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## IS STORAGE CAPACITY ADEQUATE?

There has been general concern about the capacity to store fall harvested crops in light of the prospects for the 2007 corn crop to exceed 13 billion bushels. With production forecasts now available, prospective fall supplies can be calculated.

While the 2007 harvest of fall crops is spread over a long period of time, the magnitude of fall supplies can be represented by the expected size of the September 1 inventory of the 2006 crops, the September 1 inventory of 2007 crops already harvested, and prospective size of the fall harvest of the primary crops - corn, soybeans, and sorghum. The USDA projects the September 1, 2007 inventory of corn, soybeans, and sorghum at 1.75 billion bushels. We forecast the September 1 inventory of wheat, oats, and barley at 2.16 billion bushels, so that September 1 stocks of the six major crops may be near 3.91 billion bushels. Stocks of these crops totaled 4.545 billion bushels on September 1, 2006. The USDA forecasts production of corn, sorghum, and soybeans at 16.154 billion bushels, suggesting a fall crop supply of 20.064 billion bushels. Production of these three crops totaled 14.001 billion bushels in 2006, resulting in a total fall crop supply of 18.546 billion bushels. Excluding rice (fall supplies will be about equal those of a year ago), these calculations suggest that the 2007 fall crop supply will be about 1.518 billion bushels larger than the 2006 supply. However, the largest supply, based on the methodology used here, was in the fall of 2005 when inventories plus production totaled 19.288 billion bushels. It appears that the supply this year will be about 776 million bushels (4 percent) larger than the previous record supply of 2005.

Additional storage capacity has been added since the fall of 2005. The USDA provides estimates of on-farm and off-farm storage capacity each year in the December *Grain Stocks* report. Estimates of off-farm capacity exclude, among others, facilities that are used to store only rice or peanuts and capacity at processing facilities that are exclusive to cottonseed and peanuts. Crop storage capacity as of December 1, 2006 was estimated at 20.347 billion bushels, 392 million bushels above the December 1, 2005 capacity and 653 million above the December 1, 2004 capacity. It is not known how much capacity has been added in 2007. If capacity has been added at the same rate as in 2006, total U.S. capacity this fall may be near 20.739 billion bushels. That exceeds our calculation of fall crop supplies by 675 million bushels. The calculation of surplus capacity was 1.801 billion bushels last year, but only 667 million bushels

in 2005. On the surface, it appears that issues of storage capacity will not be any more severe than in 2005. The storage challenge in 2005 was further complicated by hurricane Katrina which interrupted the flow of grain through the Gulf. A significant amount of temporary storage will likely be required again this year, but probably not more than was required in 2004 and 2005.

Regional storage issues could be more severe than implied by the previous calculations. Even in Illinois, however, where combined corn and soybean production is expected to exceed that of last year by 405 million bushels, the shortage of storage appears to be no more severe than in 2004, assuming capacity has been added in 2007 at the same rate as in 2006.

One of the results of the anticipated storage crunch this fall has been the relatively weak basis for harvest delivery. In the south-central region of Illinois, for example, the average harvest bid on August 16 was \$.50 under December futures. That compares to \$.37 on the same date last year, \$.24 in 2005, and \$.20 in 2004. The basis strengthened to \$.455 under on August 17, but remains weak by historic standards. With a \$.32 carry from December 2007 to July 2008 futures, the average harvest bid is \$.775 under July 2008 futures. In each of the past three years, the basis has strengthened to about \$.15 under July futures by the end of June. It appears, that the market is currently offering about \$.60 per bushel to store corn from harvest to June in this region of the country. Unless the size of the fall harvest exceeds current forecasts, the corn basis could strengthen quickly after the fall harvest, in part due to storage demand for corn. Consumption of U.S. corn during the 2007-08 marketing year is projected at 12.69 billion bushels. The rate of consumption varies seasonally, but that is an average of nearly 35 million bushels per day, about 4 million above the average of the past year.

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