

USDA WASDE Report - Wheat Market Impacts

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Summary

The impact of the USDA September 12th Crop Production and World Agricultural Supply-Demand Estimates reports were somewhat negative for wheat market price prospects. Although no changes were made in U.S. wheat supply estimates, a lowering of projected exports and food use for the 2011/12 marketing year resulted in an increase in ending stocks (from 671 in the August USDA WASDE report to 761 million bushels) and in % ending stocks-to-use (from 28.3% in August to 33.3%).

The U.S. wheat supply-demand balance sheet has a “comfortable” amount of ending stocks carryover when compared to recent historic minimums in the U.S. of 13.2% in MY 2007/08. The relative “abundance” of U.S. wheat supply-demand balances is striking in comparison to the near historic low ending stocks-to-use projections for U.S. corn (5.3% S/U in MY 2011/12 versus the record low of 5.0% in MY 1995/96) and U.S. soybeans (5.2% S/U in MY 2011/12 versus the record low of 4.2% in MY 2003/4). World wheat ending stocks of 194.59 mmt (28.7% S/U) for MY 2011/12 are markedly higher than historic lows of 124 mmt ending stocks (20.1% S/U) in MY 2007/08.

Although U.S. and World wheat supply-demand balances are relatively abundant compared to other major U.S. crops, U.S. wheat prices are projected to be record high. Wheat prices are being supported at record levels due to the likelihood of near historically low supply-demand balances for U.S. corn in MY 2011/12, and the opportunity to substitute wheat for corn in livestock feeding rations or even ethanol production. Wheat prices have followed corn and soybean prices higher as market participants arbitrage-away most opportunities for U.S. wheat to be a “low cost” feed alternative to corn in the U.S.. That said, there is the possibility that final MY 2011/12 U.S. wheat feed usage will be more than the current projection of 240 million bushels (mb) – with feed usage expected to come from soft red winter wheat stocks in the Eastern Corn Belt.

A number of serious questions cloud the outlook for wheat supplies and markets during the remainder of 2011 and on into 2012. Climatologist’s projections that the La Nina weather pattern will continue in the U.S. through early spring 2012 signals a the likelihood of a) extreme drought conditions in the southern and central plains and b) a repeat of wet spring planting conditions in the northern plains states and into Canada. This could hinder fall 2011 U.S. hard red winter wheat seeding and ultimately 2012 HRW wheat production prospects. It could also signal problems for 2012 U.S. spring and durum wheat seeding and production for the second consecutive year. As crop threats in various parts of the world continue to evolve, with the possibility of mid-September early frost damage to Canadian wheat and feedgrain crops as well as continuing issues and uncertainty about Australian and other countries / regions.

Finally, it is likely that the major a factor impacting U.S. and World wheat market prices in MY 2011/12 will continue to be cross-market impacts from strength in the U.S. corn prices. Whereas it can be argued that U.S. and World wheat supply-demand balances have been rebuilt to moderate levels from a historic low in MY 2007/08, the same cannot be said for U.S. corn and soybeans. Since it seems unlikely that U.S. corn and soybean stocks will be rebuilt within 1-2 years, it is increasingly possible that high corn and soybean prices (and wheat prices!) will persist for the next few years.

I. U.S. Wheat Market Situation and Outlook

- A. **2011 U.S. Wheat Production Prospects:** Although the USDA National Agricultural Statistics Service (NASS) Crop Production report gave no new information on 2011 U.S. wheat production prospects, the impact of crop production problems that occurred earlier in the year are evident. Drought stress in 2010-11 in the central and southern Great Plains hurt 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. These production problems for hard red winter, hard red spring and durum wheat were largely offset by larger soft red winter wheat production.
- a. **2011 U.S. Wheat Production = 2.077 billion bushels;** In its September Crop Production Report, the USDA maintained its August projection of U.S. wheat production at 2.077 billion bushels (bb), which is down from 2.208 bb in MY 2010/11 and from 2.218 bb in MY 2009/10, and the lowest since 2.051 bb in MY 2007/08 (**Table 1**). It is still possible that further declines in 2011 U.S. spring wheat production prospects could reduce U.S. total wheat production and supplies by an additional 25-50 million bushels or more.
- i. 2011 Hard Red Winter Wheat Production = 794 mb; down from 1.018 bb in 2010, and less than the 2007-2010 average of 982 mb (919 mb – 1.035 bb range). Drought conditions in the central and southern plains reduced 2011 hard red winter wheat production for that region to 81% of the 2007-2010 average.
 - ii. 2011 Hard Red Spring Wheat Production = 475 mb; down from 570 mb in 2010, and less than the 2008-2010 average of 520 mb (512 – 570 mb range). Planting and development problems in the northern plains reduced 2011 hard red spring wheat production for that region to 91% of the 2008-2010 average, down to the lowest level since 450 mb in 2007.
 - iii. 2011 Soft Red Spring Wheat Production = 452 mb; Soft red spring wheat production has varied widely over the last five years, with 452 mb in 2011 comparing to 238 mb in 2010, 404 mb in 2009, 614 mb in 2008, and 352 mb in 2007.
 - iv. 2011 White Wheat Production = 298 mb; up from 275 mb in 2010.
 - v. 2011 Durum Wheat Production = 57 mb; down from 107 mb in 2010, and less than the 2007-2010 average of 93 mb (72 – 109 mb range). Planting and development problems in the northern plains states of Minnesota and North Dakota reduced 2011 durum wheat production for that region to 61% of the 2007-2010 average.
- B. **MY 2011/12 U.S. Wheat Supply-Demand:** For MY 2011/12, a small increase in U.S. wheat imports and total supplies, a reduction in projected U.S. wheat exports, and an small decrease increase in wheat food use combined to increase U.S. wheat supply-demand balances to “comfortable” market levels (**Table 1**).
- a. **U.S. Wheat Supplies = 3.047 bb:** The USDA projected MY 2011/12 total wheat supplies to be 3.047 bb, based on beginning stocks of 861 mb, 2011 production of 2.077 bb, and imports of 110 mb (up 10 mb from August). This amount of total supplies is less than 3.281 bb in MY

2010/11, but greater than for the three previous marketing years (i.e., 2.993 bb in MY 2009/10, 2.932 bb in MY 2008/09, and 2.620 bb in MY 2007/08).

Commentary: Without the additional 214 mb of 2011 U.S. soft red winter wheat production (i.e., 452 – 238 mb for 2011 versus 2010), U.S. wheat supplies would be closer to 2.8 mb – the second lowest U.S. wheat total supply figure since MY 2007/08. Ending stocks-to-use would likely be moderately tighter (i.e., in the 24%-26% range), with more concern by market participants in regards to the adequacy of MY 2011/12 wheat supplies.

- b. **U.S. Wheat Use = 2.287 bb:** A marked decrease in projected U.S. wheat export prospects, a small downward adjustment in food use, and no change in feed and residual usage led to a 3.4% decrease in projected MY 2011/12 wheat use from the August USDA WASDE report (Table 1). Projected weakness in exports (1.025 bb) combined with slightly lower domestic food use (940 mb) and relatively strong wheat feeding (240 mb) to lower MY 2011/12 wheat usage to 2.287 bb from August. MY 2011/12 U.S. wheat usage of 2.287 bb is down from 2.420 bb in MY 2010/11, but up from 2.018 bb in MY 2009/10.
- i. U.S. Domestic food usage of 940 mb (down 5 mb) in MY 2011/12 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 1.025 bb in MY 2011/12 – down 75 mb from August and 125 mb from the July WASDE report. Projected MY 2011/12 U.S. wheat exports are now 20.5% 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. However, concerns about possible early frost damage in Canada and possible short supplies of food quality wheat in the Black Sea area may positively affect wheat export prospects in future USDA reports.
 - iii. U.S. Wheat feeding of 240 mb in MY 2011/12 would be the second largest amount since MY 2007/08 (behind 255 mb in MY 2008/09). 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 September for MY 2011/12.

Commentary: It is entirely possible that diminished 2011 U.S. feedgrain production will 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.

- iv. **Recent Wheat Use Trends:** Variability in U.S. wheat exports has had a key influence and has been key source of variation in U.S. wheat supply-demand balances since MY 2007/08 (**Figure 1**). While food use has been consistent since MY 2004/05 (ranging from 879 to 940 mb), feed and residual use has varied from 16 to 255 mb over the same period.

- C. **U.S. Wheat Ending Stocks (761 mb) & Ending Stocks-to-Use (33.3%):** The USDA projects MY 2011/12 ending stocks to be 761 mb, up 90 mb from August, and down from 861 mb in MY 2010/11 and from 1.708 bb in MY 2009/10 (**Table 1 and Figure 1**). The MY 2011/12 projection equals 33.3% ending stocks-to-use, up from 28.3% in August, but down from 35.6% in MY

2010/11, and from 48.4% in MY 2009/10 (**Figure 2**). These ending stocks and % ending stocks-to-use levels compare to the historic 60 year low of 306 mb and 13.2%, respectively, in MY 2007/08.

Commentary: Whereas U.S. corn and soybean % ending stocks-to-use are each near historic lows, U.S. wheat % ending stocks-to-use levels of 33.3% in MY 2011/12 are much larger than recent historic lows (i.e., 13.2% in MY 2007/08). Wheat ending stocks levels are generally thought to be at “comfortable” levels, large enough relative total use to avoid causing concern to the wheat market. As a competitive livestock feed substitute for feedgrains, wheat market prices are being supported by were not being supported by record high corn prices. Without such support, it is likely that wheat prices would be markedly lower than their current levels.

Sensitivity to Changes in U.S. Wheat Production & Use: If MY 2011/12 ending stocks were to decline 50 mb because of decreased production with use being unchanged (i.e., 711 mb ending stocks and 2.287 bb total use), U.S. ending stocks-to-use levels would decline to 31%. Alternatively, if a 50 mb decrease in production were combined with a 100 mb increase in total use (i.e., 610 mb ending stocks and 2.387 bb total use), ending stocks-to-use would decline to 25.6%. So even with sizable declines in production and increases in usage both occurring, ending stocks-to-use would still markedly higher than historic lows in MY 2007/08.

- D. **U.S. Wheat Prices in MY 2011/12 = \$7.35-\$8.35 /bu.** U.S. wheat prices are projected to be record high in MY 2011/12, finding some support from wheat market supply demand-conditions, but have be strongly influenced by record high corn prices.
- a. The USDA projected MY 2011/12 U.S. average wheat prices to be record high in the range of **\$7.35-\$8.35 per bushel**, up \$0.35 on each end of the range from August, and up from \$5.70 in MY 2011 and \$4.87 in MY 2009/10 (**Table 1 & Figure 2**). Wheat prices in MY 2011/12 have eclipsed the previous record highs of \$6.48 and \$6.78 per bushel in MY 2007/08 and MY 2008/09, respectively.

Commentary: Tight corn supplies and high corn prices have provided carryover support for wheat prices. By responding to high corn prices, the wheat market appears to be acknowledging the possibility that large amounts of wheat feeding could occur in from fall 2011 through summer 2012 to make up for shortfalls in the 2011 U.S. corn crop and historically tight MY 2011/12 corn ending stocks. As market arbitrage forces impact wheat and corn prices, and as corn prices have moved higher, wheat prices have followed them at levels approximating breakeven feeding opportunities.

- E. **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 3**).
- a. **Inflexible World Wheat Demand:** This pattern of inflexible or inelastic World demand for wheat shows how only small changes in wheat supplies can and have caused large variability in U.S. and World wheat prices over the last five years.

Commentary: Consumers of wheat need a consistent amount for human consumption, and are willing to pay high prices to obtain it if supplies are tight. However, if food grade wheat supplies are abundant, consumer’s willingness to pay high prices for wheat is much more

limited. This inflexibility of demand has been keenly experienced by the U.S. and World wheat market since MY 1998/99.

- b. World Wheat Ending Stocks & Ending Stocks-to-Use for MY 2011/12 = 194.6 mmt (28.7% S/U): World Wheat ending stocks are projected to be 194.6 mmt, up 5.7 mmt since August, and larger than 193.3 mmt in MY 2010/11 and 199.9 mmt in MY 2009/10. However, % ending stocks to use has moderately declined over the most recent three marketing years, with 28.7% S/U for MY 2011/12 being less than 29.5% in MY 2010/11 and 30.6% in MY 2009/10. The historic World wheat ending stocks and % ending stocks-to-use lows since at least the early 1970s occurred in MY 2007/08, with ending stocks of 124 mmt (20.1% S/U).

- i. World Wheat Exports = 131.9 mmt in MY 2011/12: Projected World wheat exports of 131.9 mmt are up 0.6 mmt from August, and up from 130.2 in MY 2010/11, but are down from 135.8 mmt in MY 2009/10.

Larger exports in MY 2011/12 are projected for Canada (17.0 mmt, up 0.5 mmt), Russia (16.0 mmt, up 12.02 mmt), Kazakhstan (7.5 mmt, up 1.98 mmt), and Ukraine (9 mmt, up 4.7 mmt).

Lower exports are projected for the United States (27.9 mmt, down 2.0 mmt), Australia (17 mmt, down 0.5 mmt), the EU-27 (16.0 mmt, down 6.6 mmt), and Argentina (7.5 mmt, down 1.5 mmt).

Commentary: These projections of wheat exports are in some cases subject to change, such as is the case for Canada with the possibility of early frost affecting wheat production amount and quality. Quality issues may also be a concern in some key Black Sea exporting countries such as the Ukraine. With extremely tight World feedgrain supplies, export demand for low quality feed grade wheat as a substitute for corn in livestock rations should be high in MY 2011/12.

However, if World supplies of food quality wheat are less than expected, it may be a positive for that amount of food quality U.S. wheat exports in MY 2011/12.

- 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 lingering 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.
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Table 1. U.S. Wheat Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12
(September 12, 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	110
Total Supply	2,620	2,932	2,993	3,281	3,047
Food Use	948	927	919	926	940
Seed Use	88	78	69	73	82
Exports	1,263	1,015	879	1,289	1,025
Feed & Residual	16	255	150	133	240
Total Use	2,314	2,275	2,018	2,420	2,387
Ending Stocks	306	657	976	861	761
% Ending Stocks-to-Total Use	13.2%	28.9%	48.4%	35.6%	33.3%
U.S. Average Farm Price (\$/bushel)	\$6.48	\$6.78	\$4.87	\$5.70	\$7.35-\$8.35 Midpoint = \$7.85

Figure 1. Trends in U.S. Wheat Use and Ending Stocks: MY 2004/05 through MY 2011/12
(September 12, 2011 USDA WASDE Report)

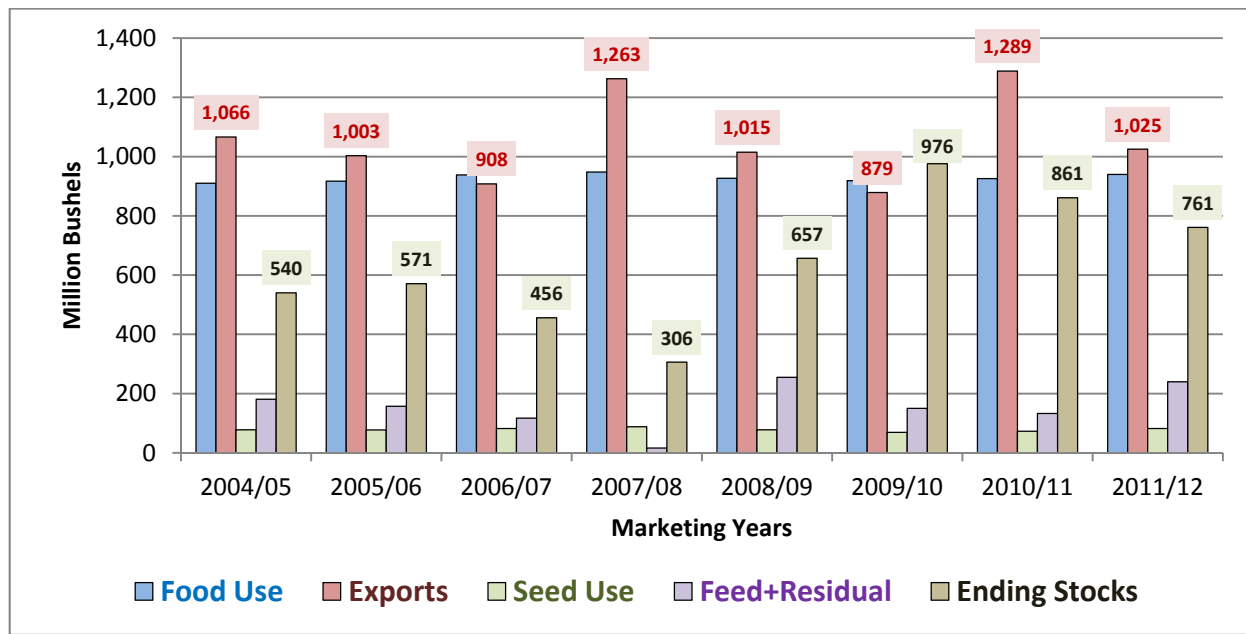


Figure 2. U.S. Wheat Ending Stocks vs U.S. Avg. Cash Prices: MY 1973/74 through MY 2011/12
(September 12, 2011 USDA WASDE Report)

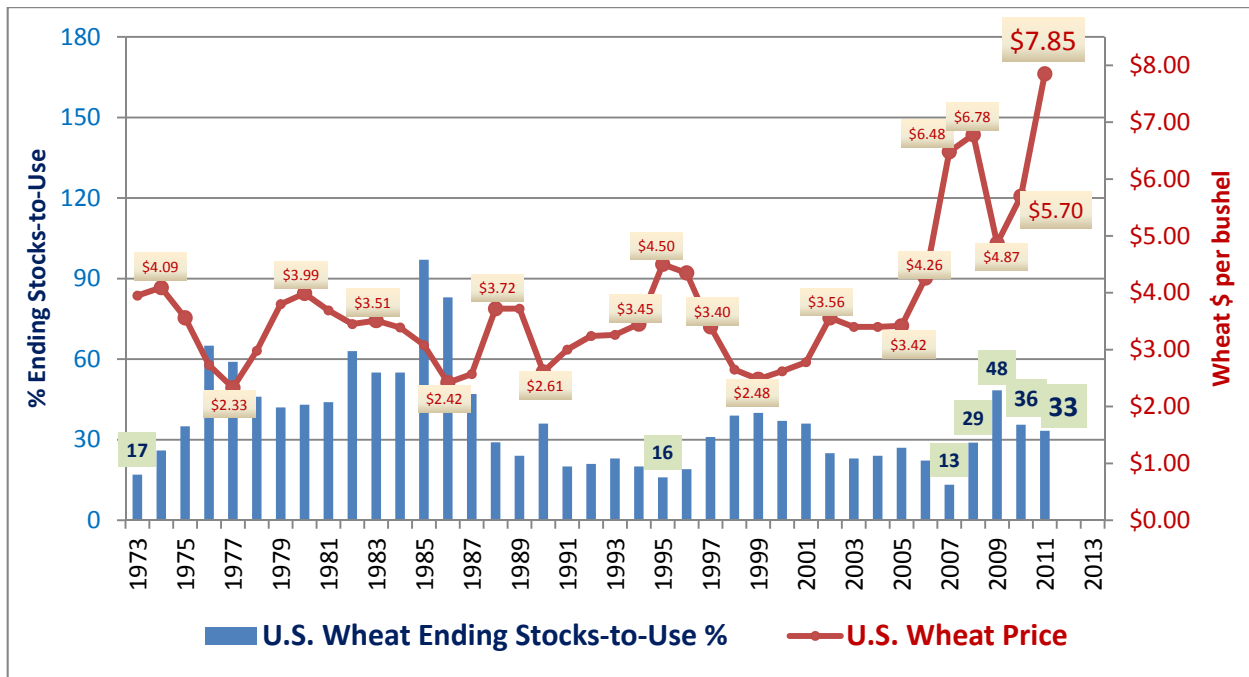


Figure 3. World Wheat Usage & Ending Stocks: MY 2007/08 thru MY 2011/12
(September 12, 2011 USDA WASDE Report)

