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Projected 2014 Gross Revenues and Farmer Returns on Cash Rent Farmland

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Returns to farmers are projected to be lower in 2014 as compared to 2011 through 2013 levels. Lower prices contribute to these lower return projections. Also playing a role are lower projected crop insurance payments. In 2013, many farmers received crop insurance payments on corn because of lower prices. These crop insurance payments then contributed to positive farmer returns in 2013. Crop insurance payments caused by price decreases will not lead to positive farmer returns in 2014. This is illustrate here by examining historical and projected returns from corn grown in central Illinois on high-productivity farmland.

Farmer Returns on Cash Rent Farmland

Figure 1. Farmer Returns for Cash Rent Farmland, Corn, Central Illinois, High-Productivity Farmland.

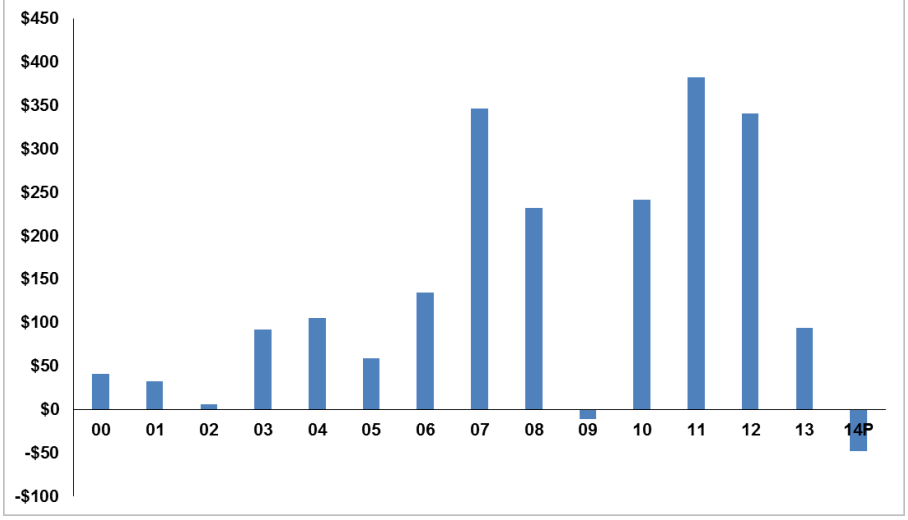

Figure 1 shows farmer returns on cash rent farmland located in central Illinois that is high-productivity. Farmer return equal gross revenue minus non-land costs minus cash rent. These farmer returns represent a return to equity, unpaid labor, and management.

As can be seen in Figure 1, farmer returns were relatively high in 2011 and 2012. For example, farmer returns for corn production were $382 in 2011 and $341 in 2012. Farmer returns then decreased to $94 per acre for corn in 2014. At this point, farmer returns are projected to be -$48 per acre in 2014.

Decreases in Farmer Returns Caused by Lower Gross Revenues

Gross revenue includes crop revenue (yield per acre time price per bushel), ARC/PLC payments, direct payments, and crop insurance payments. A major reason for lower returns in 2013 and 2014 are because gross revenues have declined since 2011.

Gross revenues for corn were above $1,000 per acre in 2011 and 2012: $1,133 per acre in 2011 and $1,192 per acre in 2012 (see Table 1). Corn prices above $6.00 led to high gross revenues: $6.24 per bushel corn price in 2011 and $6.93 in 2012. In 2012, crop insurance payments of $295 per acre in 2012 also was an important contributor to gross revenue.

Gross revenue in 2013 was $999. This $999 gross revenue consists of $916 of crop revenue (197 bushel yield x $4.65 price), plus $22 of direct payments, plus $61 of crop insurance payments (see Table 1). The $61 of crop insurance payments accounted for 6% of gross revenue. Without the $61 average crop insurance payment, farmer return would have been $33 per acre rather than $94 per acre.

Gross revenue for corn is projected at $833 per acre in 2014. This projection includes $823 of crop revenue (196 per acre yield times a $4.20 per bushel price). Also included is a $10 per acre Agricultural Risk Coverage (ARC) payment, a county revenue program contained in the 2014 Farm Bill. ARC likely would make payments at a $4.20 price, depending on the level of county yields. No revenue is included for direct payments in 2014. Price and yield levels in projections would not trigger crop insurance payments; hence, crop insurance payments are not included in 2014 projections.

Commentary

For 2014 revenue projections, the 2014 projected yield of 196 bushels per acre is almost the same as the actual yield of 197 bushels per acre. Hence, yield changes do not play a large role in differences between 2013 actual and 2014 projected gross revenue. Three factors play a role. First, corn price is projected lower in 2014: $4.65 price in 2013 compared to a $4.20 price in 2014. This price decline results in $88 lower revenue (197 bushel yield x (4.65 – 4.20)).

Second, crop insurance payments occurred in 2013 at an average of $61 per acre. A large contributor to these payments was that the 2013 harvest price of $4.39 was significantly below the $5.65 projected price. This year's projected price is $4.62 per bushel. If a price decrease would cause similar crop insurance payments in 2014 as in 2013, the harvest price would have to be near $3.60 per bushel. Because of the lower 2014 projected price, crop insurance provides a lower safety net in 2014 as compared to 2013. The projections shown for 2014 do not include crop insurance payments because projected price and yield levels do not result in crop insurance payments. If crop insurance payments are triggered by a price decrease, farmer returns would be significantly lower than those projected in Table 1.

Third, there is decrease in Commodity Title payments. The direct payments of $22 per acre that occurred in 2013 will not occur in 2014. Some ARC payments may occur, but given the price scenario in Table 1, those ARC payments would be below the 2013 direct payments.

Table 1. Corn Revenues and Costs, Central Illinois -- High Productivity Farmland, Actual for 2006 through 2013 Projected for 2014.[1]

	Year							
	2007	2008	2009	2010	2011	2012	2013	2014P
Yield per acre	201	199	192	168	174	126	197	196
Price per bu	$4.12	$4.07	$3.62	$5.07	$6.24	$6.93	$4.65	$4.20
Crop revenue	$828	$810	$695	$852	$1,086	$873	$916	$823
ARC/PLC or ACRE	0	0	8	0	0	0	0	10
Direct payments	25	25	24	24	24	24	22	0
Crop insurance proceeds	0	22	5	32	23	295	61	0
Gross revenue	**$853**	**$857**	**$732**	**$908**	**$1,133**	**$1,192**	**$999**	**$833**
Fertilizers	90	124	185	122	159	200	193	163
Pesticides	40	46	52	44	50	49	66	60
Seed	55	67	90	95	96	108	114	119
Drying	9	19	38	22	19	16	24	23
Storage	8	11	14	13	8	7	8	5
Crop insurance	20	27	25	18	30	25	27	27
Total direct costs	**$222**	**$294**	**$404**	**$314**	**$362**	**$405**	**$432**	**$397**
Machine hire/lease	8	8	9	8	8	10	11	11
Utilities	4	4	4	4	4	5	5	5
Machine repair	16	17	18	17	17	22	22	24
Fuel and oil	18	22	13	17	18	23	24	24
Light vehicle	2	2	1	2	1	2	2	2
Mach. depreciation	23	29	35	38	39	55	63	66
Total power costs	**$71**	**$82**	**$80**	**$86**	**$87**	**$117**	**$127**	**$132**
Hired labor	9	11	12	13	14	14	16	17
Building repair and rent	4	5	5	4	5	8	6	7
Building depreciation	4	5	5	6	6	9	5	6
Insurance	9	10	7	8	8	9	10	10
Misc	6	7	7	8	8	8	8	8
Interest (non-land)	18	14	14	13	13	11	11	11
Total overhead costs	**$48**	**$52**	**$50**	**$52**	**$54**	**$59**	**$56**	**$59**
Total non-land costs	**$341**	**$428**	**$534**	**$452**	**$503**	**$581**	**$615**	**$588**
Operator and land return	**$512**	**$429**	**$198**	**$456**	**$630**	**$611**	**$384**	**$245**
Land costs	166	197	209	215	248	270	290	293
Farmer return	**$346**	**$232**	**-$11**	**$241**	**$382**	**$341**	**$94**	**-$48**

[1]Results for 2007 through 2013 are summarized from grain farms enrolled in Illinois Farm Business Farm Management. Projections are made for 2014.

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Available in the management section of *farmdoc* (www.farmdoc.illinois.edu).

Summary

Gross revenues and farmer returns are projected lower in 2014 as compared to recent years. Beside crop prices, lower projected crop insurance proceeds play a role. In 2013, crop insurance payments occurred because the harvest price was much lower than the projected price. If a price decline causes crop insurance payments in 2014, farmer returns on cash rent farmland likely will be negative. Obviously, returns will vary from those shown in Table 1 if prices or yields differ from those shown in Table 1. At projected yield levels, break-even prices to cover non-land costs and cash rent is around $4.50 per bushel. Prices near $5.00 per bushel are needed to generate profit levels similar to 2013.