



Crop Insurance Payments in 2013 for Corn and Soybeans

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Harvest prices will have a large impact on the size of crop insurance payments for corn and soybeans. Current futures prices suggest that crop insurance policies on corn will make payments on some farms, particularly on those farms that purchased revenue policies at high coverage levels. There is less of a chance for crop insurance payments on soybeans.

Corn Crop Insurance Payments

The 2013 projected price for corn is \$5.65 per bushel. The projected price is used to set crop insurance guarantees. The harvest price is used to calculate revenue on which crop insurance payments are based. The harvest price for corn equals the average of settlement prices of the December Chicago Mercantile Exchange (CME) corn contract during the month of October. Settlement prices during the first two days of October suggest a harvest price of \$4.40 per bushel. Obviously, the final harvest price can vary from \$4.40. However, \$4.40 provides a good starting point for evaluating corn payments.

A \$4.40 harvest price is 78% of the \$5.65 projected price (i.e., $.78 = \$4.40 \text{ harvest price} / \$5.65 \text{ projected price}$). If actual yield equals guarantee yield (i.e., the Trend-Adjusted APH yield), revenue policies with 80% and higher coverage levels will make payments. In Illinois, recently released Crop Reporting District (CRD) yields suggest that harvest yields will be close to guarantee yields (see [here](#) for more detail). Projected 2013 CRD yield for Iowa suggest lower yields, resulting in higher chance of crop insurance payments, particularly in the northwest corner of Iowa.

Since yields will vary across farms, insurance payments also will vary. Table 1 shows payments for a Revenue Protection (RP) policy at 75%, 80%, and 85% coverage levels, the most commonly used product and coverage levels in Illinois. Payments in Table 1 are based on a guarantee yield of 180 bushels per acre.

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Table 1. 2013 Crop Insurance Payments for Corn with a Revenue Protection Policy and a 180 Bushel Per Acre Guarantee Yield.¹

Harvest Yield	75% Coverage Level			80% Coverage Level			85% Coverage Level		
	Harvest Price			Harvest Price			Harvest Price		
	\$4.25	\$4.40	\$4.60	\$4.25	\$4.40	\$4.60	\$4.25	\$4.40	\$4.60
Bu /acre	\$ per acre			\$ per acre			\$ per acre		
130	210	191	165	261	242	216	312	292	266
140	168	147	119	219	198	170	269	248	220
150	125	103	73	176	154	124	227	204	174
160	83	59	27	134	110	78	184	160	128
170	40	15	0	91	66	32	142	116	82
180	0	0	0	49	22	0	99	72	36
190	0	0	0	6	0	0	57	28	0
200	0	0	0	0	0	0	14	0	0
210	0	0	0	0	0	0	0	0	0

¹Calculated using the "what-if" sheet in the 2013 Crop Insurance Decision Tool, available for download from the farmdoc website.

Below are several observations from Table 1 given that the harvest price is \$4.40:

- At a 75% coverage level, insurance payments will not occur unless the yield is below the guarantee yield.
- At an 80% coverage level, crop insurance payments occur at the guarantee yield. Generally, payments at the guarantee level will be small (i.e., \$22 per acre for a 180 bushel per acre harvest yield given a \$4.40 harvest price). Insurance payments become larger at lower yields.
- At an 85% coverage level, crop insurance payments will occur if the actual yield equals the guarantee yield. In the example shown in Table 1, a \$72 per acre payment results for a \$4.40 harvest price and a 180 bushel per acre actual yield. Higher yields are needed before crop insurance payments do not occur.

Larger payments are likely under the Group Risk Income Plan (GRIP). Most farmers who purchase GRIP do so at a 90% coverage level. To illustrate the size of payments, take a McLean County GRIP policy with an actual yield equal to the expected yield of 183.3 bushels per acre. A \$4.40 harvest price results in a \$209 payment given that the highest protection level was chosen. The lowest protection level results in a \$126 per acre payment. The 90% coverage level for GRIP causes the larger payments for GRIP compared to RP.

Soybean Crop Insurance Payments

The projected price for soybeans is \$12.87 per bushel. The harvest price equals the settlement price of the November CME soybean contract during the month of October. The first two days of settlement prices during October suggest a harvest price of \$12.70 per bushel. Similar to corn, soybean harvest price may vary from \$12.70, but \$12.70 is a useful starting point for evaluating insurance payments.

A \$12.70 harvest price is 99% of the \$12.87 projected price ($.99 = \$12.70 / \12.87). Because 98% is above coverage levels offered by crop insurance products, a yield loss has to occur before crop insurance policies makes payments. In Illinois, projected CRD yields suggest that most farms will not have yield losses large enough to trigger insurance payments (see [here](#) for more detail). Because of lower projected yields, crop insurance payments are more likely in Iowa.

There will be some farms with soybean yields low enough to trigger insurance payments. Table 2 shows payments for a Revenue Protection (RP) policy at 75%, 80%, and 85% coverage levels. The guarantee yield is 50 bushels per acre. As can be seen, yields below the guarantee level are required before crop insurance payments occur. Crop insurance payments on GRIP are unlikely in Illinois.

Table 2. 2013 Crop Insurance Payments for Soybeans with a Revenue Protection Policy with a 50 Bushel Per Acre Guarantee Yield. ¹

Harvest Yield	75% Coverage Level			80% Coverage Level			85% Coverage Level		
	Harvest Price			Harvest Price			Harvest Price		
	\$12.20	\$12.40	\$12.60	\$12.20	\$12.40	\$12.60	\$12.20	\$12.40	\$12.60
Bu /acre	\$ per acre			\$ per acre			\$ per acre		
10	361	359	357	393	391	389	425	423	421
15	300	297	294	332	329	326	364	361	358
20	239	235	231	271	267	263	303	299	295
25	178	173	168	210	205	200	242	237	232
30	117	111	105	149	143	137	181	175	169
35	56	49	42	88	81	74	120	113	106
40	0	0	0	27	19	11	59	51	43
45	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0

¹Calculated using the "what-if" sheet in the 2013 Crop Insurance Decision Tool, available for download from the farmdoc website.

Summary

In Illinois, crop insurance payments for corn will occur on some farms, particularly on those who purchased RP policies at higher coverage levels. GRIP at the 90% coverage level likely will make payments. Soybean payments are less likely. In aggregate, 2013 crop insurance payments in Illinois will be much lower than in 2012.