Current Chicago Mercantile Exchange (CME) futures prices suggest that market year average (MYA) corn prices for 2013 will be near $6.00 per bushel. Obviously, prices could vary from $6.00. In this post, historical price changes are used to evaluate possible 2013 MYA prices. Historical price changes suggest there is an 8% chance of the MYA price being below $4.50 and a 19% chance of MYA price being below $5.00 per bushel.
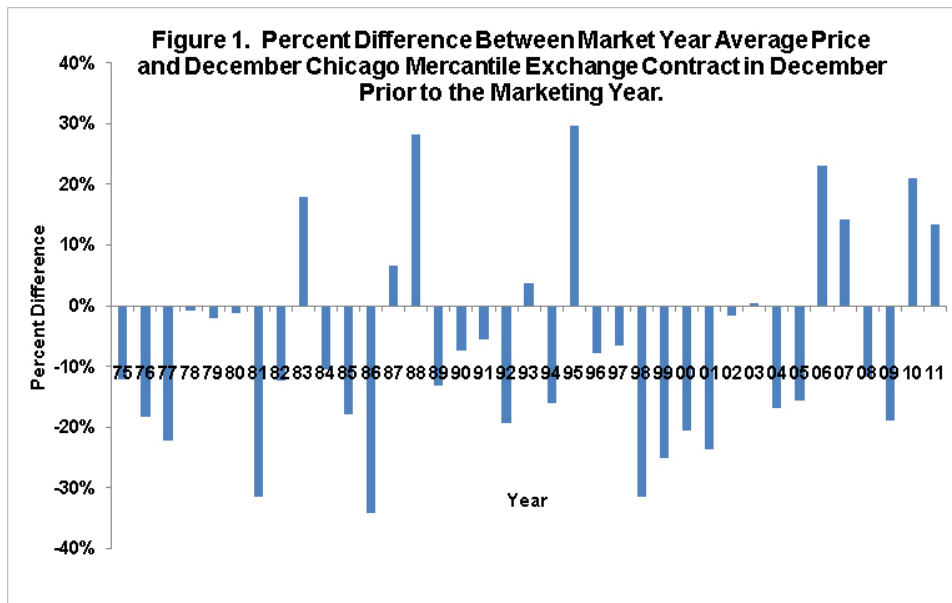
Historical Price Changes

MYA prices are national, cash price farmers receive for corn from the months of September to the following August. These MYA prices are compared to average settlement prices for the December Chicago Mercantile Exchange futures contracts in the December prior to expiration. These futures prices serve as a way of predicting the MYA prices.

Percent changes are calculated for the MYA corn prices and the futures prices. To illustrate take the 2011 MYA price is 6.22 per bushel, which represents the price from September 2011 to August 2012. The average settlement prices of the Dec 2011 CME contract in December 2010 is $5.48. The $6.22 MYA price for 2011 is 14% higher than the $5.48 futures prices (14% = $6.22 MYA price / $5.48 futures price – 1).

Percent changes between 1975 through 2011 averaged -7% (see Figure 1), meaning that the MYA prices average lower than the December futures prices. Lower MYA prices than futures price reflect the fact that there typically is a basis between cash and futures prices.

Larger percent differences exist between these futures prices and MYA prices (see Figure 1). MYA prices were the furthest below futures prices in 1986 (-34%), 1981 (-32%), 1998 (-32%), 1999 (-25%) and 2001 (-23%). MYA prices were the furthest above futures prices in 1995 (30%), 1988 (28%), 2006 (23%), and 2012 (21%).

Figure 1. Percent Difference Between Market Year Average Price and December Chicago Mercantile Exchange Contract in December Prior to the Marketing Year.

Historical Variability and 2013 MYA Prices

Historical variability can be used to gain a feel for the range of prices possible in 2013. Currently, the December 2013 futures contract is trading around $6.40 per bushel. Given the average change between the MYA and futures contracts from 1975 through 2011, the expected 2013 MYA price is $5.95 ($6.40 futures price x (1- 7% average decline)).

Given history, there is a range of possible prices. If the largest price declines occur, 2013 MYA prices would be:

- $4.21 if a year like 1986 occurs,
- $4.38 if a year like 1981 occurs,
- $4.79 if a year like 1998 occurs,
- $4.88 if a year like 1999 occurs, and
- $4.97 if a year like 2001 occurs.

Conversely, if some of the largest price increases occur, 2014 MYA prices would be:

- $8.29 if a year like 1995 occurs,
- $8.21 if a year like 1988 occurs,
- $7.88 if a year like 2006 occurs, and
- $7.74 if a year like 2010 occurs.

Historical price changes can also be used to gain a feel for the chances of low prices. Percentage changes suggest that 2012 MYA prices:

- Will be below $4.50 in 3 out of 37 years, or 8% of the time.
- Will be below $5.00 in 6 out of 37 years, or 16% of the time.
- Will be below $5.50 in 14 out of 37 years or 48% of the time.
- Will be below $6.00 in 22 out of 37 years, or 59% of the time.

Summary

Historical price changes suggest that a wide range of prices are possible in 2013. Price below $4.50 per bushel are possible. Some of these are low and could signal lower net farm incomes. While not likely,

prices changes outside of historical changes also are possible.