farmdoc DAILY

Department of Agricultural and Consumer Economics, University of Illinois Urbana-Champaign

Prospects for Grain Farm Incomes in 2014

Gary Schnitkey

Department of Agricultural and Consumer Economics
University of Illinois

June 24, 2014

farmdoc daily (4):117

Recommended citation format: Schnitkey, G. "Prospects for Grain Farm Incomes in 2014." *farmdoc daily* (4):117, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June 24, 2014.

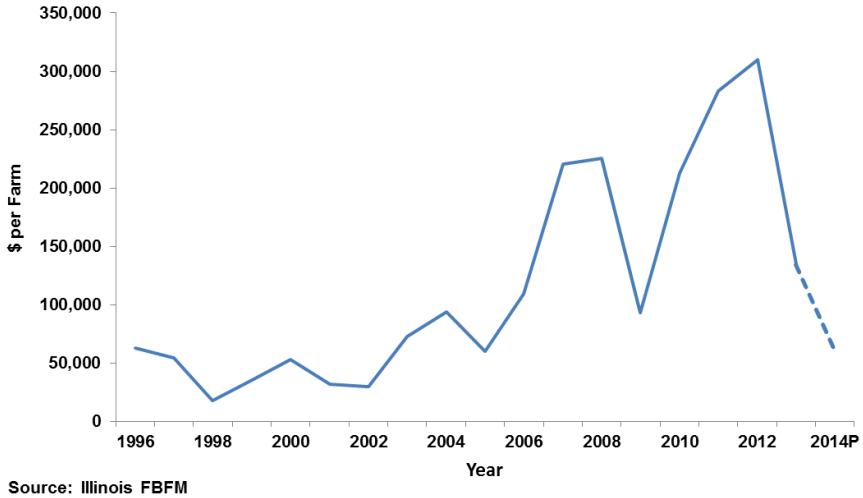
Permalink http://farmdocdaily.illinois.edu/2014/06/prospects-for-grain-farm-incomes-2014.html

Average grain farm incomes in 2014 likely will be much lower than 2013 incomes. Corn prices near $4.20 per bushel combined with above average yields could result in average incomes on grain farms in Illinois around $45,000 per farm, slightly below the average for the years from 1996 through 2005. A scenario that would result in average incomes near $134,000 per farm, the 2013 level of average income, would be above average yields combined with corn prices near $4.80 per bushel. This is a large range ($45,000 to $134,000), and it represents the likely range of average grain farm incomes over the next several years, with lower incomes possible if low commodity prices occur.

Historical Grain Farm Incomes in Illinois

Net incomes for grain farms enrolled in Illinois Farm Business Farm Management averaged $51,000 per farm for the years from 1996 to 2005 (see Figure 1). During this period, the lowest year's average income of $18,000 per farm occurred in 1998, while the highest income of $94,000 per farm occurred in 2004.

Figure 1. Average Net Incomes on Illinois Grain Farms, Actual for 1996 though 2013, Projected for 2014.



Higher commodity prices since 2006 led to higher incomes. From 2006 through 2008, net farm incomes averaged $185,000 per farm. Because of lower corn and soybean prices, and much higher costs, incomes fell to $93,000 per farm in 2009. Higher commodity prices then caused higher incomes in 2010 through 2012, with average incomes in 2011 and 2012 exceeding $250,000 per farm.

From 2012 levels, incomes fell more than half to $134,000 per farm in 2013. Two factors caused the decrease between 2012 and 2013. First, grain prices declined. The corn price received for the 2012 crop averaged $6.93 per bushel, compared to $4.65 for the 2013 crop. Soybean price for the 2012 crop averaged $14.66 per bushel, compared to $13.25 for the 2013 crop. Second, crop insurance payments were lower in 2013 as compared to 2012 levels. The 2012 drought caused high crop insurance payments, with crop insurance payments accounting for about one-third of gross revenue in 2012. Crop insurance payments were much lower in 2013.

Prospects for 2014

While grain prices and yields are far from certain, most current projections of prices and yields result in much lower incomes for 2014. To illustrated, 2014 net incomes are projected under the following scenario:

1. Costs are taken in 2014 budgets (see here). Non-land costs are projected slightly lower in 2014 as compared to 2013.
2. Yields are projected at 10 bushels per acre higher for corn in 2014 than in 2013. Soybean yields for soybeans are projected 3 bushel per acre higher than 2013 yields. This yield scenario is for an above average yielding year, certainly within the prospects given weather up to this point. However, yields are far from certain. Hot, dry weather during the upcoming critical yield-determination weeks, or other adverse events, could result in much lower yields.
3. Corn and soybean prices are projected at the midpoint of the WASDE range: $4.20 per bushel for corn and $10.75 per bushel for soybeans.

The scenario is based is for 2014 to be an above average year, with higher yields leading to more supply and lower grain prices.

Given this scenario, average net income are projected at $45,000 per farm, considerably below any average income level since 2006. This income would be closer to incomes from 1995 to 2005, the period before the commodity price increase, with the $45,000 projected average being lower than the 1995 – 2005 average of $51,000 per farm.

Two factors lead to the lower income projections for 2014. First, grain prices are projected lower. The $4.20 corn price projected for 2014 is below the $4.65 price for the 2013 crop. Similarly the $10.75 soybean price projected for 2014 is below the $13.25 price for the 2013 crop.

Second, crop insurance payments are projected lower in 2014. In 2013, the average insurance payment for corn insured in Illinois was $54 per acre (see Summary of Business at the Risk Management Agency). The majority of these payments resulted because the 2013 harvest price of $4.39 was 22% below the 2013 projected price of $5.65. In 2014, the projected price for corn is $4.62 per bushel. A 22% price decline – similar to the 2013 decline – would result in a $3.59 harvest price. At that price level, gross revenue would be much lower than those used to generate the $45,000 net income projection. Higher crop insurance payments would not offset gross revenue losses, leading to a much lower income projection than $45,000.

Variation in Income Projections

Differences in yields and prices will impact revenue projections. To illustrate, average net income is projected with a higher and lower set of prices. Yields are held constant at the above average levels.

For higher prices, income projections are given for a $4.65 corn price and an $11.25 soybean price, levels slightly above expected long-run averages (*farmdoc daily*, February 27, 2013). Continued strong demand for grains could result in these price levels. At these price levels, average net income is projected at

$108,000. A change in price from $4.20 to $4.65 for corn, an increase of $.45 per bushel, has a large impact on incomes.

For lower prices, a $3.75 corn price and a $10.25 soybean prices are used in income projections. This scenario results in -$7,000 of average net income. This scenario assumes that farmers enroll in the ARC commodity program and that ARC makes $40 of payments per corn base acre. The other farm program alternative, Price Loss Coverage, would not make payments at these projected prices.

Prices Required for 2013 Income Levels

Given above average yields, 2014 incomes would reach the 2013 level of $135,000 average per farm if corn price was $4.80 per bushel and soybean prices was $11.50 per bushel. Given average yields, 2014 incomes reach the 2013 level at a corn price of $5.05 per bushel and a soybean price of $12.00 per bushel.

Summary

Incomes in 2014 likely will be considerably below those in recent years. Corn prices in the low $4.00 range likely will result in incomes below $50,000. Corn prices in the high $4.00 range will result in average incomes above $100,000. If corn prices average around $4.50 over the next several years, average incomes likely will be in the above range for the next several years. Lower incomes are possible with corn prices below $4.00 per bushel.

References

Irwin, S., and D. Good. "The New Era of Crop Prices --- A Five-Year Review." *farmdoc daily* (3):38, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 27, 2013.

Schnitkey, G. "Revenue and Costs for Corn, Soybeans, Wheat, and Double-Crop Soybeans, Actual for 2007 through 2013, Projected 2014." Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June 2014. Accessed June 24, 2014.

Also available at:
http://farmdoc.illinois.edu/manage/newsletters/fefo14_12/fefo_14_12.html