

Long Run Crop Price Outlook: \$6 Corn and \$13 Soybeans

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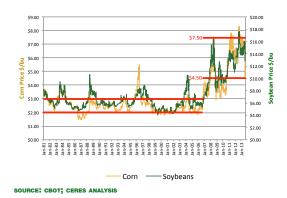
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Long run crop prices that drive farmland returns are far more predictable than short run prices.

EXHIBIT 1

CORN AND SOYBEAN PRICING CONTINUOUS NEARBY DAILY FUTURES / JAN '81-AUG '13



The value of farmland, whether in the U.S. or anywhere else in the world, is driven primarily by the price of the crops being grown. Unfortunately, agricultural commodities are highly volatile and notoriously unpredictable, being subject to the vagaries of the weather in far ranging corners of the world.

However, the *long run* agricultural commodity prices that drive farmland returns are far more predictable. We can't predict with any confidence where crop prices will be in 6 or 12 or even 18 months, but we can predict with a significant level of confidence what the average should be over the next 5–10 years.

Ceres believes that over the next 5–10 years, corn prices will generally be range-bound between \$4.50 and \$7.50 and soybean prices will be range-bound between \$10.00 and \$16.50. We forecast average corn and soybean prices at \$6.00 and \$13.25 respectively. Specifically we note:

- 1. Crop prices have permanently shifted;
- 2. Additional row crop acreage is required globally;
- 3. \$7.50 corn signals a positive supply response;
- **4.** \$4.50 corn signals a negative supply response.

CROP PRICES HAVE PERMANENTLY SHIFTED HIGHER

Crop prices were highly stable for over 3 decades through 2006. This was the era of \$2.50 corn and \$5.50 soybeans. The commodity markets were characterized by standing surpluses (i.e., high stocksto-use), with stable pricing based on the global marginal cost of production. Periodic supply disruptions would cause prices to rise rapidly, followed by swift mean-reversion.

This report contains forward-looking statements which can be identified by words such as "expect," "believe," "estimate" and variations of such words and similar expressions. Forward-looking statements, by their nature, involve estimates, projections, forecasts, assumptions, risks and uncertainties. Although we believe that the forward-looking statements in this report are based upon reasonable estimates and assumptions, they are not guarantees of future outcomes and are subject to known and unknown risks, uncertainties, contingencies and other factors. Accordingly, actual outcomes may differ materially from those expressed or implied by such forward-looking statements. Prospective investors are encouraged to read carefully the latest Private Placement Memorandum of Ceres Farms LLC, including especially the section titled "Risk Factors," for further information regarding various risks relevant to an investment in Ceres Farms, LLC.



1

In most years, for most crops, demand rationing will be needed to balance volatile physical supply.

EXHIBIT #2 ANNUAL CROP FARMLAND ACREAGE (HISTORICAL AND NEEDED TO MEET ESTIMATED DEMAND) 3,700 3,650 3,600 3,550 Million Acres 3,500 3,450 3,400 3,350 3.300 3,250 3,200 2010 2012 2016 2018 2020 98 000 2014 002 8 Historical Needed NOTE: FAO "ARABLE" LAND COMPRISES ACREAGE CURRENTLY PLANTED TO ANNUAL CROPS OR FALLOW LESS THAN 5 YEARS

ROWCROP PRICES HIGHLY CORRELATED

Prices for major rowcrops are highly correlated. This is primarily because crops must compete for acreage: corn and soybeans compete in the U.S. and Southern Brazil; soybeans and cotton compete for 1st-crop acres in West Central Brazil; corn and cotton compete for 2nd-crop acres in West Central Brazil; and winter wheat competes with second-crop corn in Southern Brazil. In addition, corn and wheat compete as a carbohydrate in the livestock feed market. The relationship between corn and soybeans is particularly strong, with the price of corn an 88% predictor of the price of soybeans. Consequently when we talk about \$5.00 or \$6.00 corn, we are also talking about \$12.00 or \$13.25 soybeans respectively.

While the economics of this relationship are strong over the long run, there is short run volatility. Currently (mid-September 2013), the benchmark December corn contract is trading at ~\$4.65 and the November soybean contract is at ~\$14.00. (We would expect ~\$10.50 based on the price of corn.) We will have a large corn surplus this year

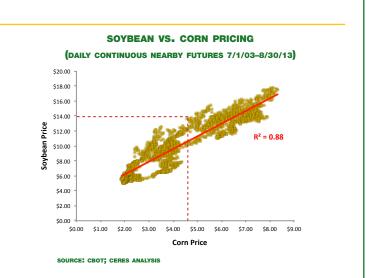
Beginning in 2007 we have witnessed a different dynamic in the commodity markets that Ceres believes is a "new normal." (See Exhibit 1) Based on rapidly growing demand driven by population growth, biofuels, and rising incomes in emerging markets (especially China), we now see commodity markets characterized by deficits—the permanent surpluses have been consumed across the agricultural commodity complex. As a result, in most years for most crops, demand rationing is needed to balance volatile physical supply. This has resulted in high and volatile prices.

2 ADDITIONAL CAPACITY (ACRES) NEEDED

Ceres estimates that demand for major rowcrops will grow approximately twice as fast as productivity. Consequently half of incremental demand over the next decade will need to be met by additional capacity (acreage).

According to the United Nations Food and Agriculture Organization (FAO), annual crop farmland acreage has been flat for the past 30 years. Ceres estimates it would take 200 to 250 million net additional acres to meet growing demand over the next decade. (See Exhibit 2) We do not believe this is realistic. So we anticipate a prolonged supply/ demand imbalance.

Contrary to popular belief, there is sufficient acreage available globally for conversion to cropland, but bringing on-line additional capacity (i.e., converting acreage to rowcrop production) will require a strong price signal. The available acreage is primarily in Sub-Saharan Africa and in South America. Barriers to investment include long distances to transport crops to markets, poor infrastructure, no history of farming, as well as political risk.



while soybean stocks will be very tight. Consequently, the market is "buying acres" for soybeans. We expect to see more soybeans and less corn planted this fall in Southern Brazil, and next spring in the U.S.

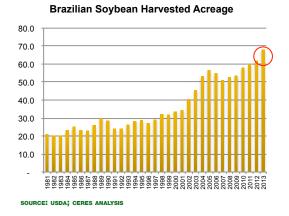
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2

SOURCE: FAO: CERES ANALYSIS

We anticipate a prolonged supply/demand imbalance.

EXHIBIT #3 BRAZILIAN SOYBEAN HARVESTED ACREAGE (MILLION ACRES)



\$7.50 corn (and \$16.50 soybeans) signals an expansion of acreage globally ... \$4.50 corn (and \$10 soybeans) signals a reduction in acreage. While acreage is being expanded worldwide (e.g., sub-Saharan Africa; Russia; Ukraine), Brazil is the most important marginal capacity. Brazil has significant pasture and cerrado (savannah) acreage available for relatively low cost conversion. However, it takes 3 years to condition the highly acidic soils to grow at full productivity. Consequently, development tends to come sporadically in years with a strong price signal.

3 \$7.50 CORN SIGNALS A *POSITIVE* SUPPLY RESPONSE

In 2012, droughts in both South and North America significantly cut global supplies of corn and soybeans. The North American drought was particularly severe, with U.S. corn production falling 12.8% year-over-year despite a 5.7% increase in planted acreage. The outlook for extremely tight supplies drove corn prices to \$7.50– \$8.00 and soybean prices to \$16.00–\$17.00 during late summer and fall, when Brazilian farmers were finalizing cropping decisions and buying seed and fertilizer.

Brazil has been expanding its soybean acreage for 20 years, but \$16.00 soybeans made the economics attractive on even marginal ground, which may not yet be fully conditioned to neutralize the naturally high acidity. Consequently, we witnessed the second biggest expansion of Brazilian soybean acreage ever. (See Exhibit 3)

Furthermore, \$7.50 corn made not only 1st-crop corn attractive in Southern Brazil, but also 2nd-crop or safrinha corn. In some parts of the world, including major parts of Brazil, farmers are often able to get 2 crops by planting a soybean variety with a shorter growing season, and then immediately planting the second crop (often corn, cotton, or sorghum). This acreage is able to rotate annually to whichever crop offers the best economics. But second-crop corn is risky. Farmers are gambling that the rainy season will continue until the corn is mature. However, at \$7.50 or even \$6.00 the economics have been compelling and in Brazil there was a major expansion of second crop corn in 2012 and 2013. For the first time ever, second crop corn (safrinha means "little crop" in Portuguese) was bigger than first crop corn, comprising 56% of the total production.

4 \$4.50 CORN SIGNALS A *NEGATIVE* SUPPLY RESPONSE

Where \$7.50 corn (and \$16.50 soybeans) signals an expansion of acreage, Ceres believes \$4.50 corn (more precisely \$10 soybeans) signals a *reduction* of acreage.

Mato Grosso State in West Central Brazil grows approximately 10% of the global soybean crop. But Mato Grosso soybeans must be



EXHIBIT 4

2014 SOYBEAN PRODUCTION COSTS FOR MATO GROSSO

US \$ PER BUSHEL @ 2.25 BRL

SEED	\$ 0.59	
FERTILIZER	\$ 2.41	
HERBICIDE/PESTICIDE	\$ 1.58	
LABOR, ETC	\$ 0.68	
OTHER VARIABLE	\$ 1.81	
TOTAL VARIABLE		\$ 07.07
TRANSPORTATION (BASIS VS. CBOT)	\$ 3.00	
BREAKEVEN PRICE		\$ 10.07

SOURCE: IMEA: BRAZIL INTERNATIONAL: CERES ANALYSIS

At \$6 corn and \$13 soybeans, U.S. Farmland values are fully supported by the economics of farming.

hauled more than 1,000 miles by truck over poor roads to get to market. Net of transportation costs, the price farmers receive for soybeans is significantly below the price quoted in Chicago. Currently the "basis" on bids for 2014 soybeans is reportedly ~\$3.00 under Chicago. So \$10 soybeans in Chicago (the ~price equivalent to \$4.50 corn) translates into \$7 soybeans in Mato Grosso. But \$7 is the breakeven price for the average producer in the state (See Exhibit 4) according to IMEA, the Mato Grosso Institute for Agricultural Economics. Put another way, half of the soybean producers in Mato Grosso, comprising ~5% of worldwide soybean production, would be below breakeven in a \$4.50 corn/\$10 soybean environment.

\$10 soybeans might not have an *immediate effect* on soybean acreage because Brazilian farmers typically buy inputs and market their crops in advance. So it could take \$4.50 corn/\$10 soybeans lasting a full year for soybean acreage to drop significantly.

Additionally, at \$4.50 corn, we would anticipate much less corn acreage in the second crop. Based on crop budgets from IMEA it will cost ~\$2.50 to grow a bushel of second crop corn in 2014. This is breakeven at ~\$5.00 corn given that IMEA estimates it costs another \$2.50 a bushel to truck corn from the interior to the major grainexporting ports. Second crop corn would at best be a breakeven proposition at \$4.50-\$5.00. We would see some acreage planted as farmers need a cover crop, but it will be significantly less than we saw in 2013.

CONCLUSION

Long run crop prices are the primary driver of farmland values. While short run agricultural commodity prices are highly volatile and notoriously unpredictable, *long run* prices are far more predictable. Ceres believes that corn prices will be range-bound between ~\$4.50 and \$7.50 over the next 5–10 years, with soybeans at \$10.00-\$16.50. At these prices, farmland values are fully supported by the economics of farming.



Ceres Partners

Ceres Partners has been investing in farmland since 2007, and today manages over \$250 million of property across the U.S. through Ceres Farms, LLC.

Ceres focuses on acquiring under-valued farms and adding value through improvements and partnerships with leading progressive farmers.

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