Soybean prices have moved sharply higher since early May, continuing the uptrend started in early October 2006. November 2007 futures, for example, have increased by about $1.20 since mid-May and by more than $3.00 since early October.

A number of factors have contributed to the increase in prices at various times over the past nine months. Chief among those was the expectation and eventual confirmation of a sharp reduction in soybean acreage in the U.S. this year. A second price supporting fundamental factor was the expansion in use of vegetable oils in the production of biodiesel. While soybean oil stocks have remained large, expanding consumption of soybean oil, palm oil and canola oil has resulted in higher prices of vegetable oils. In the U.S., the Census Bureau estimates that monthly consumption of soybean oil for biodiesel production expanded from 168 million pounds in January 2007 to 244 million pounds in May 2007. Biodiesel use of soybean oil accounted for 14 percent of domestic soybean oil consumption in May 2007. A third factor supporting the recent strength in soybean prices is the need for South America to substantially expand soybean area for harvest in 2008. High prices are thought necessary for that expansion since production costs are increasing. In addition, the strength of the Brazilian currency requires a higher U.S. dollar-based price to maintain a given level of profitability.

In the very near term, soybean prices will be largely influenced by the progress of the U.S. crop and expected size of the 2007 harvest. In its July update, the USDA’s World Agricultural Outlook Board (WAOB) projected a 2007 harvest of 2.625 billion bushels, 120 million less than the June forecast and 563 million less than the record crop of 2006. The forecast is based on the forecast of harvested acreage in the USDA’s June Acreage report and a projected yield of 41.5 bushels based on the analysis of regional trend yields since 1989. That projection is 1.2 bushels below the 2006 average yield and 1.5 bushels below the record yield of 2005. Based on the correlation between the U.S. average yield and the percent of the crop rated good or excellent at the end of the growing season, a yield of 41.5 bushels implies a year end crop condition rating of only 58 percent good or excellent. As of July 8, 65 percent of the crop was rated in good or excellent condition. Crop ratings will be carefully monitored during the critical part of the growing season over the next six weeks.
to judge the potential yield. The USDA’s National Agricultural Statistics Service will release its first yield and production forecasts on August 10.

With a crop of 2.625 billion bushels, the USDA’s WAOB projects a 70 million bushel decline in U.S. soybean exports during the 2007-08 marketing year. South American exports are expected to jump by 255 million bushels, as Chinese imports increase by 165 million bushels. Year ending stocks of soybeans in the U.S. are expected to decline from 600 million bushels on September 1, 2007 to 245 million bushels on September 1, 2008. The WAOB sees the 2007-08 marketing year average farm price in a range of $7.75 to $8.25, compared to the $6.35 average for the year ending on August 31, 2007.

Futures settlement prices for the overnight trade of July 16, 2007 implied a much higher 2007-08 average farm price than forecast by the USDA. November 2007 futures settled at about $9.21 and July 2008 futures settled at about $9.62. With basis levels near the average of the past five years, those prices implied a 2007-08 marketing year average farm price near $9.20. Futures prices for the 2008 and 2009 marketing year were at even higher levels. Prices may continue to be quite volatile as the growing season wraps up, but current futures prices appear to offer attractive pricing opportunities.

A bit of a pricing dilemma, however, is presented by the generally weak soybean basis. For example, on July 13 the average overnight bid for harvest delivery in south central Illinois was $8.83, or nearly $.60 under the settlement price of November 2007 futures. In the previous four years, the basis on the same date ranged from -$.33 to -$.20. Following the transportation disruption from hurricane Katrina in 2005, the basis in that area traded to only -$.44. With a $.40 spread from November 2007 to July 2008 futures, the current harvest bid is $1.00 under July 2008 futures. Currently, the spot cash bid of soybeans in south central Illinois is extremely weak, at $.67 under August futures. Tightening stocks of soybeans during the upcoming marketing year suggests that basis levels will return to a more normal level, meaning that the cash bid in the example area could be about $.10 under July futures by next spring. If so, the market is currently offering about $.90 return on 9-months storage of the 2007 crop. At 8 percent, the interest cost for 9 months storage is near $.50, leaving a $.40 return to cover physical storage costs. As the 2007 crop is priced, the market is encouraging that the crop be stored and priced for later delivery – selling futures, using a hedged-to-arrive contract, or a cash contract if the deferred basis bids are strong.

Issued by Darrel Good
Extension Economist
University of Illinois