FARM BUSINESS MANAGEMENT

FARM ECONOMICS Facts & Opinions

Department of Agricultural and Consumer Economics • College of Agriculture, Consumer and Environmental Sciences
University of Illinois at Urbana-Champaign

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HIGH/LOW ONE-THIRD RETURN GRAIN FARM COMPARISONS

As previous studies have shown, differences in efficiencies and profitability exist across farm operators. The degree of some of these differences is illustrated by examining 2000 data from the Illinois Farm Business Farm Management (FBFM) Association. Data for pure grain farms (no livestock) with over 260 tillable acres were sorted into 4 groups: northern Illinois, central Illinois with high productive soils, central Illinois with lower productive soils and southern Illinois. Data for each group was then ranked based on dollars of production per $1 of non-feed costs. Averages were then calculated for the high and low one-third group of farms (Table 1).

INCOME COMPARISONS

Differences in net farm income and labor and management income were quite large. For the four groups, net farm income per operator for the high one-third group averaged $89,815 compared to $16,203 for the low one-third group, a difference of $73,612. The southern Illinois farms recorded the largest difference between the high and low one-third, $92,087. Differences in labor and management income per operator were similar with the high group averaging $75,401 more labor and management income than the low one-third group. The top group averaged $65 per acre of management returns compared to a *negative* $49 for the lower one-third set of farms.

RETURN DIFFERENCES

Crop returns for the top four groups averaged $387 per acre compared to $342 for the low one-third group, a difference of $45 per acre. Crop returns are generally a reflection of crop yields and grain prices received. The top four groups averaged 161 bushels per acre corn yield compared to 151 bushels per acre for the low one-third set of farms. Soybean yields averaged 48 bushels per acre for the top group compared to 45 bushels per acre for the lower return farms. Corn and soybean prices received were also slightly higher for the higher return group of farms.

COST DIFFERENCES

Total non-feed costs per acre for the high one-third return farms averaged $73 less for the four groups. No one single cost category accounted for the majority of this difference, rather, the high return farms were lower in all cost categories. On a per acre basis, crop costs were $11 lower, power and equipment $18 lower, building $5 lower, labor $13 less, other costs $9 less and land costs $17 lower.

SUMMARY

Studies of the returns and costs for Illinois grain farms for 2000 indicate the amount of differences that

exist between the averages for the high and low one-third return farms. The high return farms are larger, have higher yields, sell their grain at higher prices and have lower costs. Their gross production per man is over $100,000 more than the low return farms. Approximately 36 percent of differences in management returns is due to higher gross income while 64 percent is due to lower costs. Farms in the top one-third seem to be a little bit better in a number of areas compared with farms in the low one-third. Future studies will examine how often the same farms appear in the top and bottom groups over a number of years.

Issued by: Dale Lattz, Department of Agricultural and Consumer Economics

Table 1. Selected high/low one-third factors from Illinois pure grain farms for 2000.

	Northern		Central - high SPR		Central - low SPR		Southern	
	High	Low	High	Low	High	Low	High	Low
Number of farms	170	170	240	240	128	128	83	83
Tillable acres	1,070	673	1,050	792	1,128	787	1,428	885
Corn yield	160	149	169	161	159	149	154	143
Soybean yield	49	43	50	48	47	44	47	44
Corn price received (old crop)	$2.03	$1.92	$1.99	$1.96	$2.00	$1.93	$2.08	$1.98
Soybean price received (old crop)	$4.90	$4.84	$4.88	$4.85	$4.85	$4.84	$4.93	$4.87
	---------- per acre ----------							
Returns:								
Crop returns	$402.19	$344.29	$407.99	$376.04	$377.16	$334.60	$362.08	$313.50
Gross farm returns	413.32	359.40	418.08	389.26	386.82	350.45	372.51	327.99
Costs:								
Crop	$89.67	$95.75	$88.32	$98.07	$81.44	$97.51	$85.98	$99.31
Power and equipment	65.46	88.05	55.18	77.14	57.10	69.84	59.03	75.39
Building	15.24	20.91	15.69	19.72	14.40	18.36	8.75	14.64
Labor	31.01	47.37	32.66	46.75	31.66	42.15	31.51	43.66
Other	49.04	55.45	48.36	58.89	46.21	56.19	39.56	46.90
Land	115.03	128.81	108.35	130.65	93.34	118.61	77.15	81.98
Total non-feed costs	365.45	436.34	348.57	431.22	324.14	402.65	301.98	361.88
Management returns	50.62	-74.20	72.03	-39.58	65.26	-50.69	73.11	-30.39
Net farm income / operator	$80,410	$3,967	$82,897	$24,525	$82,157	$14,611	$113,795	$21,708
Labor and mgmt. Income / operator	$62,491	-$17,477	$68,608	$5,062	$69,310	-$825	$95,169	$7,213
Production / $1 non-feed costs	$1.13	$0.82	$1.20	$0.90	$1.19	$0.87	$1.23	$0.91
Farm production / man year	$334,772	$191,457	$342,357	$233,968	$323,891	$218,469	$328,008	$192,094

SPR = soil productivity rating

Source: Illinois Farm Business Farm Management Association and Department of Agricultural and Consumer Economics, Univ. of Illinois.

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