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A Different Way to Evaluate Profitability

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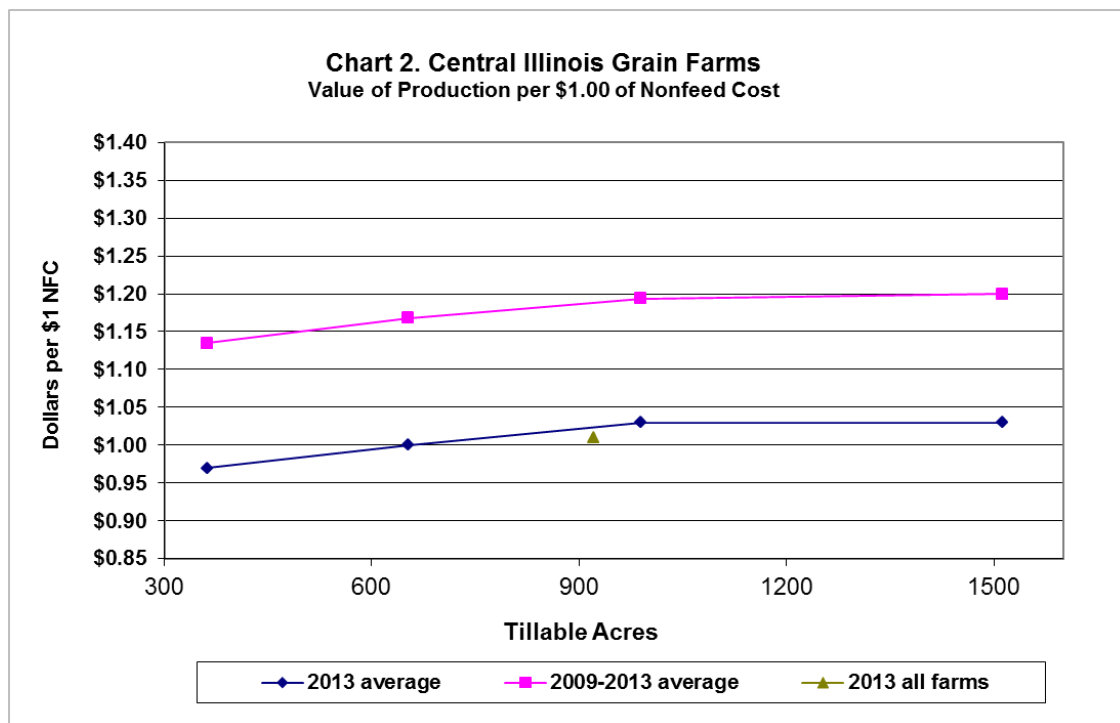
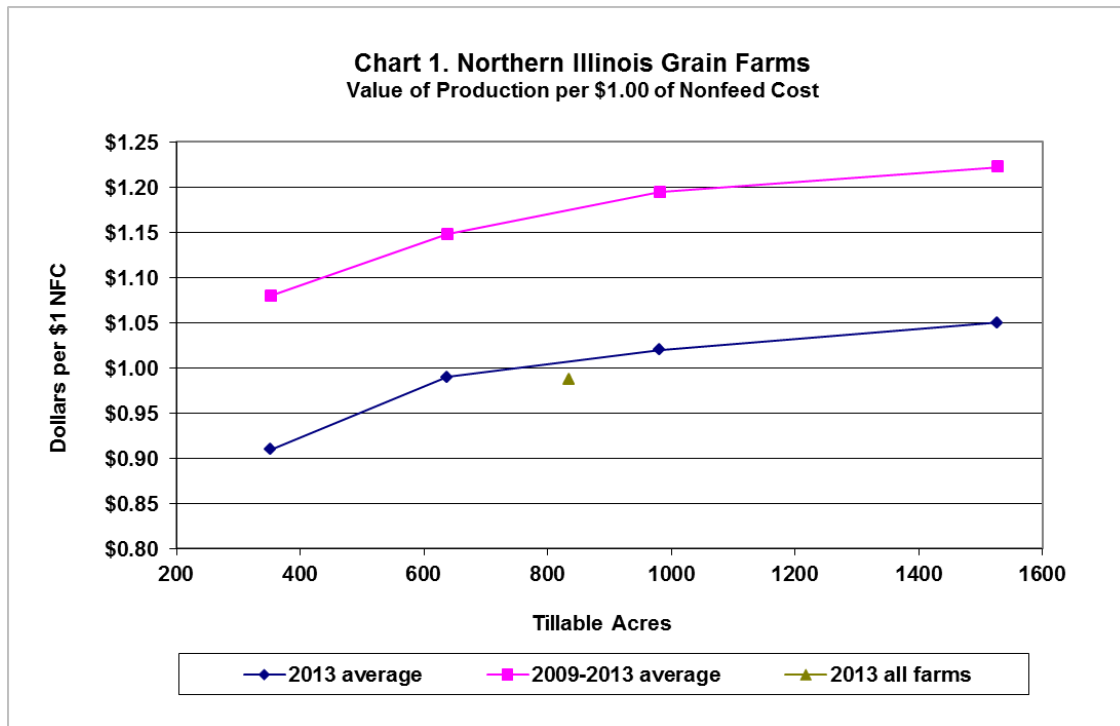
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Typically to measure farm profitability one would subtract expenses from income to arrive at a dollar value of profitability. But comparing farms of different sizes and types is difficult using this absolute dollar measure. So that we can compare different size and type farms, let's take gross farm returns and divide them by all (non-feed) economic costs to arrive at a measure of profitability that has 1.00 as the breakeven point. Let's call this 'Production/\$1 of Cost'...if revenue equals expense then there is no profit...but there is also no loss.

See Chart 1 for a group of northern Illinois grain farms. The top line is the five-year (2009-2013) average of Production/\$1 of Cost. The bottom line is the same Production/\$1 of Cost for 2013 only. The first point on the curve represents a group of farms with an average of about 350 acres farmed. The second point of the curve represents a group of farms at about 640 acres farmed. The third point on the curve represents a group of farms with about 980 acres farmed and the last point represents about 1530 acres farmed. Both the average and 2013 data show that Production/\$1 of Cost increases as farm size increases but does show tendencies of leveling out as farm size in acres increases. Not a part of this chart, a different group of northern Illinois grain farms with more livestock but at a larger acreage reveal Production/\$1 of Cost to be much the same as the 1530 acre farm size group in Chart 1.

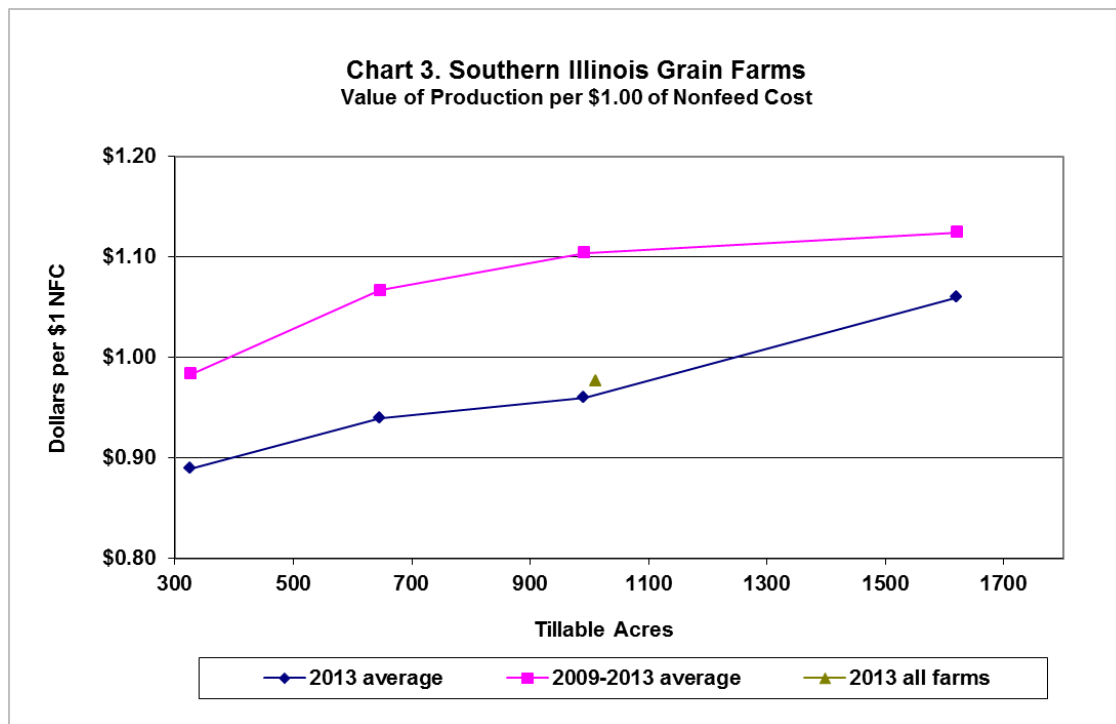
See Chart 2 for a group of central Illinois grain farms. The five-year average on this group shows to be slightly higher than the northern Illinois group and the curve is a bit flatter. The first point on the curve represents a group of farms with an average of about 360 acres farmed. The second point on the curve represents a group of farms with about 650 acres farmed. The third point on the curve represents a group of farms with about 990 acres farmed and the last point represents a group of farms with about 1510 acres farmed. Both the average and 2013 data show that Production/\$1 of Cost increases as farm size increases but does show tendencies of leveling out as farm size in acres increases and both curves are flatter. Not a part of this chart, a different group of central Illinois grain farms with more livestock but at a larger acreage reveal Production/\$1 of Cost to be slightly larger the 1510 acre farm size group in the chart.

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See Chart 3 for a group of southern Illinois grain farms. The five-year average on this group shows to be lower than the northern or central Illinois groups and the curve shows more of an increase from smaller acreage to larger acreage than northern or central Illinois. The first point on the curve represents a group of

farms with an average of about 330 acres farmed. The second point on the curve represents a group of farms with about 650 acres farmed. The third point on the curve represents a group of farms with about 990 acres farmed and the last point represents a group of farms with about 1620 acres farmed. The average data show that Production/\$1 of Cost increases as farm size in acres increases but does show tendencies of leveling out and both curves are flatter. The 2013 data show a marked increase in Production/\$1 of Cost between the 990 acre group and the 1622 acre group that is not present in the data from northern or central Illinois. Not a part of this chart, a different group of southern Illinois grain farms with more livestock but at a larger acreage reveal Production/\$1 of Cost to be slightly larger the 1510 acre farm size group in the chart.



Summary

As is evidenced by the data, profitability as represented by Production/\$1 of Cost tends to increase as farm size in acres increases. The level of Production/\$1 of Cost differs by region in Illinois.

The author 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 5,700 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 with computerized 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.