

Wheat Market Situation and 2012/13 Outlook

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February 20, 2012

Summary

In its February 9th World Agricultural Supply and Demand Estimates (WASDE) report, the USDA increased its projection of U.S. wheat exports, decreasing ending stocks and tightening % ending stocks-to-use for the 2011/12 marketing year. Projected World wheat supplies, trade and ending stocks were also increased for MY 2011/12. Serious questions exist regarding 2012 wheat crop prospects in the U.S., the European Union and the Black Sea region. However, World wheat supply-demand balances are large enough to buffer market concerns about short crop scenarios developing.

MY 2011/12 U.S. & World Wheat Market Prospects: The USDA raised its projection of U.S. wheat exports by 25 million bushels (mb) to 975 mb as a result of stronger than expected U.S. export sales to date in MY 2011/12. This change led to a 25 mb decline in U.S. wheat ending stocks to 845 mb. Projected % ending stocks-to-use for MY 2011/12 fell marginally to 39.5%. The USDA raised the lower end of its projection of U.S. average wheat prices by \$0.20 bushel to \$7.15-\$7.45 per bushel for MY 2011/12, which is record high compared to the previous high of \$6.78 in MY 2008/09.

However, the marginal declines in U.S. ending stocks-to-use were offset by rising World supply-demand balances. Projected MY 2011/12 World wheat ending stocks increased to a record high 213 mmt, representing 31.3% ending stocks-to-use. This compares to 30.8% in MY 2010/11, and 31.1% in MY 2009/10, and to historic lows of 124 mmt ending stocks and 20.1% S/U in MY 2007/08.

Early Projections of MY 2012/13 U.S. Wheat Market Scenarios: An “expected production” 2012 U.S. wheat supply-demand scenario assumes 57.5 million acres (ma) planted and 48.4 ma harvested, with trendline yields of 45 bu/ac., and total U.S. wheat production of 2.178 bb. Projected U.S. wheat ending stocks of 968 mb, 44.7% stocks-to-use, and a projected U.S. average farm price of \$5.00 per bushel are associated with this scenario, with a 65% probability or likelihood of occurring. A “low production” 2012 scenario is assigned a 15% probability, with U.S. wheat yields of 41.5 bu/ac, production of 2.009 bb, ending stocks of 650 mb, 40.0% S/U, and \$6.50 /bu average prices. A “high production” 2012 scenario is also assigned a 20% probability, with U.S. wheat yields of 47.0 bu/ac, production of 2.275 bb, ending stocks of 1.030 bb, 47.0% S/U, and \$4.60 /bu average prices. Taken together, these scenarios indicate an 85% probability of MY 2012/13 U.S. wheat ending stocks-to-use of 44.7%-47.0% S/U, and marketing year average U.S. farm prices of \$4.60-\$5.00 /bu.

Likely Wheat Price Trends in 2012: Unless wheat production problems occur in World wheat producing areas – such as the central and southern plains of the U.S., eastern Europe / the Black Sea area, or elsewhere – it is likely that World wheat supply-demand balances will remain large enough to suppress potential wheat market price increases. As has been the case in MY 2011/12, strength in corn prices has provided cross-market support for wheat market prices. If corn prices increase sharply in 2012 on acreage and production concerns, it is likely that wheat prices will be supported as well.

I. U.S. Wheat Market Situation and Outlook

- A. **“Old Crop” MY 2011/12 U.S. Wheat Supply-Demand:** In its February 9th WASDE report, the USDA raised its projection of U.S. wheat exports for MY 2011/12, leading to an increase in projected total usage, a decrease in ending stocks, and marginally tighter projected % ending stocks-to-use (**Table 1**). Even with these changes, United States’ wheat ending stocks and % ending stocks-to-use for MY 2011/12 are still projected to remain larger than normal for the period since the early 1970s.

Wheat ending stocks in the U.S. are fully adequate to meet domestic wheat usage needs in MY 2011/12, and can be described as becoming “burdensome” to the domestic wheat market. Absent a “game changing” crop shortfall in the U.S. this year that would reduce available domestic supplies, or significant foreign wheat production problems that cause a sharp increase in U.S. wheat exports, it seems likely that the current “abundant stocks” situation will persist in the coming year – limiting wheat price potential.

That said, the potential for 2012 wheat production problems in the U.S. central and southern plains region for hard red winter wheat and in the northern plains for hard red spring and durum wheat is likely to provide support for wheat prices in the early spring of 2012, as are prospects for volatile U.S. corn prices through the spring and early summer months of the coming year.

- a. **U.S. Wheat Supplies = 2.982 bb:** In its February report, the USDA made no changes in its projection that MY 2011/12 U.S. total wheat supplies would be 2.982 bb, based on beginning stocks of 862 mb, 2011 U.S. production of 1.999 bb, and imports of 120 mb (**Table 1**). This amount of total supplies is less than 3.279 bb in MY 2010/11, approximately equal to 2.993 bb in MY 2009/10, and more than 2.932 bb in MY 2008/09, and 2.620 bb in MY 2007/08.
- b. **U.S. Wheat Use = 2.112 bb:** Projected total usage of U.S. wheat in MY 2011/12 was raised 25 mb from the January USDA WASDE report (**Table 1**). Stronger U.S. wheat exports combined with unchanged domestic food use and wheat feeding led to an increase in projected U.S. wheat supply-demand balances. The February WASDE projection of U.S. wheat usage of 2.137 bb in MY 2011/12 is down from 2.417 bb in MY 2010/11, but up from 2.018 bb in MY 2009/10.
- i. U.S. Domestic Food Usage of 935 mb in MY 2011/12 continues to trend higher in accordance with U.S. population growth and largely inflexible consumer wheat product purchases.
- ii. U.S. Wheat Exports are projected to be 975 bb in MY 2011/12, up 25 mb from January and up 50 mb from December. Projected U.S. wheat exports in MY 2011/12 are down 24% from 1.289 bb in MY 2010/11, but still up from 879 mb in MY 2009/10.

Comments on U.S. wheat export shipments and sales for MY 2011/12 to date: U.S. export prospects have increased in recent months with the pace of U.S. exports being strong enough for the USDA to justify increasing its MY 2011/12 projection. Based on USDA Foreign Agricultural Service export reports, actual U.S. wheat export shipments for MY 2011/12 have totaled 656.9 mb – equal to 67% of the USDA’s 975 mb projection with 36 of 52 weeks (69%) of the marketing year completed. However, when future sales are added to completed shipments, a total of 837 mb are

accounted for, equal to 86% of the USDA projection. In particular, U.S. soft red winter wheat exports have been up 19% over the last marketing year, with white wheat also being up 10%.

- iii. U.S. Wheat feeding of 145 mb in MY 2011/12 is unchanged from January, but is down 80 mb from the September 2011 WASDE projection of 240 mb earlier in the marketing year.

Comments on unfulfilled expectations for U.S. wheat feeding in 2011: Given tight U.S. corn supply-demand balances and relatively abundant U.S. wheat supplies, it was thought by many market analysts in early-mid 2011 that U.S. wheat feed use would increase sharply to make up the shortfall in available U.S. corn. However, USDA projections to date have not indicated that to be the case. It is still possible that tightness of supplies for U.S. corn in the spring and summer months of 2012 may eventually force increased feeding of U.S. wheat to occur.

- iv. **Recent Wheat Use Trends**: Variability in U.S. wheat exports have been a 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 948 mb), feed and residual use has varied from 16 to 255 mb over the same period.

- C. **U.S. Wheat Ending Stocks (845 mb) & Ending Stocks-to-Use (39.5%)**: The USDA projects MY 2011/12 ending stocks to be 845 mb, down 25 mb from January. The February U.S. wheat ending stocks estimate is down from 862 mb in MY 2010/11 and from 976 mb in MY 2009/10 (**Table 1 and Figure 1**). The MY 2011/12 projection equals 39.5% ending stocks-to-use, down from 41.2% in January, and compares to 35.7% in MY 2010/11 and 48.4% in MY 2009/10 (**Figure 2**). These ending stocks and % ending stocks-to-use levels are markedly above the historic 60 year low of 306 mb and 13.2%, respectively, in MY 2007/08 – the benchmark “tight supply-demand balance” scenario marketing year since the early 1970s.

Comments on level of U.S. wheat % ending stocks-to-use: Whereas current projected U.S. corn % ending stocks-to-use is near historic lows, U.S. wheat % ending stocks-to-use levels of 39.5% in MY 2011/12 are much larger than the recent U.S. wheat historic low of 13.2% in MY 2007/08. Current U.S. wheat ending stocks are large enough relative to total use to avoid causing current market concerns about short supplies in the U.S. wheat market.

As a competitive potential livestock feed substitute for feedgrains, wheat market prices have been and continue to be supported by record high corn prices. Without such support from the corn market, it is likely that wheat prices would be markedly lower than their current levels given their burdensome supply-demand balances.

By responding to and keeping in the range of “relative market value relationship” with high corn prices, the wheat market appears to be acknowledging that the possibility remains that, should market forces and comparative grain prices dictate, large amounts of wheat feeding could occur during the February through May 2012 period to make up for shortfalls in the 2011 U.S. corn crop and historically tight MY 2011/12 corn ending stocks.

- D. **U.S. Wheat Prices in MY 2011/12 = \$7.15-\$7.45 /bu.**: Although U.S. wheat prices in MY 2011/12 have declined since last summer, they are still projected to be record high.
 - a. The USDA projected MY 2011/12 U.S. average wheat prices to be in the range of **\$7.15-\$7.45 per bushel**, up \$0.15 on the bottom of USDA’s projected price range from January. The midpoint of this price range, i.e., **\$7.30 per bushel**, is up from \$5.70 in MY 2011 and \$4.87 in MY 2009/10 (**Table 1 & Figure 2**). United States’ wheat prices in MY 2011/12 are on track to

eclipse the previous record highs of \$6.48 and \$6.78 per bushel in MY 2007/08 and MY 2008/09, respectively.

Comment on Farmers' cash wheat storage and sales strategies: As in January, this month U.S. wheat cash basis levels and cash prices may be finding support from U.S. wheat farmers' resistance to selling any remaining wheat at what they view to be lower than expected prices – at least lower prices than were available at times during the summer and early fall of 2011. However, with the time till 2012 winter wheat harvest growing shorter, “speculatively storage” strategies are growing more risky to maintain.

E. **Supply-Demand Balances for Major Classes of U.S. Wheat:** **Tables 2-4** show U.S. hard red winter, hard red spring, and soft red winter wheat supply-demand balances for the 2007/08 through 2011/12 marketing years.

- a. **U.S. Hard Red Winter Wheat Supply-Demand (MY 2007/08-MY 2011/12):** The USDA increased its projection of MY 2011/12 HRW wheat exports in February, leading to lower projected ending stocks and tighter % ending stocks-to-use for the class. For the 2011/12 marketing year, the USDA projects total supplies for U.S. hard red winter wheat to be 1.167 bb, based on beginning stocks of 386 mb, production of 780 mb, and imports of 1 mb (**Table 2**). Total use of 834 mb is comprised of food use of 395 mb, seed use of 34 mb, exports of 395 mb, and feed and residual use of 10 mb. The USDA has projected MY 2011/12 U.S. HRW wheat ending stocks of 333 mb (39.9% S/U) – the lowest level in 3 years, compared to 386 mb (37.9% S/U) in MY 2010/11, 385 mb (48.7% S/U) in MY 2009/10, 254 mb (27.6% S/U) in MY 2008/09, and to extremely tight supplies in MY 2007/08 of 138 mb (14.0% S/U).

Comments on the likelihood of 2011 drought conditions carrying over to 2012 U.S. HRW wheat production: In late – winter / early spring of 2012 the focus of the U.S. wheat market will likely be on crop conditions and production prospects for HRW wheat in the U.S. central and southern plains, given the projected continuation of the La Nina weather pattern in early 2012. The question of whether the 2011 drought conditions that occurred in these areas will be prolonged and continue to have a negative impact on the 2012 U.S. HRW wheat crop will be a key driver of U.S. wheat market prospects through July 2012.

- b. **U.S. Hard Red Spring Wheat Supply-Demand (MY 2007/08-MY 2011/12):** The USDA's projection of 2011 U.S. hard red spring wheat production in the U.S. dropped to 398 mb in 2011, the lowest level since 351 mb in 2002 (**Table 3**). The USDA decreased its projection of MY 2011/12 HRS wheat exports in February, leading to an increase in projected ending stocks and a “looser” % ending stocks-to-use for the class. In the 2011/12 marketing year, the USDA projects total supplies for U.S. hard red spring wheat to be 621 mb, based on beginning stocks of 185 mb, production of 398 mb, and imports of 38 mb (**Table 3**). Total use of 472 mb is comprised of food use of 220 mb, seed use of 22 mb, exports of 230 mb, and no appreciable feed and residual use. The USDA has projected MY 2011/12 U.S. HRS wheat ending stocks of 149 mb (31.6% S/U). This level of ending stocks is the lowest in 3 years, comparing to 185 mb (28.6% S/U) in MY 2010/11, 234 mb (47.1% S/U) in MY 2009/10, 142 mb (29.4% S/U) in MY 2008/09, and to the extremely tight supplies in MY 2007/08 of 68 mb (12.4% S/U).

Comments on potential impact of La Nina weather patterns on 2012 HRS seedings: The anticipated continuation of the La Nina weather pattern into early 2012 increases the likelihood of wetter than normal spring wheat seeding conditions next spring in the Northern Plains. In the spring of 2012

market analysts will be assessing the likelihood of a repeat of the extremely wet spring conditions that occurred in 2011 in spring wheat areas, and weighing their potential impact 2012 U.S. spring wheat acreage and production prospects.

- c. **U.S. Soft Red Winter Wheat Supply-Demand (MY 2007/08-MY 2011/12):** Soft red winter wheat production in the U.S. jumped dramatically to 458 mb in 2011 from 237 mb in 2010, which is the highest level since 614 mb in 2008 (**Table 4**). In the 2011/12 marketing year, the USDA projects total supplies for U.S. soft red winter wheat to be 659 mb, based on beginning stocks of 171 mb, 2011 production of 458 mb, and imports of 30 mb. Total use of 416 mb is comprised of food use of 155 mb, seed use of 15 mb, exports of 130 mb, and feed and residual use of 116 mb. The USDA has projected MY 2011/12 U.S SRW wheat ending stocks of 243 mb (58.4% S/U).

Total supplies of 659 mb in MY 2011/12 are up from 508 mb in MY 2010/11 and 607 mb in MY 2009/10, but still below 702 mb in MY 2008/09. Exports of 130 mb in MY 2011/12 are up from 109 mb in both MY 2010/11 and MY 2009/10, but down from 199 and 208 mb in MY 2008/09 and MY 2007/08, respectively. Feed usage of 116 mb in MY 2011/12 is up from 62 mb in MY 2011/12 and 90 mb in MY 2009/10, but less than 161 mb in MY 2008/09. Ending stocks of 243 mb (58.4% S/U) are up from 171 mb (50.7% S/U) in MY 2010/11, and greater than 242 mb (48.7% S/U) in MY 2009/10.

Comments on U.S. SRW wheat feeding prospects: Market expectations in summer 2011 were that feed usage of U.S. SRW wheat in MY 2011/12 would be markedly higher given the tightness of U.S. corn supply-demand balances. It is still possible that increases in U.S. SRW wheat feeding could occur in early-mid 2012 if the availability of U.S. corn supplies were to tighten markedly.

- F. **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. **World Wheat Exports = 140.25 mmt in MY 2011/12:** Projected World wheat exports of 140.25 mmt are up 0.88 mmt from January, and up from 131.82 in MY 2010/11 and from 135.80 mmt in MY 2009/10.
- i. Larger exports in MY 2011/12 are projected for **Australia** (21.0 mmt, up from 18.7 mmt last year), **Russia** (20.5 mmt, up 1 mmt from January and up from 3.98 mmt last year), **Canada** (17.5 mmt, down 0.5 mmt from January, but up from 16.6 mmt last year), **Kazakhstan** (8.5 mmt, up from 5.5 mmt last year), and the **Ukraine** (6.0 mmt, down 1 mmt from January, but up from 4.3 mmt last year).
- ii. Lower exports in MY 2011/12 are projected for the **United States** (25.5 mmt, up 0.68 mmt from January, but down from 35.1 mmt last year), the **EU-27** (17.0 mmt, down from 22.9 mmt last year), and **Argentina** (9.0 mmt, up 0.5 mmt from January, but down from 9.5 mmt last year).

Comments on U.S. competitor's wheat export prospects: Weather problems in parts of eastern Europe and the Black Sea countries may lead to further reductions in projected wheat production and exports from these regions in coming USDA WASDE reports. Government policies in the Black Sea region regarding wheat and other grain exports may impact World wheat and grain markets if these governments become fearful of having adequate domestic supplies. The relative abundance

of feed quality wheat is “fortuitous” for World grain markets, as countries look for lower cost livestock feed alternatives to higher priced / less available corn and other coarse grains.

- b. **World Wheat Imports = 135.9 mmt in MY 2011/12**: Projected World wheat imports of 135.9 mmt are up 0.7 mmt from January, and up from 130.1 in MY 2010/11 and from 133.6 mmt in MY 2009/10.
- i. **Larger imports** in MY 2011/12 are projected for **selected Middle Eastern countries** – including Iraq, Iran, Saudi Arabia and Israel (13.9 mmt, up from 13.3 mmt last year), the **EU-27** (7.5 mmt, up from 4.7 mmt last year), **Brazil** (7.0 mmt, up from 6.7 mmt last year), **other Former Soviet Union countries** – excluding Russia, Kazakhstan and the Ukraine (5.8 mmt, up from 5.3 mmt last year), and **China** (1.5 mmt, up from 0.9 mmt last year).
 - ii. **Lower imports** in MY 2011/12 are projected for **North African countries** – including Egypt and Libya (23.0 mmt, down from 24.1 mmt last year), and **Southeast Asian countries** – including Indonesia, the Philippines, Thailand and Vietnam (15.3 mmt, down from 15.8 mmt last year).

Comments on World supplies of food versus feed quality wheat for import: Increased World supplies and availability of wheat at marginally lower prices beginning in fall 2011 from Australia, the Black Sea Region and elsewhere has led to an increase in World wheat imports. Although supplies of lower quality feed wheat are abundant, supplies of higher protein wheat are not as abundant on a relative basis as evidenced by prices currently being offered for U.S. Hard Red Spring wheat on the Minneapolis Grain Exchange.

- c. **World Wheat Ending Stocks & %Ending Stocks-to-Use for MY 2011/12 = 213.1 mmt (31.3% S/U)**: World Wheat **ending stocks** are projected to be 213.10 mmt, up 3.08 mmt since January, and larger than 200.70 mmt in MY 2010/11 and 202.34 mmt in MY 2009/10. Current **% ending stocks-to-use** projections of 31.3% S/U for MY 2011/12 are greater than 30.7% in MY 2010/11 and 31.1% in MY 2009/10. The tightest supply-demand balances in the World wheat market since at least the early 1970s occurred in MY 2007/08, with declines down to 124 mmt in **ending stocks** and to 20.1% in **% ending stocks to use**.
- i. Overall, **foreign wheat production and export prospects** have improved markedly in MY 2011/12 over the previous year, with foreign **production** projected to be 638.5 mmt (up 46.9 mmt) and foreign **exports** projected to be 113.7 mmt (up 17.0 mmt or 17.5%).
- d. **Percent (%) Wheat Ending Stocks-to-Use for the World, U.S., China and Other Countries**: Changes in World wheat % ending stocks-to-use since the early 1970s has been driven largely by the United States and China, with influences by other major importing countries such as Canada and Australia (**Figure 4**).

The large buildup in World wheat stocks during the middle 1980s was due mainly to large increases in U.S. wheat ending stocks – although China, Canada and Australia also had increases in relative stocks during the period. The increase in World stocks during the 1997-2001 period followed large increases in Chinese wheat stocks. The recent buildup on World wheat stocks in MY 2010/11 and MY 2011/12 appears to be mainly attributable to both China and the United States.

G. Persistence of High Wheat Prices into 2012: Given a) historically tight ending stocks for U.S. corn in MY 2011/12, b) competition for U.S. crop acres between corn, soybeans, spring wheat in the northern plains, and other crops in spring 2012, and c) the forecast persistence of the La Nina weather pattern in early 2012, with expectations of drier than normal conditions in U.S. hard red winter wheat production areas and wetter than normal conditions in U.S. spring wheat regions, ***it seems likely that historically high and volatile wheat prices*** will persist throughout the spring months of 2012. Although wheat prices declined in fall 2011, still they are at historically high levels – even with growing U.S. wheat ending stocks for MY 2011/12.

Table 1. U.S. Wheat Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12
(February 9, 2012 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	54.4
Harvested Area (million acres)	51.0	55.7	49.9	47.6	45.7
Yield per harvested acre (bushels/acre)	40.2	44.9	44.5	46.3	43.7
	million bushels				
Beginning Stocks	456	306	657	976	862
Production	2,051	2,499	2,218	2,207	1,999
Imports	113	127	119	97	120
Total Supply	2,620	2,932	2,993	3,279	2,982
Food Use	948	927	919	926	935
Seed Use	88	78	69	71	82
Exports	1,263	1,015	879	1,289	975
Feed & Residual	16	255	150	132	145
Total Use	2,314	2,275	2,018	2,417	2,137
Ending Stocks	306	657	976	862	845
% Ending Stocks-to-Total Use	13.2%	28.9%	48.4%	35.7%	39.5%
U.S. Average Farm Price (\$/bushel)	\$6.48	\$6.78	\$4.87	\$5.70	\$7.15-\$7.45 Midpoint = \$7.30

Table 2. U.S. Hard Red Winter Wheat S-D Balance Sheet: MY 2007/08 through MY 2011/12
(February 9, 2012 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Planted Area (million acres)	33.0	31.3	31.7	28.6	28.5
Harvested Area (million acres)	25.7	25.9	24.1	24.0	21.4
Yield per harvested acre (bushels/acre)	37.2	39.9	38.1	42.4	36.4
	million bushels				
Beginning Stocks	165	138	254	385	386
Production	956	1,035	920	1,018	780
Imports	1	2	2	1	1
Total Supply	1,121	1,174	1,176	1,404	1,167
Food Use	397	385	361	359	395
Seed Use	35	35	32	32	34
Exports	536	447	370	616	395
Feed & Residual	15	52	28	11	10
Total Use	984	919	791	1,018	834
Ending Stocks	138	254	385	386	333
% Ending Stocks-to-Total Use	14.0%	27.6%	48.7%	37.9%	39.9%
U.S. HRW Avg. Farm Price (\$/bushel)	\$6.15	\$6.90	\$4.84	\$6.49	---
% U.S. HRW / U.S. All Wheat Price	94.9%	101.8%	99.4%	113.9%	---

Table 3. U.S. Hard Red Spring Wheat S-D Balance Sheet: MY 2007/08 through MY 2011/12
(February 9, 2012 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Planted Area (million acres)	12.7	13.5	12.6	13.0	11.6
Harvested Area (million acres)	12.4	12.8	12.3	12.6	11.3
Yield per harvested acre (bushels/acre)	36.3	39.9	44.5	45.1	35.9
	million bushels				
Beginning Stocks	117	68	142	234	185
Production	450	512	548	570	398
Imports	48	45	41	28	38
Total Supply	615	625	731	832	621
Food Use	233	224	239	247	220
Seed Use	20	17	17	14	22
Exports	304	210	214	339	230
Feed & Residual	-11	32	27	46	--
Total Use	547	483	497	647	472
Ending Stocks	68	142	234	185	149
% Ending Stocks-to-Total Use	12.4%	29.4%	47.1%	28.6%	31.6%
U.S. HRS Avg. Farm Price (\$/bushel)	\$7.16	\$7.39	\$5.26	\$6.54	---
% U.S. HRS / U.S. All Wheat Price	110.5%	109.0%	108.0%	114.7%	---

Table 4. U.S. Soft Red Winter Wheat S-D Balance Sheet: MY 2007/08 through MY 2011/12
(February 9, 2012 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Planted Area (million acres)	8.6	11.2	8.3	5.3	8.6
Harvested Area (million acres)	7.0	10.1	7.2	4.4	7.4
Yield per harvested acre (bushels/acre)	50.0	60.9	56.1	54.3	61.7
	million bushels				
Beginning Stocks	109	55	171	242	171
Production	352	614	404	237	458
Imports	14	34	32	29	30
Total Supply	475	702	607	508	659
Food Use	150	155	156	150	155
Seed Use	21	16	10	16	15
Exports	208	199	109	109	130
Feed & Residual	41	161	90	62	116
Total Use	420	531	365	337	416
Ending Stocks	55	171	242	171	243
% Ending Stocks-to-Total Use	14.0%	27.6%	48.7%	37.9%	58.4%
U.S. SRW Avg. Farm Price (\$/bushel)	\$5.20	\$5.78	\$4.35	\$5.16	---
% U.S. SRW / U.S. All Wheat Price	80.2%	85.3%	89.3%	90.5%	---

Figure 1. Trends in U.S. Wheat Use and Ending Stocks: MY 2004/05 through MY 2011/12
(February 9, 2012 USDA WASDE Report)

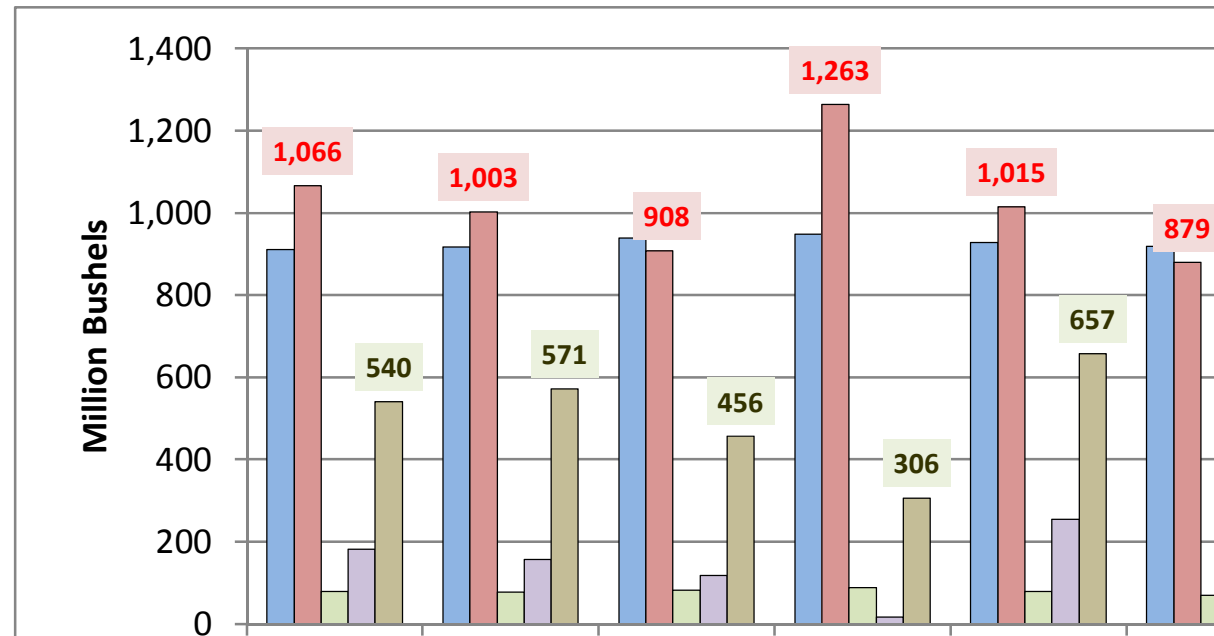


Figure 2. U.S. Wheat Ending Stocks vs U.S. Avg. Cash Prices: MY 1973/74 through MY 2011/12
(February 9, 2012 USDA WASDE Report)

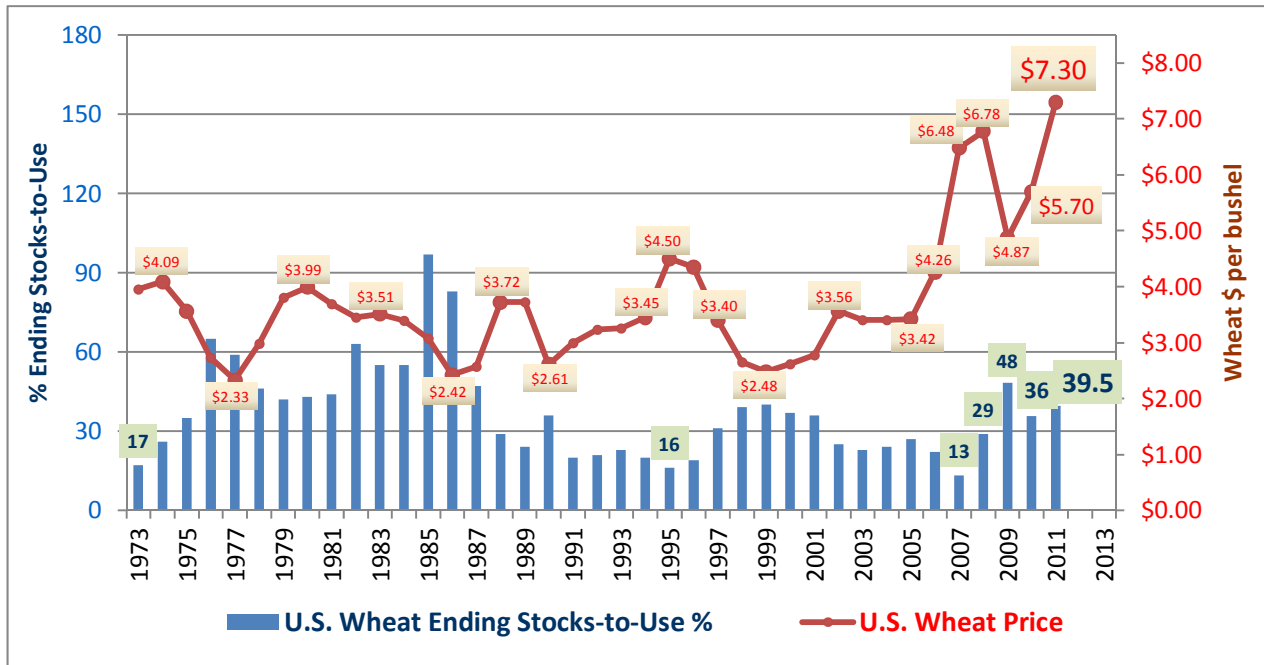


Figure 3. World Wheat Usage & Ending Stocks: MY 2007/08 thru MY 2011/12
(February 9, 2012 USDA WASDE Report)

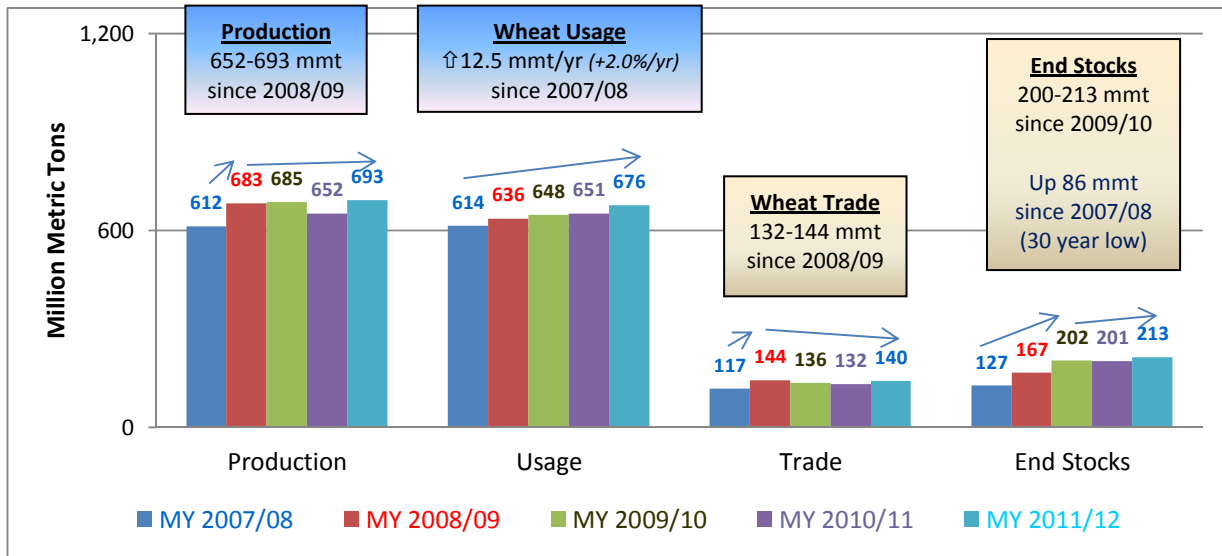
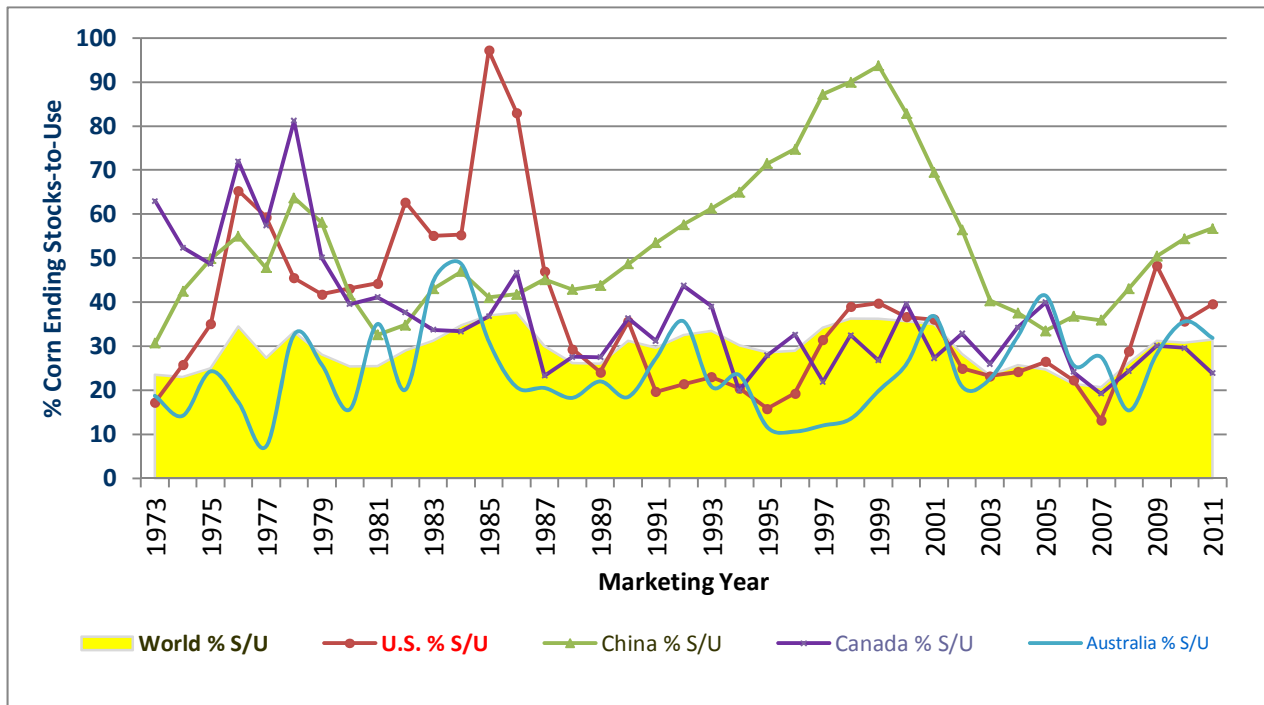


Figure 4. Wheat % Ending Stocks-to-Use for the World, U.S., Canada, Australia, China & Rest of World: MY 1973/74 through MY 2011/12 (February 9, 2012 USDA WASDE Report)



II. U.S. Wheat Supply-Demand & Price Projections for MY 2012/13

The outlook for the coming 2012/13 marketing year for U.S. wheat supply-demand balances and prices is driven by a number of key market factors. Based on current expectations for 2012 U.S. wheat acreage, projected market outcomes for low, expected, and high U.S. corn production are presented below.

- A. **U.S. Wheat Planted Acreage in 2012 = 57.5 million acres:** Current grain market consensus is that marginally higher U.S. wheat acreage will be planted in 2012. These projections are based on earlier USDA National Agricultural Statistical Service (NASS) survey results estimating fall 2011 U.S. winter wheat seedings to be 41.947 ma (up 3%), and on private estimates of projected 2012 planted acreage for other U.S. spring wheat classes. This analysis proceeds on the assumption that 57.5 million acres (ma) of wheat will be planted in the U.S. for the 2012/13 marketing year. This would compare to 54.4 ma in MY 2011/12, 53.6 ma in MY 2010/11, and 59.2 ma in MY 2009/10 (Figure 5).

Comment on implied U.S. spring wheat seeded acreage projected for 2012. These figures implicitly imply that 15.6 ma will be planted to other spring wheat and durum varieties, wheat varieties which amounted to 13.736 ma planted in 2011. In 2011 initial intentions for spring wheat plantings were approximately 2 million acres larger than was finally planted, accounting for the near 2.0 million acre differential between 15.6 ma projected for 2012 and 13.736 ma seeded in 2011.

- B. **U.S. Wheat Harvested Acreage in 2012 = 48.4 ma**: Based on average historic planted-to-harvested U.S. wheat acreage relationships since year 2000, it is projected that **if** 57.5 ma of wheat are seeded in the U.S. in 2012, **then** 48.4 ma will be harvested (**Figure 5**). This amount of U.S. wheat harvested acres would be the largest since 49.9 ma in MY 2009/10, comparing to 45.7 ma in MY 2011/12 and 47.6 mb in MY 2010/11.
- C. **U.S. Wheat Yields in 2012 – 65% probability of 45.0 bu/acre (trend line)**: Based on U.S. average wheat yields over the 1973-2011 time period, a linear trend line yield projection for 2012 would be approximately 45.0 bushels per acre (**Figure 6**). The most recent five year average U.S. soybean yield (2007-2011) is also approximately 45.0 bushels per acre.
- a. **Likelihood of Low Yields in 2012 – 15% probability of 41.5 bu/acre**: It is assumed in this analysis that given information available in early February 2012, there is approximately a 1.5/10 (i.e., 15%) likelihood of U.S. wheat yields being approximately 3.5 bushels below trend line for 2012, i.e., 41.5 bushels per acre (**Figure 6**).
- b. **Likelihood of High Yields in 2012 – 20% probability of 47.0 bu/acre**: It is also assumed in this analysis that given current market information there is approximately a 2/10 (i.e., 20%) likelihood of U.S. wheat yields setting a new record high by being 2.0 bushels above trend line for 2012 at 47.0 bu/ac, which would be 0.7 bu above the current record high of 46.3 bu/ac in 2010 (**Figure 6**).
- D. **U.S. 2012 Wheat Production – 65% probability of 2.178 billion bushels**: Based on the preceding U.S. wheat acreage and yield projections, it is estimated that there is a 65% probability of 2012 U.S. wheat production being near 2.178 bb (**Table 5**). This compares with 1.999 bb in 2011, 2.207 bb in 2010, and 2.218 bb in 2009.
- a. **Likelihood of Low Production in 2012 – 15% probability of 2.009 billion bushels**: Given information available in early February, 2012, there is approximately a 1.5/10 (i.e., 15%) likelihood of U.S. wheat production being 2.009 bb in 2012 (**Table 5**). This amount of U.S. wheat production would still be larger than 1.999 bb in 2011 and 1.808 bb in 2006.
- b. **Likelihood of High Production in 2012 – 20% probability of 2.275 billion bushels**: In this analysis, there is approximately a 2/10 (i.e., 20%) likelihood of U.S. wheat production being 2.275 bb in 2012, up from 1.999 bb in 2011, but still less than the most recent record high of 2.498 bb in MY 2008/09 (**Table 5**).
- Comment on factors driving 2012 U.S. wheat production prospects**: These results are driven by the projection of 3% higher 2012 U.S. winter wheat planted and harvested acres along with reasonable expectations of U.S. spring wheat seeded acreage (see explanation above). It is possible that either drought in March-May in the central and southern plains of the U.S. on the one hand or “too good to pass up” forward pricing / expected revenue opportunities for alternative crops in spring 2012 such as corn, grain sorghum, sunflower or soybeans may result in some of currently seeded winter wheat acres either a) producing substandard wheat yields, or b) being switched to alternative crop enterprises.
- E. **U.S. Wheat Supply-Demand & Price Scenarios for MY 2012/13**: Based on probability-based 2012 U.S. Wheat production projections above, adjustments were made to U.S. wheat usage categories

that are intended to reflect how adjustments in supply-demand balances and prices – and in some cases, price rationing – may impact wheat usage (**Table 5**). Projected adjustments to the usage of wheat for either U.S. domestic food use, exports, seed and/or feed and residual usage, generally reflect either a) *more inelastic* or limited proportional usage adjustments or decreases for lower production scenarios, or b) *more elastic* or more expansive usage adjustments or increases for larger production scenarios.

Given these projections of wheat usage for the “low”, “expected” and “large” production scenarios, estimates of U.S. wheat ending stocks and % ending stocks-to-use were then derived for each. Projected U.S. farm average wheat prices were made based on the evolving relationship between historic U.S. wheat prices and % ending stocks-to-use levels since MY 1973/74 (**Figure 7**).

- a. **“Expected Production” Market Scenario:** 65% prob. of 44.7% S/U & \$5.00 /bu U.S. Farm \$: Based on the U.S. wheat acreage and yield projections above, and supply-demand the adjustments just alluded to, there is approximately a 65% probability of 2012 U.S. wheat ending stocks being near 968 mb, with ending stocks-to-use rising to 44.7%, and U.S. average wheat prices falling to \$5.00 /bu (**Table 5**).
- b. **“Low Production” Market Scenario:** 15% prob. of 40.0% S/U & \$6.50 /bu U.S. Farm \$: Based on the previous analysis, there is approximately a 15% probability of 2012 U.S. wheat ending stocks being near 849 mb, with ending stocks-to-use staying nearly steady with current projections for MY 2011/12 of 40.0%, and with U.S. average wheat prices averaging \$6.50 /bu (**Table 5**).
- c. **“High Production” Market Scenario:** 20% prob. of 47.0% S/U & \$4.60 /bu U.S. Farm \$: There is approximately a 20% probability of 2012 U.S. wheat ending stocks being near 1,030 mb, with ending stocks-to-use increasing to 47.0%, and with U.S. average wheat prices averaging \$4.60 /bu (**Table 5**).

Comment on the projected probabilities of alternative U.S. wheat S/D & \$ scenarios for MY 2012/13:

Combining the “expected” and “large” U.S. wheat production scenarios together, these projections indicate that there is an 85% probability (65% + 20%) of U.S. wheat prices being near \$4.60-\$5.00 per bushel in the 2012/13 marketing year. In other words, expected trend line yields on larger U.S. wheat acres in 2012 are expected to lead to larger projected total U.S. wheat ending stocks and % stocks-to-use in MY 2012/13 than in MY 2011/12. This in turn would pressure prices to be lower for MY 2012/13 than they have been in either MY 2011/12 (\$7.30 /bu on average) or MY 2010/11 (\$5.70 / bu average). However, U.S. wheat prices at 44.7% ending stocks-to-use and \$5.00 /bu price would be somewhat similar to MY 2009/10, when U.S. wheat ending stocks-to-use were 48.4% and U.S. wheat prices were \$4.87/bu.

That said, there is still a 1.5 in 10 (or 15%) probability that U.S. wheat yields will again be substandard or at least below early growing season expectations for a second consecutive year. In that event, U.S. wheat % ending stocks-to-use levels are projected to be 40.0% with a \$6.50 average price. This compares with previous record high U.S. farm average wheat prices of \$6.48 in MY 2007/08 and \$6.78 in MY 2008/09 on much lower % ending stocks-to-use numbers. As in MY 2010/11 and MY 20 11/12, cross over effects of high U.S. corn market prices are providing underlying support for U.S. wheat prices – helping them to maintain higher price levels than they would have otherwise.

Table 5. U.S. Wheat Supply-Demand Balance Sheet: MY 2010/11 through Projected MY 2012/13
 (February 9, 2012 USDA WASDE Report & KSU Projections)

Item	2010/11	2011/12	2012/13 Low Production	2012/13 Expected Production	2012/13 High Production
% Probability of Occurance			15%	65%	20%
Planted Area (million acres)	53.6	54.4	57.5	57.5	57.5
Harvested Area (million acres)	47.6	45.7	48.4	48.4	48.4
Yield per harvested acre (bushels/acre)	46.3	43.7	41.5	45.0	47.0
	million bushels				
Beginning Stocks	976	862	845	845	845
Production	2,207	1,999	2,009	2,178	2,275
Imports	97	120	120	110	100
Total Supply	3,279	2,982	2,974	3,133	3,220
Food Use	926	935	935	940	945
Seed Use	71	82	80	80	80
Exports	1,289	975	975	1,000	1,015
Feed & Residual	132	145	135	145	150
Total Use	2,417	2,137	2,125	2,165	2,190
Ending Stocks	862	845	849	968	1,030
% Ending Stocks-to-Total Use	35.7%	39.5%	40.0%	44.7%	47.0%
U.S. Average Farm Price (\$/bushel)	\$5.70	\$7.30	\$6.50	\$5.00	\$4.60

Figure 5. U.S. Wheat Planted Acreage (1973-2011) and Projection for 2012

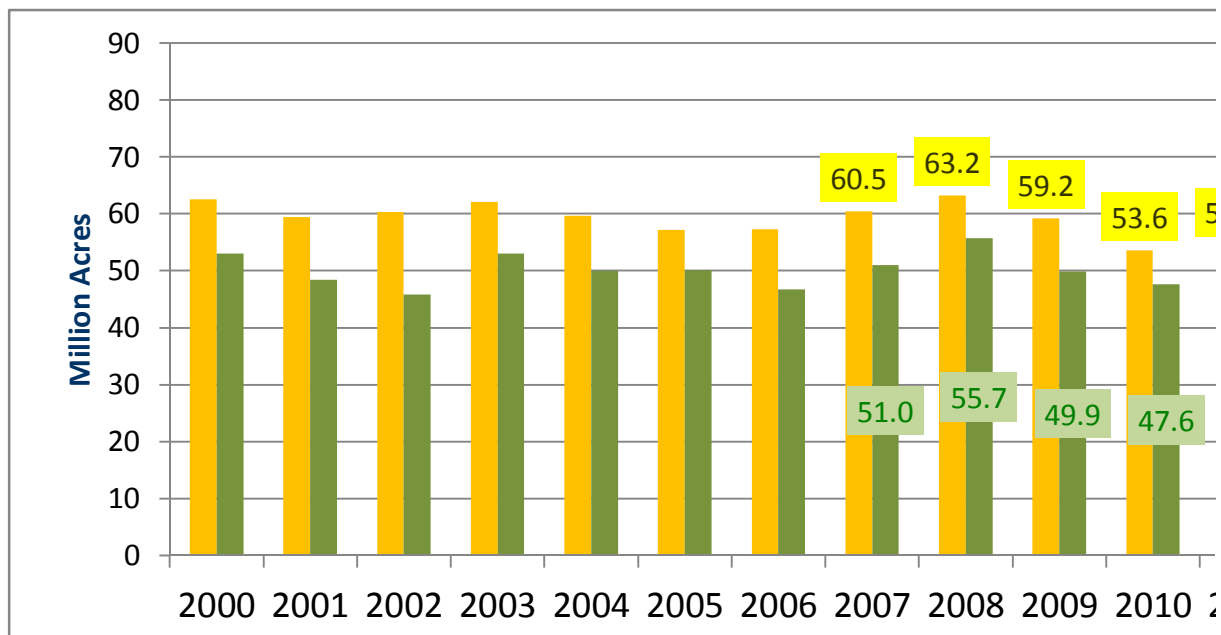


Figure 6. U.S. Wheat Yield Trend (1973-2011) and Projection for 2012

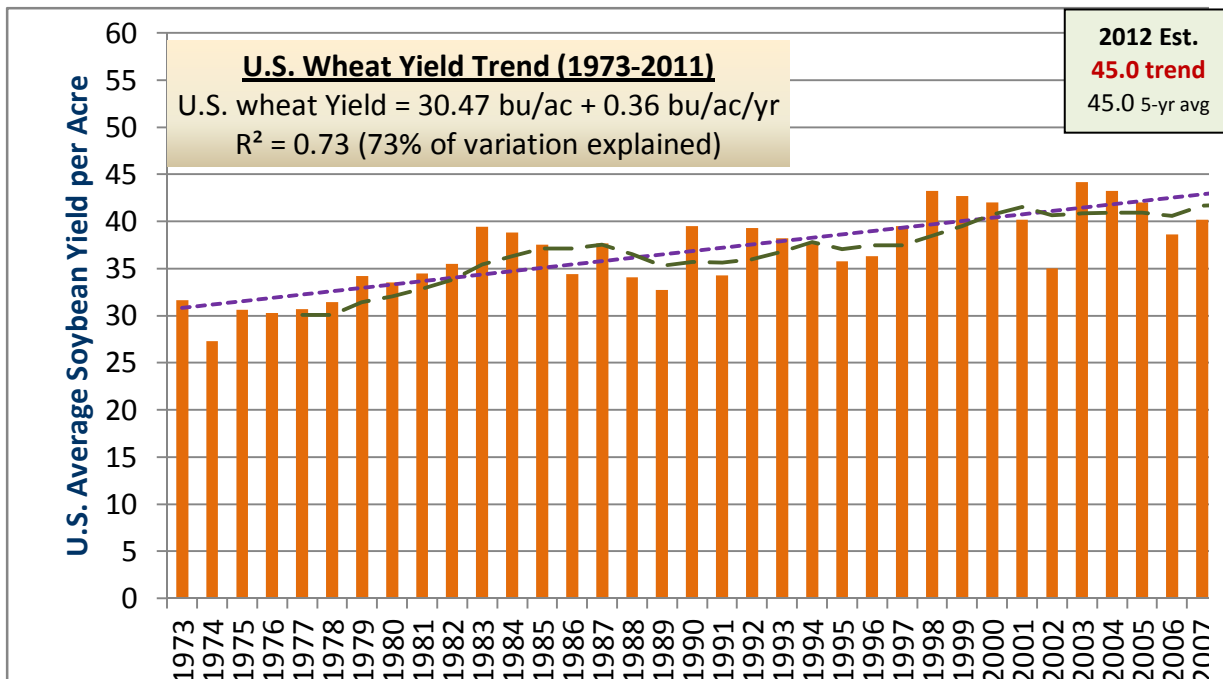


Figure 7. U.S. Wheat Price vs % Stocks-to-Use (MY 1973/74 through Projected MY 2012/13)

