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Controlling Cost vs. More Revenue?

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June 20, 2014

farmdoc daily (4):115

Recommended citation format: Krapf, B, D. Raab, and B. Zwilling. "Controlling Cost vs. More Revenue?" farmdoc daily (4):115, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June 20, 2014.

Permalink http://farmdocdaily.illinois.edu/2014/06/controlling-cost-vs-more-revenue.html

Our quest to understand the financial side of our farm businesses leads many times to wondering how you compare to other farms. Benchmarking has a useful place when analyzing the financial and managerial strengths and weaknesses of our farm business. Benchmarks are a product of having a large number of observations in a data set so that trends and facts are brought to light and can be observed.

Using data from the Illinois FBFM Association, today's article compares the difference between the average of the high one-third of a group of farms and the average of the low one-third for the same group of farms for several revenue and cost categories in an attempt to better understand the differences in the residual profits. This provides two points of reference for comparison (the 67th percentile and the 33rd percentile) within the same group of farms. Most often, benchmarks use only the average or sometimes the median (50th percentile) as a point of reference for comparison. The basis for ranking these farms and sorting them into a high one-third and a low one-third is the management return which is an economic measure of farm profitability.

Using a five-year series of data from a group of central Illinois FBFM grain farms on higher productivity soils, Table 1 shows the difference between the average corn (soybean) yield of the high one-third and the average corn (soybean) yield of the low one-third. The high one-third has a corn yield advantage that ranges from a low of 7 bushels per acre in 2013 to a high of 21 bushels per acre in 2012. The high one-third has a bean yield advantage that ranges from a low of 3 bushels per acre in 2010 to a high of 6 bushels per acre in 2011 and 2012.

Table 1.
Illinois FBFM - High and Low Third Difference
Grain Farms - Central Illinois High Productivity

Corn Yield (bu/a)
Bean Yield (bu/a)

2009	2010	2011	2012	2013
12	18	20	21	7
4	3	6	6	4

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Using Illinois FBFM's Economic Management Analysis which is a measure of economic profit or loss, Table 2 shows the advantage of the high one-third for crop returns, crop costs (seed, pesticides, and fertilizer), machinery depreciation, cash rent, and management returns. A negative value in the costs means that the high one-third has a lower cost than the low one-third.

Table 2.						
Illinois FBFM - High and Low Third Difference						
Grain Farms - Central Illinois High Productivity						
	2009	2010	2011			

Crop Returns (\$/a)
Crop Costs (\$/a)
Machinery Depreciation (\$/a)
Cash Rent (\$/a)
Management Returns (\$/a)

2009	2010	2011	2012	2013
\$79.71	\$127.44	\$165.83	\$189.93	\$99.63
-\$46.46	-\$34.60	-\$29.54	-\$36.86	-\$46.91
-\$6.92	-\$7.83	-\$9.20	-\$9.27	-\$14.71
-\$25.65	-\$28.11	-\$28.06	-\$23.09	-\$43.13
\$214.19	\$257.62	\$282.86	\$304.17	\$272.73

The high one-third advantage in crop returns ranges from a low of \$79.71 in 2009 to a high of \$189.93 in 2012. Crop costs show an advantage to the high one-third ranging from a low of \$29.54 in 2011 to a high of \$46.91 in 2013. Machinery depreciation shows an advantage to the high one-third ranging from a low of \$6.92 in 2009 to a high of \$14.71 in 2013. Cash rent shows an advantage to the high one-third ranging from a low of \$23.09 in 2012 to a high of \$43.13 in 2013. The three measures of cost all show a consistent advantage to the high one-third group as do crop returns.

Management Returns are a profit measure that allow for an economic cost of 1) the operators labor and 2) the operators investment in the farm. Table 2 shows the high one-third with profit advantage that ranges from a low of \$214.19 in 2009 to a high of \$304.17 in 2012.

Summary

This data indicates that while controlling costs are always a prime concern, a large part of the profit advantage of the high one-third is due to consistently greater crop returns rather than any one of the expense items shown. Better crop returns were responsible for 50% or more of the difference in management returns of the five year in this data.

The authors would like to acknowledge that data used in this study comes from the local Farm Business Farm Management (FBFM) Associations across the State of Illinois. Without their cooperation, information as comprehensive and accurate as this would not be available for educational purposes. FBFM, which consists of 5,500 plus farmers and 60 professional field staff, is a not-for-profit organization available to all farm operators in Illinois. FBFM field staff provide on-farm counsel along with recordkeeping, farm financial management, business entity planning and income tax management. For more information, please contact the State FBFM Office located at the University of Illinois Department of Agricultural and Consumer Economics at 217-333-5511 or visit the FBFM website at www.fbfm.org.