FARM BUSINESS MANAGEMENT

FARM ECONOMICS Facts & Opinions

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July 20, 2001 **FEFO 01-15**

DO SOME FARMS CONSISTENTLY HAVE HIGHER PROFITS THAN OTHERS?

Each year profits vary tremendously across grain farms. In 2000, for example, per acre management returns for Illinois grain farms having high-quality farmland averaged $7 per acre. One-third of the farms had returns below -$12 per acre while one-third of the farms had returns above $38 per acre.

A common question is: Do some farms consistently have higher profits than others? In other words, does a farm with above average profits in one year have above average profits in the next year? Consistency across years means that a farm's management or a structural position influences its long-term profits. If profits are not consistent, a farm's profit relative to other farms is strictly a matter of chance.

Management returns from 1996 through 2000

To answer the consistency question, data from Illinois Farm Business Farm Management (FBFM) were obtained for farms that receive the majority of their income from grain farming and have high quality farmland. A total of 585 farms have data from 1995 through 2001.

Each year the 585 farms were placed into categories based on the level of per acre management returns. Management returns equal revenues less expenses less charges for unpaid labor and assets. Management returns are a measure of the profitability of a farm.

For the 585 farms, management returns averaged $16 in 1995, $48 in 1996, $18 in 1997, -$37 in 1998, -$8 in 1999, and $6 in 2000 (see Table 1). These averages reflect the general agricultural economy. For the entire period, per acre management returns were the highest between 1995 and 1997. Then returns declined dramatically in 1998 due to sharp declines in grain prices. Per acre returns have been at low levels in 1999 and 2000 due to continued low commodity prices. Returns in 1999 and 2000 were higher than in 1998 due to above average yields and larger government payments.

In each year, 195 of the farms were placed in a "high one-third" profits category. These 195 farms had higher profits than the other 390 farms. The management return to be placed in the high one-third category changed each year. For example, the break-off was $45 per acre in 1995 (see Table 1). This break-off declined to -$4 per acre in 1998. The break-off was $38 in 2000.

Table 1. Low 1/3, Average, and High 1/3 Management Return by Year, Illinois FBFM, 1995 to 2000.

Year	Low 1/3 [1]	Average	High 1/3 [2]
1995	-$1	$16	$45
1996	28	48	79
1997	-5	18	49
1998	-56	-37	-4
1999	-28	-8	19
2000	-10	6	38
Avg.	-$12	$7	$38

[1] One-third of the farms have management returns below this return.
2 One-third of the farms have management returns above this return.

Number of years in the high one-third category

The farms in the high one-third category changed each year. We counted the number of times a farm was in the high one-third category for the six years between 1995 and 2000.

For the 585 farms, 26 percent never were in the high one-third category (see Table 2). Only 5 percent of the farms were in the high one-third category all six years. About 36 percent of the farms were in the high one-third category more than one-half of the time.

Table 2. Number of Years in the High 1/3 Management Returns Group, Illinois FBFM, 1995 to 2000.

Year in the Top One-Third	Percent of Farms	Six-Year Average Management Return
0	26%	-$54
1	22%	-$3
2	16%	$18
3	14%	$33
4	11%	$54
5	6%	$64
6	5%	$94

These results suggest that it is very difficult to be in the high one-third category every year. Over the time period, many farms never were in the high one-third category. Over 64 percent of the farms were in the high one-third category less than one-half of the time. Being in the high one-third category at over half the time is a good indicator of having above average profitability.

Farms more often in the high one-third category are more profitable than farms less often in the high one-third category. Farms that were never in the high one-third category had average management returns of -$54 per acre over the six years (see Table 2), significantly below the average six-year returns of $7 per acre. Farms always in the high one-third category averaged $94 per acre of management returns.

Characteristics of high profit farms

Characteristics of high profit farms were compared to low profit farms. The 585 farms were divided into four groups based on the number of times the farms were in the high one-third category. Farms in the "low" group were never in the high one-third category, farms in the "mid-low" group were in the high one-third category one or two years, farms in the "mid-high" group were in the high one-third category three of four years, and farms in the "high" group were in the high one-third category more than five years.

Table 3 shows acres, yields, prices, and costs across the different groups. Differences include:

1. Farms in the low and mid-low group farm less than farms in the mid-high and high groups. Tillable acres are 672 for the low group and 836 for the mid-low group. This compared to 1,023 and 1,007 for the mid-high and high groups, respectively.
2. Farms in higher profit groups tend to own less farmland. Percent owned is 25 percent for the low group while it is 7 percent for the high group.
3. Farms in the low group have much lower yields than the other profit groups. Farms in the high profit group had higher corn yields than the lower profit groups.
4. Prices received for commodities did not systematically vary across returns groups.
5. High profit farms had much lower costs than lower profit farms. More profitable farms had lower costs in all categories. Magnitude of differences were in the following order: a) land, b) labor, c) power, d) other, e) crop, and f) building.

Summary

While it is difficult to always have higher returns than most other farms, farms do tend to be consistent in their profitability. Low profit farms in one year tend to be low profit farms in the next year.

High profit farms tend to be larger, rent more farmland using share rental arrangements, have slightly higher yields, and have lower costs than less profitable farms. These results continue to support the observation that farming is a low cost, volume business. An emphasis on maintaining low costs and increasing farm size seems warranted.

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Table 3. Acres, Yields, Prices and Costs by Management Returns Group, Illinois FBFM, Averages for 1995 through 2000.

	Unit	Return Group[1] Low	Mid-low	Mid-high	High
Total acres	no.	672	846	1023	1007
Operator acres	no.	510	602	706	604
Owned acres	no.	171	135	136	74
Share rent acres	no.	311	483	630	789
Cash rent acres	no.	190	228	257	144
Percent owned	%	25%	16%	13%	7%
Percent share rent	%	46%	57%	62%	78%
Percent cash rent	%	28%	27%	25%	14%
Soil rating	no.	91	91	92	92
Yields					
Corn	bu./acre	148	154	155	160
Soybeans	bu./acre	47	49	49	50
Prices					
Old crop corn	$/bu.	2.50	2.50	2.51	2.52
New crop corn	$/bu.	2.46	2.46	2.50	2.49
Old crop soybeans	$/bu.	6.11	6.15	6.18	6.10
New crop soybeans	$/bu.	6.38	5.97	6.09	5.93
Costs					
Crop	$/acre	99	96	93	92
Power	$/acre	71	67	60	55
Building	$/acre	23	20	17	19
Labor	$/acre	50	40	34	30
Other	$/acre	54	51	48	46
Land	$/acre	133	120	110	98
Total costs	$/acre	430	395	362	340

[1] The low group consists of farms that are never in the high one-third group, mid-low group has farms in the yearly high one-third group in one or two years out of six, the mid-high group has farms in the yearly high one-third gorup in three or four years, and the high group has farms in the high one-third group in five or six years.