Are Soybeans Underpriced?

November 10, 2010, Chris Hurt  hurtc@purdue.edu

What an interesting question! How could soybeans be underpriced with cash bids around $13? The answer lies in the price of soybeans relative to other crops that are going to compete for 2011 acreage. We will first look at new crop bean values then turn to the question of value for old crop.

Soybeans are in much tighter supply than had been anticipated prior to the November USDA updates. The USDA lowered production by 33 million bushels and increased exports by 50 million bushels resulting in an 80 million bushel decline in ending stocks to only 185 million bushels. This puts the ending stocks to use at 5.5% next August 31, only slightly more than the past two years. This 80 million bushel reduction means the U.S. needs about 1.8 million more acres of beans next year than had been expected prior to the report. Thus, soybeans have been added to corn, cotton, and wheat bidding strongly for 2011 acreage. New crop soybeans need to be priced in relationship to these other crops.

Up to this point, all signs had pointed to corn as the go to crop for 2011 in the Midwest with budgeted returns $50 to $100 an acre better than beans. With the new recognition of the need for nearly two million more soybean acres, new crop soybean prices will need to more closely compete with corn. What is that price? To answer that question I am using closing new crop futures on November 9 where December 2011 corn futures were $5.52 and November 11 soybeans were $12.45. Using Purdue’s preliminary budgeted variable costs for 2011 that indicates November soybean futures need to be $1.25 a bushel higher to breakeven with corn on average Indiana soils. In summary, 2011 November futures need to be an amazing $13.70 a bushel, not a mere $12.45.

Futures prices shot upward on USDA’s 80 million bushel reduction in ending inventories for the 2010/11 marketing year. The question of how high bean prices will go may come down to three factors: exports, South American production, and commodity inflation. The first and most important will be export sales, and particularly how many beans China buys. Export sales in the most recent three week period have averaged near 70 million bushels per week, probably a record sales pace. More importantly export commitments for this marketing year are up 24% over the same date last year. In comparison, the USDA is estimating that total exports for the year will be up only 5% (even after adding 50 million bushels on November 9).

China is the lead country committing to about 60% of our soybean sales for this marketing year. Their purchase rate is 24% ahead of last year at this point. Most of our remaining major customers also are running well ahead of last year’s purchase pace as well. So, the question
remains whether the world has just decided to purchase early this year, or if export estimates will have to be raised multiple times in coming months. One contributing factor will be the size of the South American crop and USDA has the size of the Brazilian and Argentinian crops down about 150 million bushels from last year. That should mean somewhat less competition for U.S. exports sales in the late winter and spring.

The chart below shows the startling growth in Chinese imports of U.S. soybeans (Source: USDA:FAS). From imports of about 400 million bushels in the mid-2000’s that has grown to nearly 900 million bushels estimated for this marketing year. In the previous two years their imports from the U.S. grew by 140 million and 180 million bushels. For this year, USDA has that growth at only 57 million bushels (882-825). In addition to smaller South American production this year, China’s own soybean crop was slightly lower this year as well. Perhaps this points to the possibility that Chinese imports from the U.S. may ultimately be much higher. If they have a growth rate of 120 million this year (more in line with the past two years), their imports from the U.S. could still be 60 million greater than current USDA estimates. With current estimated ending stocks of only 185 million bushels, 60 million bushel larger exports would put U.S. inventories in the panic mode.

If these added exports do continue to develop, then any weather threats to yields in South America would add to the bullish fever and probably assure a retesting of the record high soybean price range of $14 to $16 per bushel. And this before the mention of the FED’s $600 billion quantitative easing program and it’s growing impact on commodity price inflation.