



2018 Crop Budgets: More of the Same

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July 25, 2017

farmdoc daily (7):134

Recommended citation format: Schnitkey, G. "2018 Crop Budgets: More of the Same." *farmdoc daily* (7):134, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 25, 2017.

Permalink: <http://farmdocdaily.illinois.edu/2017/07/2018-crop-budgets-more-of-the-same.html>

Crop budgets for 2018 now are available on *farmdoc*. In addition, 2017 crop budgets have been revised and 2016 returns and costs have been updated. Overall, 2018 budgets suggest more of the same economic conditions that have occurred since 2013. Returns will be small and cash flows will be tight. This situation will continue until corn price exceeds \$4.00 per bushel, soybean price exceeds \$10.00 per bushel, and yields are at or above trend yields.

2018 Budgets

Three publications have been updated:

1. *Revenue and Costs for Corn, Soybeans, Wheat, and Double-Crop Soybeans* shows actual revenues and costs for 2011 through 2016, and projections for 2017 and 2018.
2. *2018 Crop Budgets* show revenue and costs projections for corn, soybeans, wheat, and double-crop soybeans for 2018
3. *2017 Crop Budgets* show revenue and cost projections for 2017.

All three publications have tables for northern, central, and southern Illinois, with central Illinois including tables for high-productivity and low-productivity farmland.

Table 1 shows actual results for 2016 and projections for 2017 and 2018 for high-productivity farmland in central Illinois. This table is used in the following sub-sections to describe 2017 and 2018 projections. Other regions have the same trends as illustrated for central Illinois.

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Table 1. Corn and Soybean Returns, Central Illinois High-Productivity Farmland, 2016, Forecasts for 2017 and 2018

	Corn			Soybeans		
	2016	2017P	2018P	2016	2017P	2018P
Yield per acre	228	195	201	69	61	62
Price per bu	\$3.47	\$3.70	\$3.80	\$9.65	\$9.70	\$9.70
Crop revenue	\$791	\$722	\$764	\$666	\$592	\$601
ARC	20	5	0	20	5	5
Crop insurance proceeds	5	20	0	4	7	0
Gross revenue	\$816	\$747	\$764	\$690	\$604	\$606
Fertilizers	154	134	129	49	39	36
Pesticides	64	65	65	40	39	39
Seed	118	118	117	74	74	73
Drying	13	11	11	1	1	1
Storage	11	10	10	8	8	8
Crop insurance	21	21	21	14	14	14
Total direct costs	\$381	\$359	\$353	\$186	\$175	\$171
Machine hire/lease	12	12	12	11	11	11
Utilities	5	5	5	4	4	4
Machine repair	22	21	20	20	20	19
Fuel and oil	14	14	14	12	12	12
Light vehicle	1	1	1	1	1	1
Mach. depreciation	65	63	62	58	57	55
Total power costs	\$119	\$116	\$114	\$106	\$105	\$102
Hired labor	17	17	17	16	16	16
Building repair and rent	4	4	4	4	4	4
Building depreciation	12	12	12	10	10	10
Insurance	12	11	11	11	11	11
Misc	8	8	8	8	8	8
Interest (non-land)	13	14	14	12	12	13
Total overhead costs	\$66	\$66	\$66	\$61	\$61	\$62
Total non-land costs	\$566	\$541	\$533	\$353	\$341	\$335
Operator and land return	\$250	\$206	\$231	\$337	\$263	\$271
Land costs	273	270	267	273	270	267
Farmer return	-\$23	-\$65	-\$36	\$64	-\$7	\$4

Gross revenue for corn: Compared to 2016, gross revenue for corn is projected down in 2017 and 2018. The \$816 per acre gross revenue for corn in 2016 was relatively high because of exceptional yields across Illinois. Gross revenue in 2017 is projected at \$747 per acre, down \$70 from the \$816 per acre revenue for 2016. The 2018 gross revenue is projected at \$764 per acre, up by \$17 per acre from the 2017 projected gross revenue.

For 2017, a 195 bushel per acre yield is used, which is 5 bushels below trend. Many areas across central Illinois have had very little rain, and the 195 bushel yields will be high. Other areas, particularly in western Illinois, have been receiving rains. Yields will come into clearer focus in August as crop tours commence and USDA releases its estimated yields. For 2017, a \$3.70 per bushel price is used, close to harvest-time bids for fall delivery of grain. The \$3.70 price used in budgets is well above the \$3.40 per bushel mid-point contained in the [July 2017 WASDE report](#).

For 2018, a trend line yield of 201 bushels per acre is used in 2018 budgets. The \$3.80 price is close to that suggested by prices on futures contracts expiring in 2018 and 2019.

Agricultural Risk Coverage at the County level (ARC-CO) payments are projected at \$20 for 2016. These payments will be received this fall. For 2017, \$5 of ARC-CO payments are projected. Both the 2016 and 2017 payments will vary across counties. Some counties will have \$0 per acre payments while others will have large payments. In 2017, large payments could occur in those counties with low county yields.

Gross revenue for soybeans: In 2016, gross revenue for soybeans was \$690 per acre based on a 69 bushel per acre yield and a \$9.65 per bushel price (see Table 1). Like corn, soybeans yields were excellent in 2016.

Both the 2017 and 2018 budgets used trend yields. The 2017 trend yield is 61 bushels per acre and the 2018 trend yields is 62 bushels per acre. Both trend yields are below the 2016 yield of 69 bushels per acre. Near the same prices are used for all years. The 2016 price is \$9.65 and the projected prices for both 2017 and 2018 are \$9.70 (for more detailed discussion of price projections see *farmdoc daily*, July 6, 2017). Because of lower yields and roughly the same prices, revenue is projected down in 2017 and 2018 compared to 2016. Gross revenue is projected at \$604 per acre for 2017, down by \$86 per acre from the \$690 per acre revenue for 2016. Gross revenue is projected at \$606 per acre in 2018.

Fertilizer costs: Fertilizer costs decreased in recent years (see *farmdoc daily*, July 11, 2017). Fertilizer costs for corn were \$154 per acre in 2016 (see Table 1). Fertilizer prices suggest \$20 lower fertilizer costs in 2017, resulting in a fertilizer cost projection of \$134 per acre in 2017. For 2018, a further modest decline is projected, which may occur because of reduced fertilizer rates to meet a low cash flow.

Seed costs: Seed costs have been relatively stable in recent years (see *farmdoc daily*, July 18, 2017). Stable costs are projected into 2018. For corn, seed costs are \$118 per acre for 2016, with projections of \$118 per acre for 2017 and \$117 per acre for 2018.

Machinery depreciation: Machinery depreciation for corn was \$65 per acre in 2016. Small decreases are projected into 2017 and 2018. Capital purchases in 2016 are consistent with machinery depreciation moving to being in the \$60 to \$65 per acre range in the future (see *farmdoc daily*, June 20, 2017).

Non-land costs: Non-land costs are projected down from 2016 levels. Non-land costs for corn were \$566 per acre in 2017. These costs are projected at \$541 per acre in 2017 and \$533 per acre in 2018. Non-land costs for soybeans were \$353 per acre in 2016. Projections are for \$341 per acre costs in 2017 and \$335 per acre in 2018.

Land costs: Land costs represented in Table 1 are cash rents. Cash rents are projected to decrease in 2017 and 2018.

Commentary

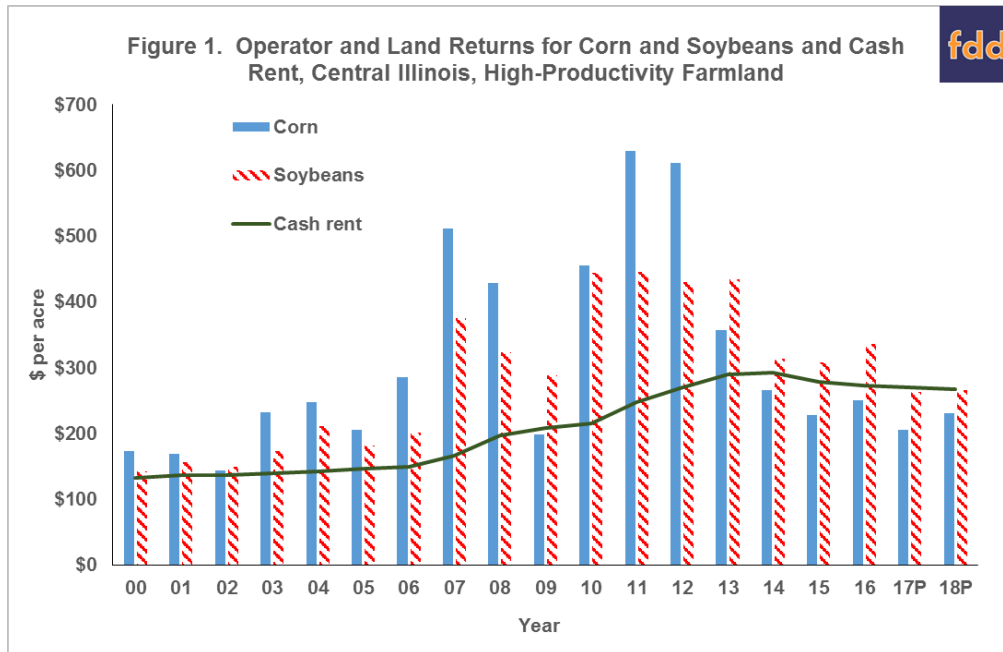
Four points relative to 2017 and 2018 budgets.

First, the 2017 and 2018 projections can change. Soon, better estimates of 2017 yields will be forthcoming and those yields could result in different return forecasts. Furthermore, lower national yields could lead to higher prices, which could result in higher revenue and returns for 2018.

Second, corn is projected to have a lower return than soybeans in 2017 and 2018, similar to results for 2013, 2014, 2015, and 2016 (see Figure 1). Given trend yields and a high \$9.00 soybean price, corn prices will need to exceed \$4.00 per bushel before corn and soybeans have the same profitability.

Third, operator and land returns in 2017 and 2018 are projected below those in 2014 through 2016 (see Figure 1). In 2017 and 2018, both corn and soybean returns are projected below cash rent. This situation occurs because of the use of near trend yields, a corn price below \$4.00 per bushel, and a soybean price below \$10.00 per bushel. Yields in 2013 through 2016 were above trend. For 2017, above trend yields for soybeans are possible, but have not been built into 2017 budgets.

Fourth, cash flows will again be tight in 2017. Incomes likely will be lower in 2017 than in 2016. As of yet, prices projected for 2017 have not offset lower yields. Given tight cash flows, downward pressures will be felt on 2018 cash rents.



Summary

At this point, lower returns should be expected in Illinois for 2017 and 2018 than occurred in 2016. As is always the case, there will be variability in incomes. Those farms with higher yields will tend to have higher incomes.

More information will come out in August as 2017 yields come into clearer focus. The 2017 and 2018 projections will be revised if yields are substantially different than trend or prices change from current levels.

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