

USDA December 2011 WASDE Report - Soybean Market Impacts

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Summary

The December 9th USDA reports projected a marginal decrease in U.S. soybean crush and exports, and a decline in U.S. soybean price prospects for the remainder of the 2011/12 marketing year. Prospects for record tight ending stocks and % stocks-to-use of U.S. soybeans for MY 2011/12 have moderated since the summer months, although the projected range of U.S. soybean prices are still at or near record highs. Strong export competition from South America is impacting U.S. soybean export prospects and projected supply-demand balances for MY 2011/12. These reports also indicate a co-dependence of soybean market prospects between the United States, Brazil and Argentina, with any weather threats to soybean production in these countries likely having a marked impact on World soybean prices and broader oilseed markets.

U.S. Soybean Supply-Demand Balances: In the December World Agricultural Supply and Demand Estimates (WASDE) report, exports of U.S. soybeans were projected to be 1.300 billion bushels (bb), down 25 mb from November, and down 13% from record highs near 1.500 bb in MY 2010/11 and MY 2009/10. Domestic crush of 1.625 bb in MY 2011/12 is projected to be down 1.4% from the previous year. Soybean ending stocks in the U.S. for MY 2011/12 are projected to be 230 bb (up 35 mb from November). Ending stocks-to-use for the U.S. in MY 2011/12 is projected to be 7.6% - up from 6.3% in November and above the historic low of 4.45% in MY 2003/04. At 7.6%, U.S. soybean % ending stocks-to-use is not as tight as over the last 3 marketing years (ranging from 4.5% to 6.6%), but is still very limited in terms of providing adequate or comfortable U.S. soybean carryover stocks. Soybean ending supply-demand balances in MY 2011/12 are vulnerable to unexpected increases in exports or domestic crush usage for the remainder of the current marketing year (through August 31, 2012).

U.S. Soybean Prices: The USDA projected dropped its projection of the average farm price for U.S. soybeans in MY 2011/12 by \$0.90 per bushel, down to the range of \$10.70 to \$12.70 per bushel. This compares to \$11.30 in MY 2010/11, and \$9.59 to \$10.10 during the 2007/08 through 2009/10 marketing years. Current U.S. soybean price projections are still at or near historic highs.

World Soybean Supply-Demand Balances: Consistent growth in World soybean use combined with level or declining World soybean production has led to a projected year-to-year decline in World soybean ending stocks in MY 2011/12. Projected MY 2011/12 World soybean ending stocks of 64.5 mmt (24.8%) are down from 68.4 mmt (27.2% S/U) in MY 2010/11, but up from 59.5 mmt (25.0% S/U) in MY 2009/10. World soybean stocks-to-use are having difficulty increasing from current levels.

Soybean Market Prospects: These reports point toward continued tight supply-demand conditions and historically high soybean prices from December 2011 through spring-summer 2012. There will likely be strong competitive pressure to at least maintain if not increase 2012 U.S. soybean and corn acreage in an attempt to manage crop weather risk in the summer of 2012 and to rebuild U.S. supply-demand balances for both crops. Grain markets in 2012 will likely be extremely sensitive to any threats to U.S. or South American soybeans. Record high soybean prices are rationing limited supplies to highest value users to ensure that adequate U.S. and World soybean and oilseed supplies are available for the duration of the 2011/12 marketing year.

I. U.S. Soybean Market Situation and Outlook

A. **Higher 2011 U.S. Soybean Production Prospects:** The USDA National Agricultural Statistical Service (NASS) made no changes in its December Crop Production report (**see Table 1**). The January 2012 USDA NASS Crop Production Summary will be based on surveys done during the first two weeks in December, and are intended to be the near final estimate of 2011 U.S. crop production for soybeans, corn, grain sorghum and other crops.

- a. **U.S. 2011 Soybean Planted Acreage = 75.0 million acres:** USDA NASS has projected that farmers in the United States planted 74.966 million acres (ma) of soybeans in 2011, down 3.1% from 77.404 ma in 2010. This is the smallest amount of U.S. soybean planted acreage since 64.741 ma in 2007, and below the 2008-2010 average of 76.9 ma.
- b. **U.S. 2011 Soybean Harvested Acreage = 73.7 ma:** USDA NASS has projected that the U.S. harvested 73.676 ma of soybeans in 2011, down 3.8% from 76.610 ma in 2010. This is the smallest amount of U.S. soybean harvested acreage since 64.146 ma in 2007, and below the 2008-2010 average of 75.9 ma..
- c. **U.S. 2011 Soybean Yields = 41.3 bu/acre:** USDA NASS has projected 2011 U.S. soybean yields at 41.3 bu/acre, below the previous two years. United States' soybean yield prospects in 2011 were affected by the cumulative impact of a) difficult spring planting conditions in the eastern and northern Corn Belt, b) hot, dry July and August weather in parts of the central Corn Belt, and c) continuing drought in the southern and central Plains and the southeastern United States.
 - i. Over the last 5 years, U.S. soybean yields have been 41.7 bu/ac in 2007, 39.7 bu/ac in 2008, 44.0 bu/ac in 2009, 43.5 bu/ac in 2010, and are now projected to be 41.3 bu/ac in 2011.
- d. **U.S. 2011 Soybean Production = 3.046 billion bushels:** USDA NASS projected 2011 U.S. soybean production to be 3.046 billion bushels (bb).
 - i. Over the last 5 years, U.S. soybean production has been 2.677 bb in 2007, 2.967 bb in 2008, 3.359 bb in 2009, 3.329 bb in 2010, and is now projected to be 3.046 bb in 2011.

Commentary: Given the ongoing growth in U.S. soybean export demand – primarily from China – and the competing demands for U.S. cropland to produce feedgrains, wheat and other crops, it seems likely that U.S. soybean supply-demand balances will remain historically tight for at least the next 1-2 years. Either a) a return to yearly trendline increases in U.S. soybean yields, b) a large increase in U.S. soybean acreage in 2012, or c) a sizable reduction in U.S. soybean usage will be needed to appreciably rebuild U.S. soybean stocks in MY 2012/13 and later years.

B. **“New Crop” U.S. Soybean Supply-Demand for MY 2011/12:** The USDA decreased its projections of U.S. soybean crush and exports, leading to increased projected ending stocks and lower price estimates for MY 2011/12 in the December 9th World Supply and Demand Estimates (WASDE) report (**Table 1 & Figure 1**).

- a. **U.S. Soybean Total Supplies for MY 2011/12 = 3.275 bb:** With projected MY 2011/12 beginning stocks of 215 bb (up from 151 mb a year ago), 2011 U.S. production of 3.046 bb,

and imports of 15 mb, U.S. soybean total supplies for MY 2011/12 are projected to be 3.275 bb.

- i. Projected U.S. soybean total supplies of 3.275 bb for MY 2011/12 are down from 3.495 bb in MY 2010/11 and from 3.512 bb in MY 2009/10, and are the lowest since 3.185 bb in MY 2008/09 and 3.261 bb in MY 2007/08 (**Table 1 & Figure 2**).

Commentary: The year-to-year increase in beginning stocks (up 64 mb) is less than the decline in projected 2011 U.S. soybean production (down 283 mb), causing the projected 220 mb decline in total supplies for MY 2011/12.

- b. **U.S. Total Soybean Use Down for MY 2011/12 = 3.045 bb:** Strong competition from South American soybean exports has led to slower than expected U.S. soybean export activity to date, leading to a reduction in the USDA's projection of U.S. soybean usage for the 2011/12 market year (**Table 1 & Figure 1**). Total soybean use for MY 2011/12 is projected to be 3.045 bb, down 10 mb from November, and down from 3.280 bb in MY 2010/11 and 3.361 bb in MY 2009/10.

Commentary: From MY 2009/10 to MY 2010/11, U.S. soybean use declined 2.4% while U.S. soybean prices increased 17.8%. However, from MY 2010/11 to MY 2011/12, U.S. soybean use is projected to decline another 7.2% while U.S. soybean prices are projected to increase 3.5%. Even with the increase in projected U.S. soybean % ending stocks-to-use in the December 2011 USDA WASDE report, U.S. soybean stocks have been at historically "tight" levels in recent years (i.e., ranging from 4.2% to 7.6% ending stocks-to-use since MY 2007/08). U.S. soybean prices are expected to be highly volatile and responsive to any weather threats or demand shocks through the spring and early summer of 2012.

- i. Soybean crush of 1.625 bb for MY 2011/12 – down 10 mb from November – is down from 1.648 bb in MY 2010/11 and 1.752 bb in MY 2009/10. This 1.4% projected decline from last year, and 7.2% decline from 2 years ago are indicators of a recovery in South American soybean production and exports since MY 2009/10 and to a smaller degree export price rationing on the other. Domestic crush has trended lower since the highs of 1.808, 1.803, and 1.752 bb in MY 2006/07, MY 2007/08, and MY 2009/10, respectively (**Figure 1**).
- ii. Soybean exports are projected to be 1.300 bb in MY 2011/12 – down 25 mb from November – is less than the record high of 1.501 bb in MY 2010/11 and the near record of 1.499 bb in MY 2009/10.

Exports had been trending strongly higher from 940 mb in MY 2005/06 up to 1.499 bb and 1.501 bb in MY 2009/10 and MY 2010/11, respectively. The projected decline in MY 2011/12 to 1.300 bb in MY 2011/12 signals at least a temporary moderation in that trend (**Figure 1**).

- C. **U.S. "New Crop" MY 2011/12 Ending Stocks (230 mb) & Ending Stocks-to-Use (7.6%):** The USDA projects MY 2011/12 U.S. soybean ending stocks to be 230 mb, up 35 mb from November. This amount of MY 2011/12 ending stocks (230 mb) compares to 215 mb in MY 2010/11 and 151 mb in MY 2009/10 (**Table 1 & Figure 1**).

The MY 2011/12 supply-demand balance projection equals 7.6% ending stocks-to-use, up from 6.3% in November, and compares to 6.6% in MY 2010/11, and 4.5% in MY 2009/10 (**Table 1 & Figure 3**). Soybean ending stocks-to-use of 7.6% in MY 2011/12 would be the 10th tightest since MY 1973/74 (39 marketing years), but only the 8th tightest since MY 1995/96 (17 years).

Projected MY 2011/12 U.S. soybean stocks-to-use of 7.6% is larger than 5.4% S/U in MY 1996/97, 7.0% in MY 2001/12, 6.4% S/U in MY 2002/03, 4.45% in MY 2003/04, 4.54% in MY 2008/09, 4.49% in MY 2009/10, and 6.55% in MY 2010/11.

Commentary: It is still possible that % ending stocks to use levels approaching 5.0% may occur in MY 2011/12 if either a) projected 2011 U.S. soybean production is reduced further in the USDA January 2012 final Crop Production report, or b) greater usage of soybean occurs in any of the major categories than is currently projected later in the marketing year – likely depending on a shortfall in projected 2012 South American soybean production.

Whereas uncertainty about estimates of U.S. soybean production typically are mostly resolved by the November or following January USDA Crop Production reports, questions about whether the rate of soybean usage will lead to reductions in ending stocks are “worked through” in the cash market throughout the remainder of the marketing year. If throughout the winter, spring and summer months soybean usage is on a more rapid pace than can be sustained to maintain a level of 4.5%-to-5.5% endings stocks-to-use for MY 2011/12, then it will likely be initially reflected in improved cash soybean basis bids, the pace of both U.S. domestic soybean crushings and soybean / soybean product exports, and in quarterly stocks reports for December 1st, 2011, and for March 1st, June 1st and finally on September 1st in 2012.

- D. **“New Crop” MY 2011/12 U.S. Soybean Prices = \$10.70-\$12.70 /bu.:** On a year-to-year basis, U.S. soybean prices have responded sharply higher in response to tightening of U.S. soybean ending stocks-to-use (**Table 1 & Figure 2**). The USDA projected MY 2011/12 U.S. average soybean prices to be record high in the range of **\$10.70 - \$12.70 per bushel**, down \$0.90 on each end of the range from November. The midpoint of the projected price range is \$11.70 /bu. This compares with U.S. average prices of \$11.30 in MY 2010/11 and \$9.59 in MY 2009/10.

Inflexible Demand – Tight Stocks / High Prices: Record high prices in conjunction with historically tight U.S. soybean ending stocks-to-use projections (7.6%) support the idea that soybean supply-demand balances and associated prices are still in an “inflexible box”. In other words, U.S. soybean markets are operating in supply-demand balance regions characterized by very inelastic, price responsive supply-demand interactions.

Commentary: Tight corn supplies and high corn prices have provided carryover support for wheat and soybean prices. Market arbitrage forces are likely to force new crop 2012 futures prices for corn and soybeans higher through the late winter/spring months in a competitive effort to convince U.S. farmers to plant adequate acreage of both crops. Market concerns about 2012 U.S. soybean plantings and production and uncertainty about 2012 South American soybean production are likely to provide continuing underlying support for soybean markets for the remainder of 2011 through at least spring / early summer of 2012.

- E. **World Soybean Supply-Demand Trends:** Consistent growth in World soybean usage since MY 2008/09 has occurred in spite of intermittent periods of record high soybean prices from MY 2007/08 to projections for MY 2011/12 (**Figure 3**). The upward trend in World soybean use combined with level or declining World soybean production has led to a projected year-to-year decline in World soybean ending stocks in MY 2011/12.
- a. **World Soybean Production and Usage:** World soybean usage has increased an average of 9.7 mmt (+4.4%) annually since MY 2008/09. World soybean production has also increased over the same time period, but virtually all of that increase occurred from MY 2008/09 to MY 2009/10 (from 212 up to 261 mmt in one year), with production trends being level to

declining over the last three marketing years. In MY 2011/12 World soybean use (260.1 mmt) is projected to be greater than World production (259.2 mmt).

Commentary: U.S. soybean export prospects have diminished over the last two marketing years largely due to export competition from South America. Brazil soybean production was record large MY 2010/11 (75.5 mmt), and is projected to be 75.0 mmt (2nd largest on record) in MY 2011/12. Argentina soybean production in MY 2010/11 was the second largest crop on record (49 mmt) versus a record high 54.5 mmt in MY 2009/10, and is projected to be 52 mmt in MY 2011/12 (which would be the 2nd highest on record).

- i. China imports of soybeans are projected to be 56.5 mmt in MY 2011/12, versus 52.34 in MY 2010/11 and 50.34 mmt in MY 2009/10. Strength in Chinese soybean imports has been a staple demand component of the World soybean market, with China accounting for 58%, 59%, and 60% of total World soybean imports for MY 2009/10, MY 2010/11 and MY 2011/12, respectively.

Commentary: Chinese soybean and soybean product imports have helped to spur World soybean and soybean product market prices higher, and have directly led to increased South American soybean production (and also to higher U.S. soybean production in 2009-2010).

b. World Soybean Ending Stocks & % Stocks-to-Use for MY 2011/12

- i. **World Soybean Ending Stocks = 64.5 mmt:** December WASDE report, the USDA projected MY 2011/12 World soybean ending stocks to be 64.54 mmt (24.8% S/U), up 0.98 mmt from November. Projected MY 2011/12 World soybean ending stocks of 64.54 mmt are down from 68.43 mmt (27.2% S/U) in MY 2010/11, but up from 59.45 mmt (25.0% S/U) in MY 2009/10.

- c. **World Soybean % Ending Stocks-to-Use = 24.8%:** Due to growth in World soybean usage, World % ending stocks-to-use have declined from 24.9% in MY 2009/10 and 27.2% in MY 2010/11 down to a projected level of 24.8% S/U in MY 2011/12. This trend toward tighter World soybean supply-demand balances continues to provide support for soybean markets for the remainder of 2011 and on into 2012.

Commentary: A broader trend toward tighter World oilseed and coarse grain % ending stocks-to-use has also occurred since MY 2009/10. Recoveries and/or increases in U.S. and World oilseed and coarse grain production are needed in the coming year to begin to rebuild both U.S. and World supply-demand balances for these major crop categories.

- F. **U.S. Soybean Oil Supply-Demand Balances:** The projected supply-demand balance sheet for U.S. soybean oil in MY 2011/12 reflects tightening stocks and likely record high prices. Low levels of beginning stocks (2.425 billion pounds (bp), down 29% from last year), and production (18.770 bp, down 0.6% from last year) more than offset higher imports (185 million pounds or “mp”, up 16%). Projected U.S. total supplies of soybean oil of 21.380 bp are up 0.4% from November, to the lowest level of U.S. soybean oil supplies since at least MY 2008/09 (i.e., 21,319 bp) (**Table 2**).

Projected domestic methyl ester (biodiesel) use (3.600 bp, up 41% vs a year ago), food, feed & industrial use (14.100 bp, down 1% vs a year ago) and exports (1.400 bp, down 100 mp from November and down 57% versus a year ago) combine to give total projected U.S. soybean oil usage of 19.100 bp for MY 2011/12. Projected total U.S. soybean oil use of 19.100 bp is down 100 mp from November, and less than 20.028 bp in MY 2010/11, and 19.173 bp in MY 2009/10.

Projected U.S. soybean oil ending stocks of 2.280 bp and % ending stocks-to-use of 11.9% are the lowest since 11.7% in MY 2007/08.

Soybean oil average prices in the U.S. are projected to be in the range of \$50.50 to \$54.50 per cwt for MY 2011/12, down \$2.50 per cwt on both ends of the price range from November, and compared to \$53.20 in MY 2010/11, \$35.95 in MY 2009/10, \$32.16 in MY 2008/09, and \$52.03 in MY 2007/08.

- G. **U.S. Soybean Meal Supply-Demand Balances**: Market price prospects for MY 2011/12 for U.S. soybean meal are not as strong price-wise in a relative sense as they are for U.S. soybean oil. High beginning stocks (350 thousand short tons or “k-st”, up 16% versus last year), lower production (38.685 k-st, down 1.4% compared to a year ago) and lower imports (165 k-st, down 7.8% versus last year), combine for projected U.S. total supplies of soybean meal of 39,200 k-st (down 1.3%), the lowest amount since 36,820 k-st in MY 2003/04 (**Table 3**).

Projections of U.S. domestic use (30,100 k-st, down 0.6% vs last year) and U.S. exports (8,800 k-st, down 3.3%) combine for total U.S. soybean meal usage of 38,900 k-st in MY 2011/12. This amount of U.S. soybean meal usage in MY 2011/12 would be down from 39,381 k-st in MY 2010/11, and below the range of 39,249 – 42,474 k-st for MY 2007/08 through MY 2009/10. Projected U.S. soybean meal ending stocks of 300 k-st and % ending stocks-to-use of 0.8% reflect typically minimal U.S. soybean meal ending stocks – given the perishability of the product. Soybean meal average prices in the U.S. are projected to be in the range of \$280 to \$310 per ton for MY 2011/12, compared to \$345.52 in MY 2010/11, \$311.27 in MY 2009/10, \$331 in MY 2008/09, and \$336 in MY 2007/08.

- H. **Persistence of Tight Supply-Demand for U.S. / World Soybeans into MY 2012/13**: Given a) the likelihood of moderately tight ending stocks for U.S. soybeans in MY 2011/12, b) competition for U.S. crop acres between soybeans, corn and other crops in spring 2012, and c) uncertainty about South American crop prospects for MY 2011/12 in light of recent long term weather forecasts (i.e., the reemergence of the La Nina weather pattern), it is likely that ***concerns about the adequacy of U.S. and World soybean supplies and supply-demand balances are likely to persist through the summer of 2012, and possibly into the early part of MY 2012/13 which begins September 1, 2012.*** These factors are likely to support soybean and soybean product prices, and to cause volatile market conditions throughout the 2012 U.S. soybean growing season.

Table 1. U.S. Soybean Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12
(December 9, 2011 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Planted Area (million acres)	64.7	75.7	77.5	77.4	75.0
Harvested Area (million acres)	64.1	74.7	76.4	76.6	73.7
Yield per harvested acre (bushels/acre)	41.7	39.7	44.0	43.5	41.3
	million bushels				
Beginning Stocks	574	205	138	151	215
Production	2,677	2,967	3,359	3,329	3,046
Imports	10	13	15	15	15
Total Supply	3,261	3,185	3,512	3,495	3,275
Domestic Crushings	1,803	1,662	1,752	1,648	1,625
Exports	1,159	1,279	1,499	1,501	1,300
Seed	89	90	90	87	88
Residual	5	16	20	43	32
Total Use	3,056	3,047	3,361	3,280	3,045
Ending Stocks	205	138	151	215	230
% Ending Stocks-to-Total Use	6.7%	4.5%	4.5%	6.6%	7.6%
U.S. Average Farm Price (\$/bushel)	\$10.10	\$9.97	\$9.59	\$11.30	\$10.70-\$12.70 Midpoint = \$11.70

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

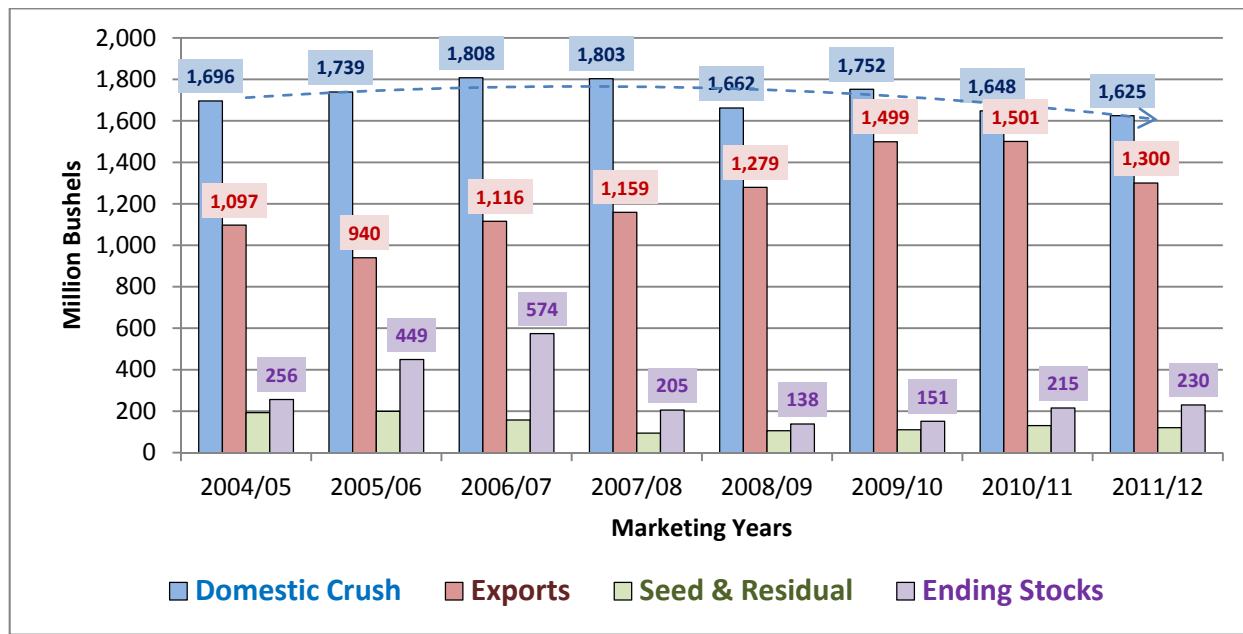


Figure 2. U.S. Soybean Ending Stocks vs U.S. Avg. Cash Prices: MY 1973/74 through MY 2011/12
(December 9, 2011 USDA WASDE Report)

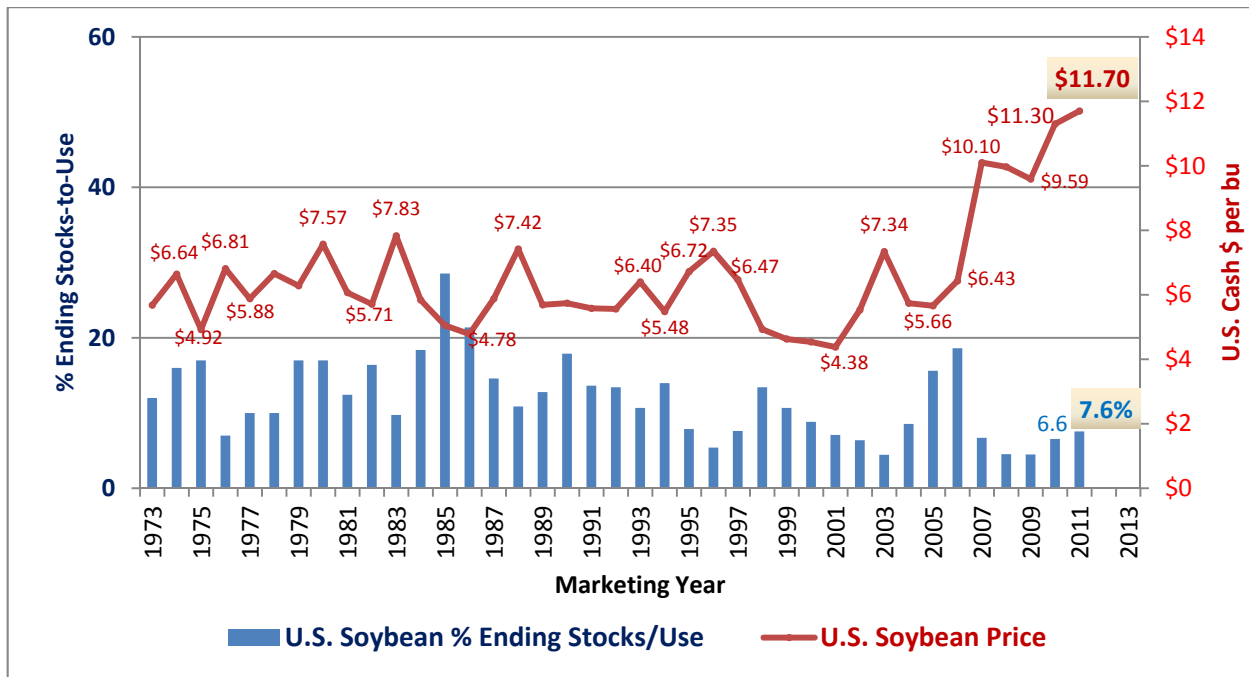


Figure 3. World Soybean Usage & Ending Stocks: MY 2007/08 thru MY 2011/12
(December 9, 2011 USDA WASDE Report)

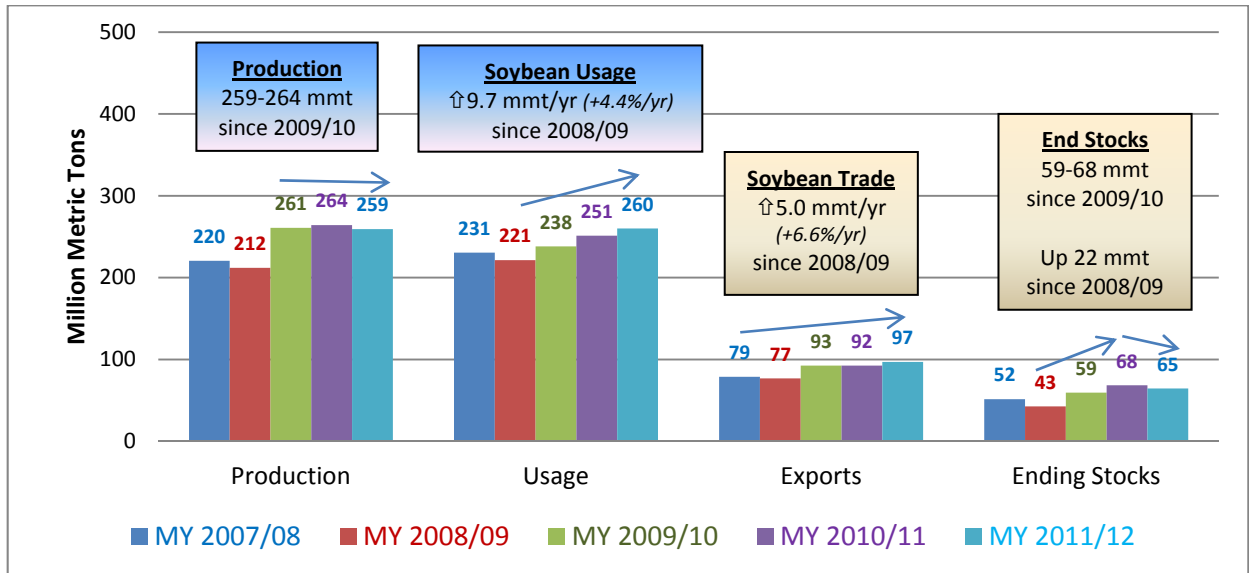


Table 2. U.S. Soybean Oil Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12
(December 9, 2011 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Million Pounds					
Beginning Stocks	3,085	2,485	2,861	3,406	2,425
Production	20,580	18,745	18,888	18,670	18,770
Imports	65	90	103	159	185
Total Supply	23,730	21,319	22,578	22,453	21,380
Domestic – Methyl Ester (Biodiesel)	3,245	2,069	1,680	2,550	3,600
Food, Feed & other Industrial	15,089	14,196	14,134	14,245	14,100
Exports	2,911	2,193	3,359	3,233	1,400
Total Use	21,246	18,459	19,173	20,028	19,100
Ending Stocks	2,485	2,861	3,406	2,425	2,280
% Ending Stocks-to-Total Use	11.7%	15.5%	17.8%	12.1%	11.9%
U.S. Average Price (\$/cwt)	\$52.03	\$32.16	\$35.95	\$53.20	\$50.50-\$54.50 Midpoint = \$52.50

Table 3. U.S. Soybean Meal Supply-Demand Balance Sheet: MY 2007/08 through MY 2011/12
(December 9, 2011 USDA WASDE Report)

Item	2007/08	2008/09	2009/10	2010/11	2011/12
Thousand Short Tons					
Beginning Stocks	343	294	235	302	350
Production	42,284	39,102	41,707	39,251	38,685
Imports	141	88	160	179	165
Total Supply	42,768	39,484	42,101	39,731	39,200
Domestic	33,232	30,752	30,640	30,277	30,100
Exports	9,242	8,497	11,160	9,104	8,800
Total Use	42,474	39,249	41,800	39,381	38,900
Ending Stocks	294	235	302	350	300
% Ending Stocks-to-Total Use	0.7%	0.6%	0.7%	0.9%	0.7%
48% Protein, Decatur Price (\$/ton)	\$335.94	\$331.17	\$311.27	\$345.52	\$280-\$310 Midpoint = \$295