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Weekly Farm Economics: 2014 Crop Budgets

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The 2014 Illinois Crop Budgets are now available on farmdoc (click here for budgets). These budgets give projected revenues, costs, and returns for corn-after-soybeans (corn planted in farmland that had been in soybeans the previous year), corn-after-corn, soybeans-after-corn, soybeans-after-two-years-corn, wheat, and double-crop soybeans. Budgets are given for northern, central, and southern Illinois. Central Illinois is further divided into categories for high and low productivity farmland. High productivity farmland has an expected corn yield of 199 bushels per acre for corn-after-soybeans while low productivity farmland with expected corn yield of 186 bushels per acre.

Changes from 2013 Budgets to 2014 Budgets

The 2014 Illinois Crop Budgets have four tables, one for each of the above regions. The table for northern Illinois is shown in Table 1.

	Corn- after- Soybeans	Corn- after- Corn	Soybeans- after- Corn	Soybeans- after-Two Years-Corn	Wheat
Yield per acre Price per bu	191 \$4.60	181 \$4.60	56 \$11.00	58 \$11.00	75 \$5.80
Crop revenue	\$879	\$833	\$616	\$638	\$435
ACRE revenue	0	0	0	0	0.00
Other gov't payments	0	0	0	0	(
Crop insurance proceeds	0	0	0	0	0
Gross revenue	\$879	\$833	\$616	\$638	\$435
Fertilizers	\$170	\$180	\$50	\$50	\$120
Pesticides	50	56	29	29	22
Seed	112	112	56	56	46
Drying	21	20	1	1	
Storage	5	5	2	2	•
Crop insurance	28	32	19	19	8
Total direct costs	\$386	\$405	\$157	\$157	\$198
Machine hire/lease	\$22	\$22	\$32	\$32	\$17
Utilities	4	4	4	4	(
Machine repair	22	22	22	22	23
Fuel and oil	22	22	21	21	23
Light vehicle	2	2	2	2	2
Mach. depreciation	60	60	54	54	40
Total power costs	\$132	\$132	\$135	\$135	\$111
Hired labor	\$17	\$17	\$16	\$16	\$14
Building repair and rent	12	12	5	5	4
Building depreciation	16	16	8	8	7
Insurance	9	9	7	7	
Misc	9	9	9	9	9
Interest (non-land)	14	14	13	13	13
Total overhead costs	\$77	\$77	\$58	\$58	\$52
Total non-land costs	\$595	\$614	\$350	\$350	\$361
Operator and land return	\$284	\$219	\$266	\$288	\$74

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Projected prices used in 2014 crop budgets are \$4.60 per bushel for corn, \$11.00 per bushel for soybeans, and \$5.80 per bushel for wheat. These prices are lower than prices in 2013 budgets. For example, the \$4.60 corn price in the 2014 budgets is significantly below the high \$5.00 corn price used in 2013 budgets released in 2012. Prices used in 2014 budgets are near those implied by prices on 2014 harvest time futures contracts. The 2014 budgeted prices also are close to anticipated long-run average prices (see here).

Non-land costs in 2014 budgets have not changed much from 2013 costs. Seed and machinery depreciation costs are increased, while all remaining costs are held constant at projected 2013 levels.

Fertilizers are the most variable cost category from one year to the next. Fertilizer prices may face downward in 2014. Nitrogen fertilizer manufacturing capacity has been built. Fertilizer prices also exhibit correlation with commodity prices. Hence, commodity price moving downward may signal downward pressures on fertilizer prices in the near term.

As a result of lower commodity prices and near constant non-land costs, operator and land returns are projected below levels realized in recent years. In northern Illinois, corn-after-soybeans is projected to have an operator and land return of \$284 per acre (see Table 1). This is the amount available to provide returns to the farmer and the land. If farmland is cash rented at \$250 per acre, the farmer would generate

 $$34 ext{ of return for corn-after-soybeans } ($35 = $284 ext{ operator and land return} - $250 ext{ cash rent}).$

Implications of Returns in 2014 Budgets

In Table 2, operator and land returns are shown by region for each crop contained in the 2014 budgets. Also shown are rotation returns, which give average returns for a rotation. In northern Illinois, the cornsoybeans rotation has a \$275 per acre return. This rotation has 50% of its acres in corn-after-soybeans (\$284 return) and 50% of its acres in corn-after-soybeans (\$266 return). The corn-corn-soybeans rotation has a \$264 per acre return. This rotation has one-third of its acres in corn-after-soybeans (\$284 return), one-third in corn-after-corn (\$219 return), and one-third in soybeans-after-two-years-corn (\$288 return).

Table 2. Operator and Farmland Returns by Crop and Rotation in the 2014 Illinois Crop Budgets.

		Region					
	-	Central	Central				
	Northern	-High	-Low	Southern			
Сгор		\$ per acre					
Corn-after-soybeans	284	348	279	185			
Corn-after-corn	219	287	217	123			
Soybeans-after-corn	266	273	249	167			
Soybeans-after-two-corn	288	295	271	178			
Wheat	74	96	77	13			
DC soybeans		155	127	118			
Rotation							
Corn-Soybeans	275	311	264	176			
Corn-Corn-Soybeans	264	310	256	162			
Continous corn 1	219	287	217	123			
Corn-wheat-soybeans Corn-wheat-double crop	208	239	202	122			
soybeans- soybeans		291	244	161			

Assumes that all corn is corn-after-corn and that there are no further yield reductions for corn longer rotations with corn.

Returns in 2014 budgets suggest returns will be the highest for the corn-soybean rotation in all regions. In northern Illinois, for example, corn-soybeans has a \$275 per acre operator and land return, corn-corn-soybeans has a \$264 return, and continuous corn has a \$219 per acre return. These projected returns could signal a move towards more soybeans in Illinois in 2014.

In southern Illinois, a corn-soybean rotation has the highest return of \$176 per acre. Wheat rotations have lower returns. For example, the corn-wheat-double crop soybeans-soybeans rotation has a \$161 per acre return. These returns may have implications for wheat plantings in Illinois.

The highest projected rotation returns are \$275 per acre in northern Illinois, \$311 per acre in central Illinois with high productivity farmland, \$264 in central Illinois with low productivity farmland, and \$176 per acre in southern Illinois. These operator and land returns are lower than many cash rents being charged in Illinois. Many counties, for example, have average cash rents higher than those shown in Table 1. This may put downward pressure on rents during the upcoming negotiating season.

Summary

The 2014 Illinois Crop Budgets have lower returns than received in recent years. This suggests that

incomes will be down in 2014 compared to incomes in 2010 through 2012.

Many events will occur between now and the 2014 harvest. Price expectations may change. Moreover, cost expectations, particularly for fertilizer, could vary from those shown in this release of the budgets. These budgets will be updated as market conditions change.

Budgets represent averages across many farms. Individual farms can vary from the budgeted amounts. Farmers should evaluate their own costs contained in budgets.