



Modest Income Levels Projected for Grain Farms in 2017

Gary Schnitkey

Department of Agricultural and Consumer Economics
University of Illinois

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In recent weeks, soybean prices have decreased, causing prospects for 2017 net incomes to decrease as well. At current fall-time delivery prices and trend yields, 2017 net incomes on grain farms would be near \$25,000 per farm, a level that would result in some financial deterioration on many farms. At this point, though, there is considerable uncertainty about 2017 incomes as 2017 yields are not known. More accurate 2017 net income projections will be able to be made when 2017 yields and prices come into clearer focus, likely in late July and early August.

2017 Budgets

Table 1 shows per acre returns and costs for central Illinois farms having high-productivity farmland. The 2015 and 2016 are actual results summarized from farms enrolled in Illinois Farm Business Farm Management (FBFM). Projections are given for 2017. Projections come from the February edition of [2017 Illinois Crop Budgets](#), with modifications made to prices and costs to reflect more up-to-date information.

2017 Revenue

Yields for 2017 projections are 200 bushels per acre for corn and 61 bushels per acre for soybeans. These projected yields are at trend levels. Projected yields have not been changed because growing conditions to date do not provide enough information to warrant changing yields. Obviously, actual yields can vary from the trend yields. Actual yields will come into clearer focus in late July for corn and August for soybeans (see [farmdoc daily, May 24, 2017](#)).

A \$3.70 per bushel price is used for corn in 2017 projections. Prices on futures contracts for corn have not varied much since winter. Hence, the price used to make the 2017 projection is not different from that in the [2017 Illinois Crop Budgets](#).

On the other hand, soybean prices have fallen considerably in recent months. The price of the November 2017 soybean contract was above \$10.00 per bushel for much of January, February, and March. From mid-March through mid-May, November 2017 prices varied in a range from \$9.50 to \$9.70. At the end of May, prices on the November contract have fallen below \$9.30, closing at \$9.20 per bushel on May 30.

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Current fall delivery bids in central Illinois are below \$9.00. A \$9.00 per bushel price is used for 2017 projections (see Table 1), down from a \$9.70 per bushel price used in the February edition of the [2017 Illinois Crop Budgets](#).

	Corn			Soybeans		
	Year			Year		
	2015	2016	2017P	2015	2016	2017P
Yield per acre	200	228	200	66	69	61
Price per bu	\$3.77	\$3.54	\$3.70	\$9.08	\$9.85	\$9.00
	\$/acre	\$/acre	\$/acre	\$/acre	\$/acre	\$/acre
Crop revenue	\$754	\$807	\$740	\$599	\$680	\$549
ARC/PLC or ACRE	45	20	15	45	20	15
Other gov't payments	0	0	0	0	0	0
Crop insurance proceeds	31	5	0	7	4	0
Gross revenue	\$830	\$832	\$755	\$651	\$704	\$564
Fertilizers	166	154	120	56	49	35
Pesticides	66	64	65	40	40	39
Seed	118	118	118	76	74	74
Drying	15	13	14	1	1	1
Storage	14	11	13	8	8	8
Crop insurance	24	21	21	16	14	14
Total direct costs	\$403	\$381	\$351	\$197	\$186	\$171
Machine hire/lease	12	12	12	11	11	11
Utilities	5	5	5	4	4	4
Machine repair	22	22	21	19	20	20
Fuel and oil	17	14	16	15	12	12
Light vehicle	1	1	1	1	1	1
Mach. depreciation	67	65	60	57	58	55
Total power costs	\$124	\$119	\$115	\$107	\$106	\$103
Hired labor	17	17	17	16	16	16
Building repair and rent	5	4	4	4	4	4
Building depreciation	12	12	12	10	10	10
Insurance	10	12	11	10	11	11
Misc	8	8	8	8	8	8
Interest (non-land)	13	13	14	11	12	12
Total overhead costs	\$65	\$66	\$66	\$59	\$61	\$61
Total non-land costs	\$592	\$566	\$532	\$363	\$353	\$335
Operator and land return	\$238	\$266	\$223	\$288	\$351	\$229

A decline in soybean prices to \$9.00 likely will trigger 2017 ARC-CO payments, given that county soybean yields are at trend levels. As a result, 2017 projections build in a \$15 per acre payment for 2017 ARC-CO payments. These 2017 ARC-CO payments will be received in the fall of 2018. This fall, some farmers will receive 2016 ARC-CO payments estimated at \$20 per acre. This amount will vary depending on the administrative county of the farm, with county estimates provided in [a farmdoc daily article](#) issued on February 24, 2017.

In 2017, revenue is projected to be \$755 per acre for corn, down by \$77 per acre from \$832 per acre in 2016. Corn revenue is projected to decline because of lower yields (228 bushels per acre in 2016 to 200 bushels per acre in 2017) and lower ARC-CO payments (\$20 per acre for 2016 and \$15 per acre for 2017).

In 2017, gross revenue for soybeans is projected at \$564 per acre, \$140 per acre lower than in 2016. Lower revenue is projected because of a lower price (\$9.85 in 2016 compared to \$9.00 in 2017) and a lower yield (69 bushels per acre in 2016 compared to 61 bushels per acre in 2017), and lower ARC-CO payments (\$20 per acre for 2016 and \$15 per acre for 2017).

2017 Costs

Non-land costs for corn in 2017 are projected at \$532 per acre, down by \$34 per acre from the \$566 level in 2016. Fertilizer costs are the primary factor leading to the non-land cost decrease, with fertilizer costs projected at \$120 per acre for corn in 2017, compared to a cost of \$154 per acre in 2016. Machinery depreciation also is projected down from \$65 per acre in 2016 to \$60 per acre in 2017.

Soybean non-land costs are projected at \$335 per acre in 2017, down by \$18 per acre from a \$353 in 2016. Similar to corn, the largest factor contributing to the non-land cost decrease is a decrease in fertilizer costs.

2017 Operator and Land Returns

Operator and land return is split between the farmer and landowner. Suppose operator and land return is \$223 per acre. If farmland is cash rented at \$270 per acre, the farmer has a \$47 per acre loss (\$47 loss = \$223 operator and land return - \$270 cash rent).

Operator and land return for corn in 2017 is projected at \$223 per acre. This level is down from a \$266 per acre level in 2016. Operator and land return for soybeans is projected at \$229 per acre, down by \$122 per acre from the 2016 level.

Assuming that a farm has 50% of their acres in corn and 50% in soybeans, operator and land returns for the last three years are:

2015: \$263 per acre (.50 x \$238 corn return + .50 x \$288 soybean return)

2016: \$308 per acre

2017: \$226 per acre

If projections hold, the \$226 per acre operator and land return will be below levels in 2015 and 2016.

Cash rents have declined slightly in recent years. Cash rent for central Illinois high-productivity farmland averaged near \$278 per acre in 2015. For 2016, average cash rent declined by \$5 per acre to \$273 per acre. Projections are for a continued decrease into 2017 of \$270 per acre.

Farm Income

Current projections place 2017 incomes near \$25,000 per farm. This estimate is made for Illinois grain farms enrolled in FBFM (see *farmdoc daily*, February 14, 2017). These farms are located throughout Illinois and range in size. Average size is near 1,500 acres. A \$25,000 income level would result in a deteriorating financial position on many Illinois farms. Income prospects have declined from earlier forecasts due to a decrease in soybean price.

The risks of substantial soybean price decreases have been anticipated earlier in the year (*farmdoc daily*, January 23, 2017). If a farmer priced a portion of their soybean production at higher prices available this winter, 2017 income projections would not have declined as much as suggested here.

A rebound in either corn or soybean prices is possible. However, the recent decrease in soybean price puts the relation of soybean-to-corn prices closer to historical levels, suggesting that increases in soybean prices should not be anticipated.

Summary

Incomes for 2017 are still far from certain. At this point, little can be said about 2017 yields, and prices will vary depending on yield prospects. Demand factors also will influence prices. With this important caveat, incomes for 2017 took a decidedly more negative prospect with recent decreases in soybean prices. In my opinion, significant rebounds in soybean prices are not likely unless 2017 yields turn out to be below trend.

More accurate income forecasts will be available in August after 2017 yields come into clearer focus.

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