



Weekly Farm Economics: Projected 2013 Corn and Soybean Budgets

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August 21, 2012

farmdoc daily (2):162

Recommended citation format: Schnitkey, G. "[Projected 2013 Corn and Soybean Budgets](#)." *farmdoc daily* (2):162, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 21, 2012.

Permalink: <http://farmdocdaily.illinois.edu/2012/08/projected-2013-corn-and-soybea.html>

http://farmdoc.illinois.edu/podcasts/fefo/FEFO_12_19.mp3

Budgets for corn and soybeans grown in Illinois for 2013 are now available on farmdoc (see [here](#)). Below, the 2013 budgets are compared to 2011 results and 2012 projections for crops grown in central Illinois on high productivity farmland. Overall non-land costs are projected to be roughly the same in 2013 as in 2012. Projected 2013 returns for corn are projected to be between 2011 and 2012 returns. Projected 2013 soybean returns are lower than 2011 and 2012 returns.

2013 Budgets

For central Illinois high-productivity farmland, 2013 yields are projected at 195 bushel per acre for corn and 57 bushels per acre for soybeans (see Table 1). These yields are trend-line yields. Prices used in 2013 projections are based on futures contracts and are \$6.00 per bushel for corn and \$12.50 per bushel for soybeans. These yields and prices result in crop revenue of \$1,170 per acre for corn and \$713 per acre for soybeans. No other revenues are included in budgets. In 2011 and 2012, \$25 per acre is included for direct payments. Direct payments are not included for 2013 under the assumption that a Farm Bill will pass that does not include direct payments.

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Table 1. Actual and Projected Returns and Costs, Corn and Soybeans in Central Illinois on High-Productivity Farmland, 2011 through 2013¹.

	Corn			Soybeans		
	Year			Year		
	2011	2012P	2013P	2011	2012P	2013P
Yield per acre	174	135	195	56	46	57
Price per bu	\$5.95	\$8.00	\$6.00	\$12.27	\$16.00	\$12.50
Crop revenue	\$1,035	\$1,080	\$1,170	\$687	\$736	\$713
ACRE revenue	0	0	0	0	0	0
Direct payments	24	24	0	24	24	0
Crop insurance proceeds	23	115	0	11	30	0
Gross revenue	\$1,082	\$1,219	\$1,170	\$722	\$790	\$713
Fertilizers	\$159	\$165	\$155	\$55	\$58	\$53
Pesticides	50	50	52	31	31	33
Seed	96	98	100	62	63	65
Drying	19	19	19	1	1	1
Storage	8	8	8	4	5	5
Crop insurance	30	28	28	20	20	20
Total direct costs	\$362	\$368	\$362	\$173	\$178	\$177
Machine hire/lease	\$8	\$8	\$8	\$8	\$8	\$8
Utilities	4	4	4	3	4	4
Machine repair	17	18	18	16	17	17
Fuel and oil	18	17	17	17	11	11
Light vehicle	1	2	2	1	1	1
Mach. depreciation	39	41	43	35	39	42
Total power costs	\$87	\$90	\$92	\$80	\$80	\$83
Hired labor	\$13	\$12	\$12	\$14	\$12	\$12
Building repair and rent	7	7	7	4	4	4
Building depreciation	9	9	9	5	3	3
Insurance	8	10	10	8	10	10
Misc	7	7	7	8	7	7
Interest (non-land)	16	17	17	11	12	12
Total overhead costs	\$60	\$62	\$62	\$50	\$48	\$48
Total non-land costs	\$509	\$520	\$516	\$303	\$306	\$308
Operator and land return	\$573	\$699	\$654	\$419	\$484	\$405
Land costs	248	288	302	248	288	302
Operator return	90	90	90	85	85	85
Net return	\$235	\$321	\$262	\$86	\$111	\$18

¹Results for 2011 are summarized from grain farms enrolled in Illinois Farm Business Farm Management. Budgets for 2012 and 2013 are projections.

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Non-land costs for corn are projected at \$516 per acre in 2013, \$4 per acre less than the \$520 non-land costs for 2012 (see Table 1). Fertilizer costs are projected to be down slightly in 2013: \$165 per acre in 2012 compared to \$155 per acre in 2013. Offsetting fertilizer declines are increases in pesticide costs (\$50 in 2012 to \$52 in 2013), seed costs (\$98 in 2012 to \$100 in 2013), and machinery depreciation (\$41 in 2012 to \$43 in 2013).

Non-land costs for soybeans are projected at \$308 per acre in 2013, \$2 per acre higher than the 2012 non-land costs of \$306 per acre (see Table 1). Fertilizer costs are projected to be down in 2013: \$58 per acre in 2012 compared to \$53 in 2013. Offsetting fertilizer cost decreases are increased in pesticide costs (\$31 in 2012 to \$33 in 2013), seed costs (\$63 per acre in 2012 to \$65 in 2013), and machinery

depreciation (\$39 in 2012 to \$42 in 2013).

Operator and farmland returns in 2013 are projected to be \$654 per acre for corn and \$405 per acre for soybeans (see Table 1). The 2013 corn return is projected higher than the 2011 return (\$573 per acre) but below the projected 2012 return (\$699 per acre). The 2013 soybean return of \$405 per acre is below the 2012 return (\$419 per acre) and the projected 2012 return (\$484 per acre). These fundamentals do not suggest that increases in cash rents should occur in 2013.

A major difficulty in projecting 2013 returns is determining the corn and soybean prices to use in budgets. The \$6.00 per bushel corn price and \$12.50 per bushel soybean price represent cash prices implied from futures contracts. These prices could change a great deal between now and harvest-time 2013, resulting in large changes in profitability.

In 2013, corn returns (\$654 per acre in 2013) minus soybeans return (\$405 per acre) equals \$244 per acre. This 2013 difference is large compared to historical averages. Between 2005 through 2011, corn-minus-soybean returns averaged \$75 per acre. The large projected difference in 2013 occurs because corn price is relatively high compared to the soybean price. The 2012 soybean-to-corn price ratio is 2.08. From 2006 through 2012, the soybean-to-corn price ratio averaged 2.38. Whether these relative prices persist into 2013 is an open question, depending on demand conditions and harvests in both North and South America. Whether these relative prices influence 2013 planting decisions also is an open question.

Summary

Current 2013 cost projections suggest that non-land costs will be roughly the same in 2013 as in 2012. Projected 2013 prices are based on futures contracts and result in projected 2013 operator and farmland returns of \$654 per acre for corn and \$405 per acre for soybeans. The corn return in 2013 is between the 2011 and 2012 returns. The 2013 soybean returns is below the 2011 and 2012 returns. These returns do not suggest increases in cash rents in 2013.

Appendix tables show budgets for northern Illinois, central Illinois with low productivity farmland, and southern Illinois. Look for modifications to 2013 budgets as economic conditions change.

Appendix Table 1. Actual and Projected Returns and Costs, Corn and Soybeans in Northern Illinois, 2011 through 2013¹.

	Corn			Soybeans		
	Year			Year		
	2011	2012P	2013P	2011	2012P	2013P
Yield per acre	177	141	188	60	50	56
Price per bu	\$5.75	\$8.20	\$6.00	\$12.22	\$16.00	\$12.50
Crop revenue	\$1,018	\$1,156	\$1,128	\$733	\$800	\$700
ACRE revenue	0	0	0	0	0	0
Direct payments	23	23	0	23	23	0
Crop insurance proceeds	7	60	0	4	15	15
Gross revenue	\$1,048	\$1,239	\$1,128	\$760	\$838	\$715
Fertilizers	\$158	\$170	\$160	\$38	\$55	\$50
Pesticides	47	47	49	28	28	29
Seed	97	99	104	53	54	55
Drying	21	21	21	1	1	1
Storage	5	5	5	2	2	2
Crop insurance	34	32	32	34	32	32
Total direct costs	\$362	\$374	\$371	\$156	\$172	\$169
Machine hire/lease	\$18	\$18	\$18	\$16	\$16	\$16
Utilities	5	5	5	4	4	4
Machine repair	21	22	22	18	19	19
Fuel and oil	23	22	22	21	20	20
Light vehicle	2	4	4	2	4	4
Mach. depreciation	40	42	44	26	27	29
Total power costs	\$109	\$113	\$115	\$87	\$90	\$92
Hired labor	\$13	\$12	\$12	\$12	\$11	\$11
Building repair and rent	7	7	7	6	6	6
Building depreciation	9	9	9	7	7	7
Insurance	8	10	10	7	9	0
Misc	7	7	7	9	9	9
Interest (non-land)	16	17	17	13	14	14
Total overhead costs	\$60	\$62	\$62	\$54	\$56	\$47
Total non-land costs	\$531	\$549	\$548	\$297	\$318	\$308
Operator and land return	\$517	\$690	\$580	\$463	\$520	\$407
Land costs	222	258	271	222	258	271
Operator return	88	88	88	88	88	88
Net return	\$207	\$344	\$221	\$153	\$174	\$48

¹Results for 2011 are summarized from grain farms enrolled in Illinois Farm Business Farm Management. Budgets for 2012 and 2013 are projections.

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Appendix Table 2. Actual and Projected Returns and Costs, Corn and Soybeans in Central Illinois with Low-Productivity Farmland, 2011 through 2013¹.

	Corn			Soybeans		
	Year			Year		
	2011	2012P	2013P	2011	2012P	2013P
Yield per acre	158	123	183	52	42	53
Price per bu	\$5.95	\$8.00	\$6.00	\$12.36	\$16.00	\$12.50
Crop revenue	\$940	\$984	\$1,098	\$643	\$672	\$663
ACRE revenue	0	0	0	0	0	0
Direct payments	24	24	0	24	24	0
Crop insurance proceeds	23	145	0	11	30	0
Gross revenue	\$987	\$1,153	\$1,098	\$678	\$726	\$663
Fertilizers	\$164	\$170	\$160	\$46	\$45	\$40
Pesticides	50	50	52	32	32	33
Seed	100	98	100	52	53	54
Drying	15	15	15	1	1	1
Storage	6	6	6	2	2	2
Crop insurance	28	26	26	19	18	18
Total direct costs	\$363	\$365	\$359	\$152	\$151	\$148
Machine hire/lease	\$11	\$11	\$11	\$9	\$9	\$9
Utilities	5	5	5	4	4	4
Machine repair	20	21	21	18	19	19
Fuel and oil	20	19	19	18	17	17
Light vehicle	2	4	4	1	2	2
Mach. depreciation	40	42	44	34	36	38
Total power costs	\$98	\$102	\$104	\$84	\$87	\$89
Hired labor	\$13	\$12	\$12	\$13	\$12	\$12
Building repair and rent	7	7	7	5	5	5
Building depreciation	9	9	9	6	6	6
Insurance	8	10	10	8	10	10
Misc	7	7	7	7	7	7
Interest (non-land)	16	17	17	14	15	15
Total overhead costs	\$60	\$62	\$62	\$53	\$55	\$55
Total non-land costs	\$521	\$529	\$525	\$289	\$293	\$292
Operator and land return	\$466	\$624	\$573	\$389	\$433	\$371
Land costs	208	241	253	208	241	253
Operator return	83	83	83	83	83	83
Net return	\$175	\$300	\$237	\$98	\$109	\$35

¹Results for 2011 are summarized from grain farms enrolled in Illinois Farm Business Farm Management. Budgets for 2012 and 2013 are projections.

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Appendix Table 3. Actual and Projected Returns and Costs, Corn and Soybeans in Southern Illinois, 2011 through 2013¹.

	Corn			Soybeans		
	2011	2012P	2013P	2011	2012P	2013P
Yield per acre	141	93	158	44	32	47
Price per bu	\$6.09	\$5.25	\$6.00	\$12.02	\$12.65	\$12.50
Crop revenue	\$859	\$488	\$948	\$529	\$405	\$588
ACRE revenue	0	0	0	0	0	0
Direct payments	21	21	0	21	21	0
Crop insurance proceeds	41	230	0	29	40	0
Gross revenue	\$921	\$739	\$948	\$579	\$466	\$588
Fertilizers	\$163	\$144	\$134	\$50	\$48	\$43
Pesticides	52	52	54	38	38	40
Seed	88	90	92	52	53	54
Drying	11	11	11	1	1	1
Storage	2	2	2	1	1	1
Crop insurance	20	19	19	14	13	13
Total direct costs	\$336	\$318	\$312	\$156	\$154	\$152
Machine hire/lease	\$8	\$8	\$8	\$9	\$9	\$9
Utilities	5	5	5	4	4	4
Machine repair	26	28	28	18	19	19
Fuel and oil	24	23	23	18	17	17
Light vehicle	2	4	4	1	2	2
Mach. depreciation	50	53	55	48	50	52
Total power costs	\$115	\$121	\$123	\$98	\$101	\$103
Hired labor	\$13	\$12	\$12	\$19	\$18	\$18
Building repair and rent	7	7	7	6	6	6
Building depreciation	9	9	9	5	5	5
Insurance	8	10	10	9	11	11
Misc	7	7	7	7	7	7
Interest (non-land)	16	17	17	13	14	14
Total overhead costs	\$60	\$62	\$62	\$59	\$61	\$61
Total non-land costs	\$511	\$501	\$497	\$313	\$316	\$316
Operator and land return	\$410	\$238	\$451	\$266	\$150	\$272
Land costs	137	160	168	137	160	168
Operator return	83	83	83	83	83	83
Net return	\$190	-\$5	\$200	\$46	-\$93	\$21

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