contained herein have been provided merely as a general guide and only for the purpose of quantifying the authors' opinions.

This report includes information from sources believed to be reliable but no independent verification has been made and we do not guarantee its accuracy or completeness. Opinions expressed are subject to change without notice. This report should not be construed as a request to engage in any transaction involving the purchase or sale of a futures contract and/or commodity option thereon. The risk of loss in trading futures contracts or commodity options can be substantial, and investors should carefully consider the inherent risks of such an investment in light of their financial condition. Any reproduction or retransmission of this report without the express written consent of The Hightower Report is strictly prohibited.