

Wheat Market Situation & Outlook

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I. U.S. Wheat Market Situation and Outlook

- A. **2011 U.S. Wheat Production Prospects:** Drought stress in 2010-11 in the central and southern Great Plains affecting hard red winter wheat production and excessive moisture / planting problems in northern plains hindered seeding and/or slowed development of hard red spring and durum wheat production have been only partly offset by higher soft red winter wheat production, and have had the cumulative effect of reducing 2011 U.S. wheat production prospects.
- a. **Lower Acreage, Higher Yields & Lower Production**
- i. **Lower Acreage:** Wheat seeding problems in the northern plains for spring wheat and durum wheat have led to reductions in the USDA's projections of 2011 planted and harvested acreage (**see Table 1**). In the August Crop Production report, the USDA projected U.S. wheat planted area at 55.2 million acres, down 1.2 million from July, and compared to 53.6 million in 2010 and 59.2 million in 2009. Projected harvested area of 45.9 million acres is down 1.3 million from July, and compares to 47.6 million in 2010 and 49.9 million in 2009.
 - ii. **Higher Yields:** The spring wheat acreage that was able to be planted is rated in generally good to excellent condition (**Table 1**). USDA raised its projection of 2011 U.S. wheat yields to 45.2 bushels per acre, up 0.6 bushels from July, compared to 46.4 bushels in 2010 and 44.5 bushels in 2009.
 - iii. **Lower Production:** Lower wheat acreage more than offset higher yields, with 2011 U.S. wheat production projected to be 2.077 billion bushels (bb), down 29 million bushels (mb) from July, and down from 2.208 bb in 2010 and from 2.218 bb in 2009 (**Table 1**). It is possible that further declines in U.S. spring wheat production prospects could reduce U.S. total wheat production and supplies by an additional 100 million bushels or more.
- b. **Variability of August-to-Final Wheat Production Forecasts:** USDA August projections of U.S. wheat production have at least a moderate degree of variability relative to final wheat crop size, with sizable forecast errors occurring several times since 1990.
- i. Since 1965 USDA August projections of U.S. wheat production have been too high 61% of the time, too low 37% of the time, and exactly correct 2% of the time (**Figure 1**).
 - ii. When August forecasts have been **too high**, they have averaged 1.9% higher than November estimates, with a 2.7% forecast standard error.
 - iii. When August forecasts have been **too low**, they have averaged 1.9% lower than November estimates, with a 2.4% forecast standard error.
 - iv. Since 1965, the years with the largest decline in U.S. wheat production forecasts by the USDA from August to the determination of Final production numbers have been 1993

(6.3% decline), 1987 (5.0% decline), 2002 (4.7% decline), and 1965 (4.4% decline). In 2010, USDA U.S. wheat production projections declined 1.7% from August to November (**Figure 2**).

- B. **MY 2011/12 U.S. Wheat Supply-Demand Balances:** For MY 2011/12, a small tightening of U.S. wheat production and total supplies, a reduction in projected U.S. wheat exports, and an increase in wheat feeding combined to leave U.S. wheat supply-demand balances essentially unchanged (**Table 1**).
- a. **Wheat Usage Changes:** A mixed set of factors are influencing projected usage of U.S. wheat in MY 2011/12.
- i. Domestic food usage of 945 mb continues to trend higher in accordance with U.S. population growth and largely inflexible consumer wheat product purposes.
 - ii. U.S. wheat exports are projected to be 1.100 bb in MY 2011/12 – down 50 mb from July, and less than 1.289 bb in MY 2010/11. U.S. export prospects have diminished at least in part because of a recovery in Black Sea (Russia, Ukraine, Kazakhstan, etc.) wheat production and export competitiveness in 2011.
 - iii. Diminished 2011 U.S. feedgrain production will likely lead to more increases in domestic and foreign wheat feeding. To the degree that U.S. livestock feeders and even ethanol producers make use of wheat as a competitive substitute for tight feedgrain supplies, wheat feeding will continue to increase and “whittle down” U.S. wheat ending stocks. The largest amount of wheat fed in the U.S. on record was 482 million bushels in MY 1990/91, compared to 240 mb projected by the USDA in August for MY 2011/12.
- b. **Recent Wheat Use Trends:** Variability in U.S. wheat exports has had a key influence on U.S. wheat supply-demand balances since MY 2007/08 (**Figure 3**). The projected decline in U.S. wheat exports to 1.100 bb from the recent high of 1.289 bb in MY 2010/11 is due to rationing of use brought about to some degree by higher prices but also by larger foreign wheat supply availability. Export declines combined with consistent domestic food use (945 mb) and increased wheat feeding (240 mb) to leave MY 2011/12 wheat usage unchanged at 2.367 bb from July. MY 2011/12 U.S. wheat usage of 2.367 bb is down from 2.420 bb in MY 2010/11, but up from 2.018 bb in MY 2009/10.
- c. **Ending Stocks-to-Use & Wheat Prices:** Projected MY 2011/12 U.S. wheat prices increased sharply due in part to moderately tighter U.S. wheat ending stocks-to-use, but likely even more so in response to extremely tight prospects for MY 2011/12 U.S. feedgrain supply-demand balances (**Figure 4**).
- i. The projected record high MY 2011/12 U.S. wheat price range of \$7.00-\$8.20 (\$7.60 midpoint) in conjunction with only a moderately tight U.S. wheat ending stocks-to-use projection of 28.3% supports the idea that wheat prices are being supported by competitive feedgrain markets and perhaps other market factors.
 - ii. The ability to at least partially substitute wheat for feedgrains in livestock feed rations continues to provided underlying support for wheat market prices.

d. **World Wheat Supply-Demand Trends:** Consistent growth in World wheat usage since MY 2007/08 has occurred in spite of periods of record high prices in MY 2007/08-MY 2008/09 and again in MY 2011/12 (**Figure 5**).

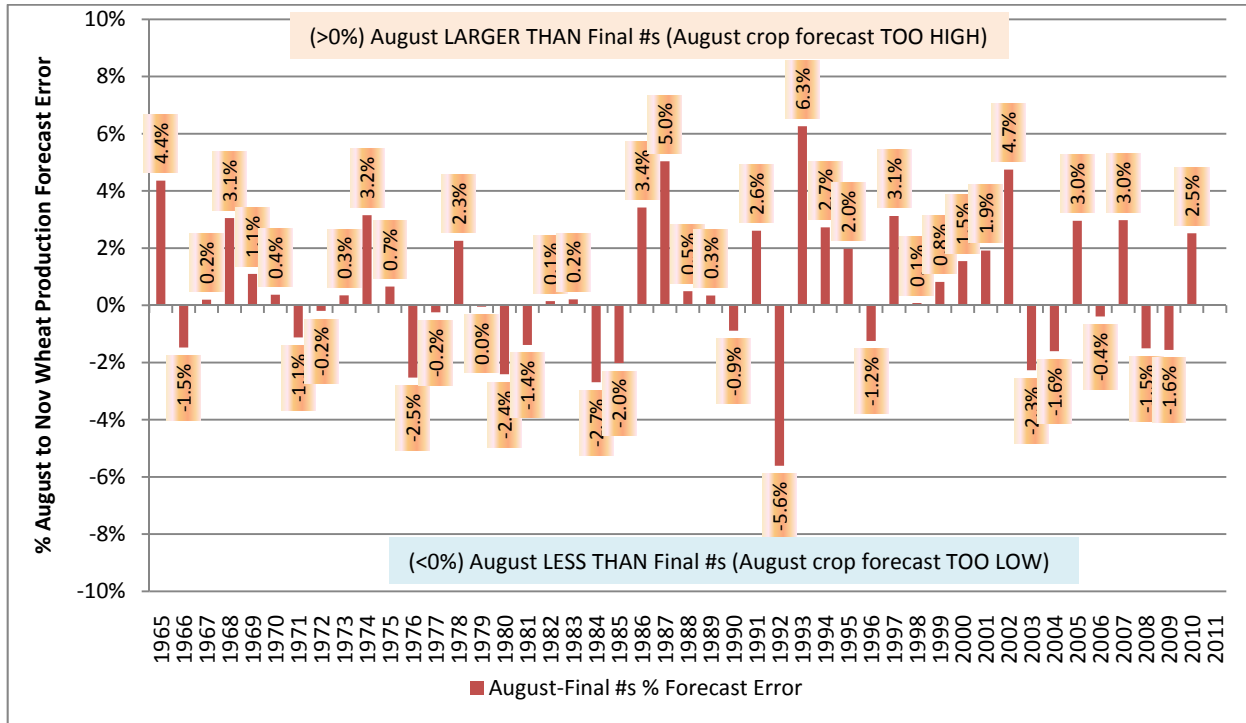
- i. This inflexible demand pattern illustrates how small changes in wheat supplies can cause large variability in U.S. and World wheat prices, as consumers of wheat need a necessary, specific amount of wheat for human consumption, and are willing to pay high prices to obtain it if supplies are tight. However, if supplies are abundant, consumer’s willingness to pay extremely high prices for wheat is much more limited.
- ii. The demand for wheat for human food use is very inflexible, i.e., small proportional changes in wheat supplies relative to demand bring about proportionally larger changes in wheat prices. This inflexibility of demand has been keenly experienced by the U.S. and World wheat market since MY 1998/99.

C. **Persistence of High Wheat Prices into 2012:** Given a) the likelihood of historically tight ending stocks for U.S. corn in MY 2011/12, b) competition for U.S. crop acres from soybeans, spring and other crops in spring 2012, and c) the persistence of dry conditions in hard red winter wheat production areas and long term forecasts for linger weather problems for at least the next several month, ***it seems likely that historically high and volatile wheat prices*** will persist throughout the remainder of 2011 and on into the spring of 2012.

Table 1. U.S. Wheat Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12
(August 11, 2011 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Planted Area (million acres)	60.5	63.2	59.2	53.6	55.2
Harvested Area (million acres)	51.0	55.7	49.9	47.6	45.9
Yield per harvested acre (bushels/acre)	40.2	44.9	44.5	46.4	45.2
	million bushels				
Beginning Stocks	456	306	657	976	861
Production	2,051	2,499	2,218	2,208	2,077
Imports	113	127	119	97	100
Total Supply	2,620	2,932	2,993	3,281	3,037
Food Use	948	927	919	930	945
Seed Use	88	78	69	73	82
Exports	1,263	1,015	879	1,289	1,100
Feed & Residual	16	255	150	129	240
Total Use	2,314	2,275	2,018	2,420	2,367
Ending Stocks	306	657	976	861	671
% Ending Stocks-to-Total Use	13.2%	28.9%	48.4%	35.6%	28.3%
U.S. Average Farm Price (\$/bushel)	\$6.48	\$6.78	\$4.87	\$5.70	\$7.00-\$8.20 Midpoint = \$7.30

Figure 1. U.S. Wheat Production August-to-Final % Forecast Accuracy (1965-2010)*



* Since 1965, USDA August wheat production forecasts have been too high 61% of the time (28/46 years), too low 37% of the time (17/46 years), and exactly correct 2% of the time (1/46). The average % forecast error for when August forecasts have been too high (i.e., ProdnAug – ProdnNov > 0%) is -1.9%, with a standard deviation of the forecast error of 2.7% in these situations. The average % forecast error for when August forecasts have been too low (i.e., ProdnAug – ProdnFinal < 0%) is 1.9%, with a standard deviation of the forecast error of 2.4% in these cases.

Figure 2. U.S. Wheat Production August-to-Final % Forecast Accuracy (1965-2010) – Arranged from TOO LOW to TOO HIGH.

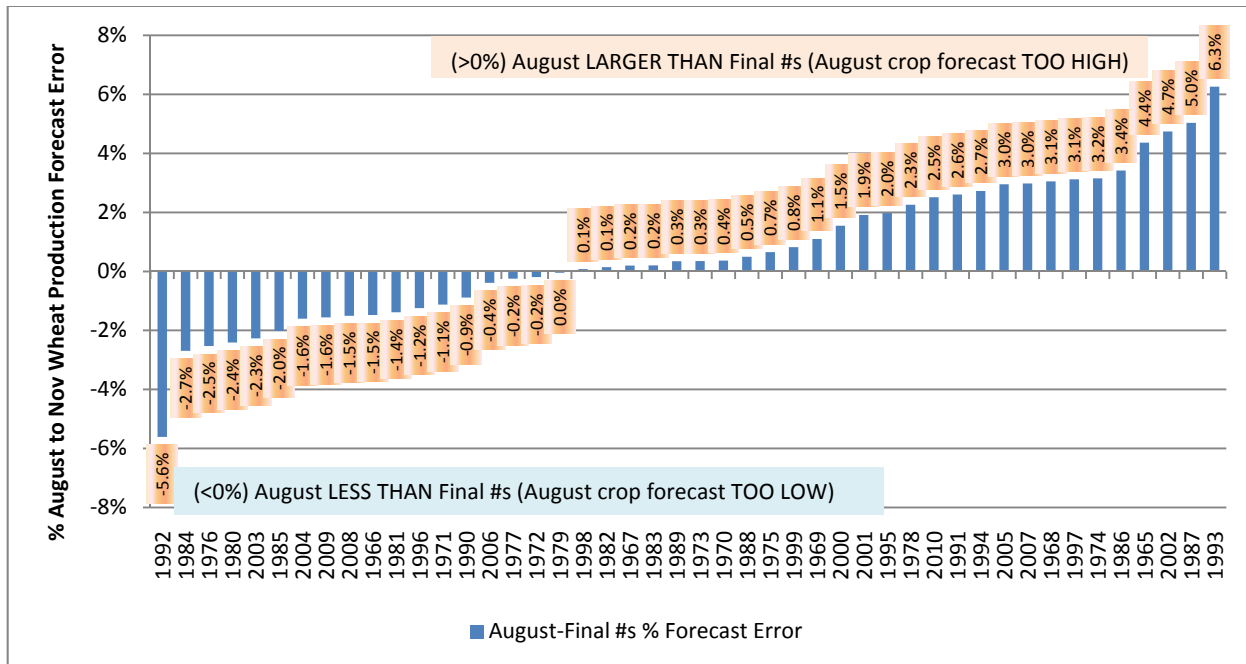


Figure 3. Trends in U.S. Wheat Use and Ending Stocks: MY 2004/05 through MY 2011/12
(August 11, 2011 USDA WASDE Report)

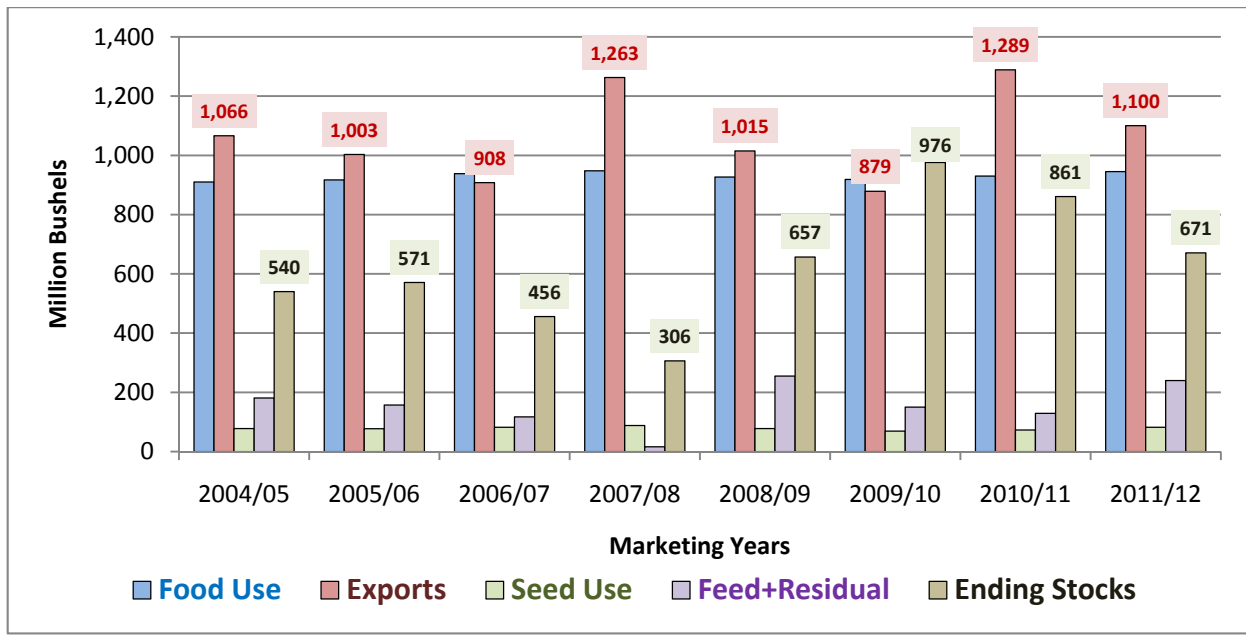


Figure 4. U.S. Wheat Ending Stocks vs U.S. Avg. Cash Prices: MY 1973/74 through MY 2011/12
(August 11, 2011 USDA WASDE Report)

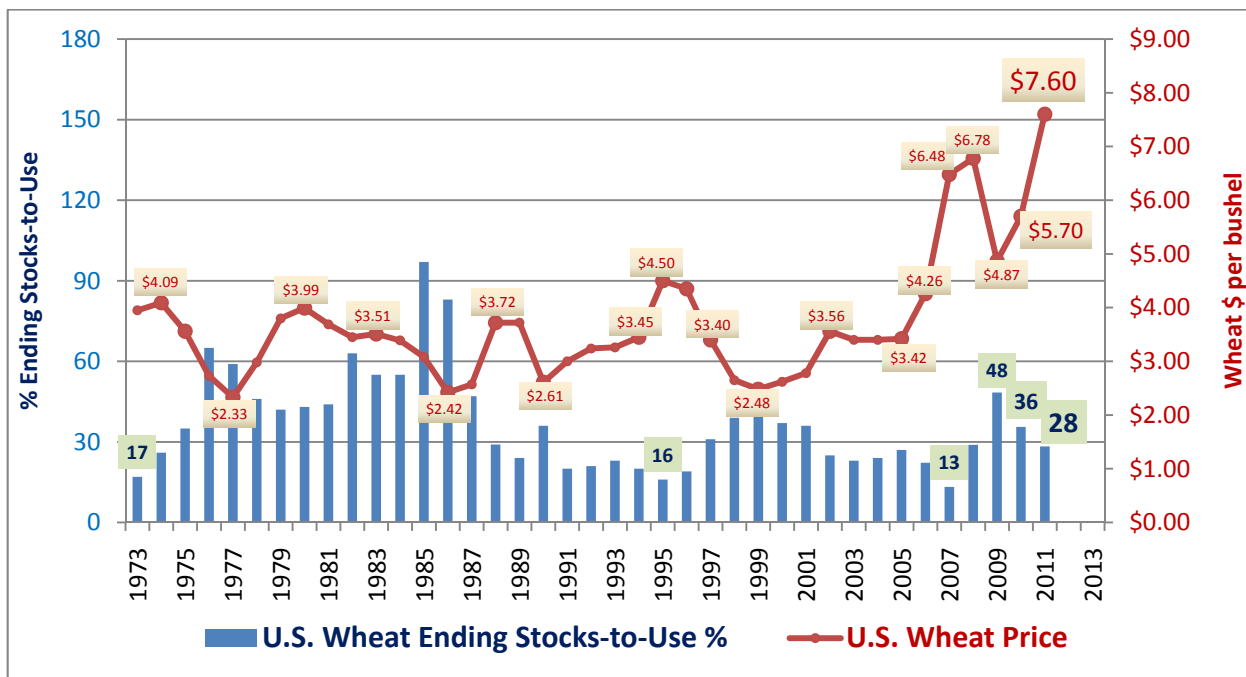


Figure 5. World Wheat Usage & Ending Stocks: MY 2007/08 thru MY 2011/12
 (August 11, 2011 USDA WASDE Report)

