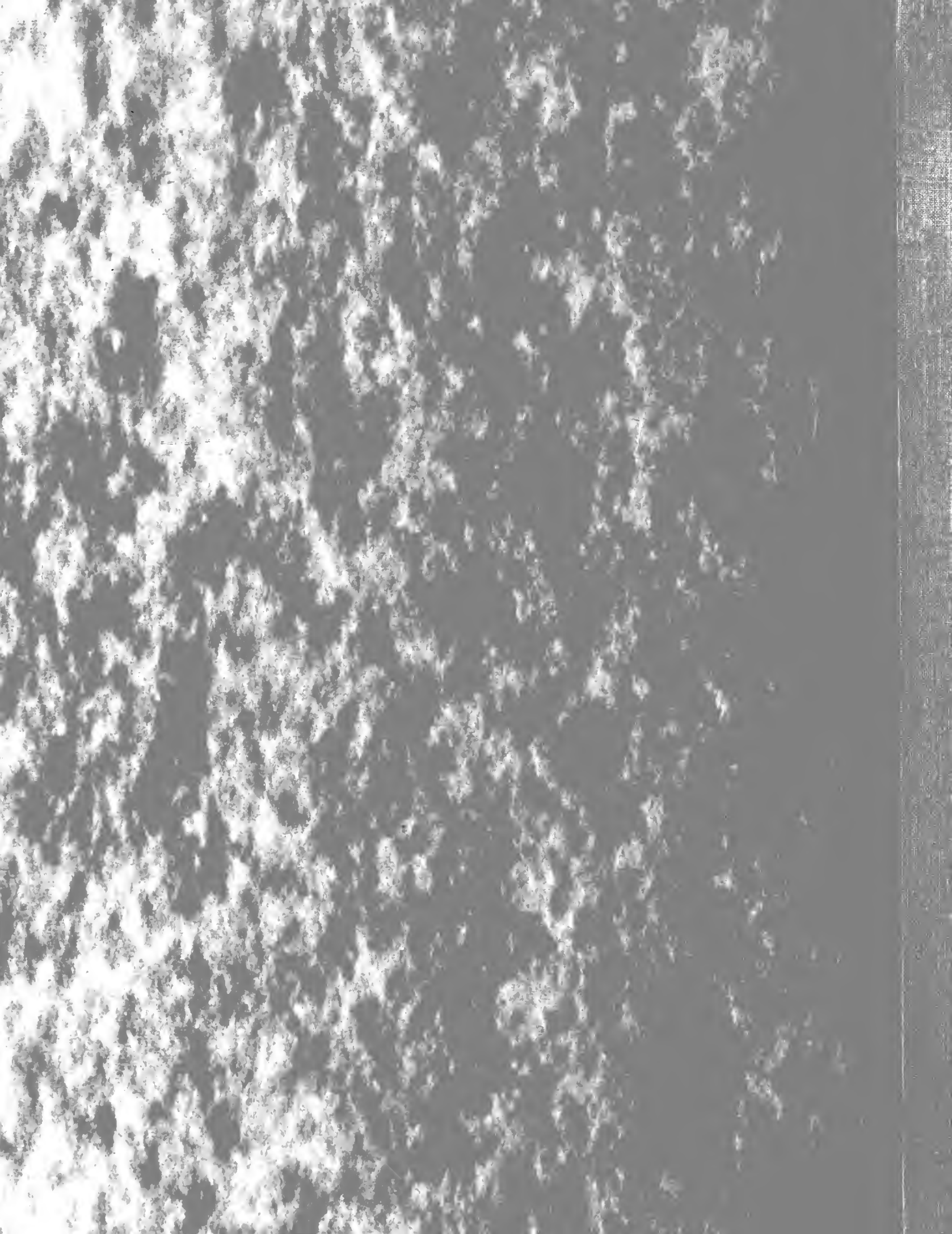


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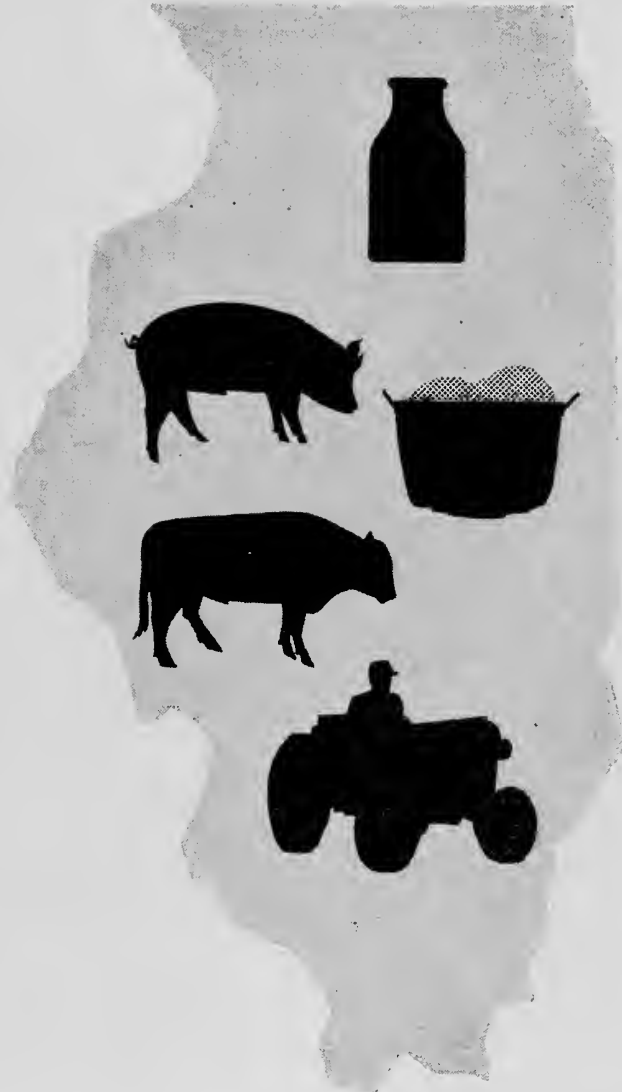
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1966

42nd annual

SUMMARY OF ILLINOIS FARM BUSINESS RECORDS



Commercial Farms:

- PRODUCTION**
- COSTS**
- INCOME**
- INVESTMENTS**

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE
 COOPERATIVE EXTENSION SERVICE
 CIRCULAR 970

Source of Data

This report is based on data obtained from farm business records on 6,500 Illinois farms. It is the 42nd in a series of annual summaries of such records obtained from farmers cooperating with the University of Illinois Cooperative Extension Service, the Department of Agricultural Economics, and the Illinois Farm Bureau Farm Management Service.

At present about 1 out of every 10 full-time commercial farmers (farmers with \$10,000 or more of gross sales) in Illinois is enrolled in this service. The service has grown steadily, and in 1967 there were 10 associations in 102 counties served by 42 full-time fieldmen. Participation in this farm business analysis service is voluntary, and cooperating farmers pay a fee for the services received.

The development since 1940 is shown by the following figures:

Year	Associa- tions	Counties partici- pating	Fieldmen employed	Farmers enrolled
1940.....	3	23	3	680
1945.....	8	54	9	1,830
1950.....	8	59	15	2,760
1955.....	9	89	24	4,501
1960.....	10	100	33	5,494
1965.....	10	102	39	6,366
1967.....	10	102	42	6,635

Over 98 percent of the 6,500 farms in this report fall within the size of business of Economic Class I, II, and III as defined in the 1964 Census of Agriculture. These three classes include farms selling \$10,000 or more of farm products a year.

The segment of Illinois agriculture that includes Economic Class I, II, and III farms is often referred to as "commercial farming." In 1964, there were 68,322 farms in Illinois with more than \$10,000 of product sales. These farms represented 52 percent of the total number of farms and produced nearly 90 percent of the products sold from Illinois farms.

Although the record-keeping farms in this report are largely within the first three economic classes, they are not proportionately distributed among the groups. In 1964, the Census of Agriculture identified 3,832 Illinois farms with more than \$60,000 in sales. Over one-third (34 percent) of these farms were enrolled in the Illinois Farm Bureau Farm Management Service. Of the 6,152 farms that sold from \$40,000 to \$59,000 of products, 24 percent participated in the farm record program. There were 32,881 Economic Class III farms in the 1964 Census of Agriculture (farms with sales ranging from \$10,000 to \$19,999). Only 730, or 2.2 percent, of these farms were enrolled in the record-keeping program.

The data presented in this report are group averages identified by size of business, type of farm, and quality of soil found on the farm. Where segments of Illinois agriculture are identified by these criteria, the data from record-keeping farms may be used with reasonable confidence, even though the record-keeping farms as a group do not represent a cross-section of all commercial farms in the state.

Uses for This Report

The management of a modern commercial farm involves decision making in the application of technology, the choice of a proper combination of crop and livestock enterprises, and effective business administration of the farming operations. A basic farm business analysis involves a careful study of past performance to detect problem areas and strengths in the farming operation. Also involved is the process of planning and developing future operations to attain the full potential of the land, labor, and capital resources available and to improve economic efficiency of the farm business. The farm business summaries contained in this report are used by individual farmers to analyze their business operations and as a basis on which to develop plans for future farming operations. This report summarizes the information so that specialists working in agricultural extension, research, teaching, and agribusiness activities may use the data to assist them in the effective performance of their duties.

The data are presented in three sections. In the

first part of the report (Tables 1 to 3), farm business trends and recent changes in farm income on Illinois farms are summarized. Economic forces and factors that contribute to these changing trends are identified. In the second section, detailed livestock enterprise data are presented. These data (Tables 4 to 11) provide comprehensive and detailed information for use as resource data by all who are interested in livestock production. Because a large proportion of the feed grains and roughage produced on Illinois farms is marketed through livestock, the margins of income from livestock enterprises are important in interpreting the economic results of farming operations.

The third section (Tables 12 to 16) reports costs, returns, financial summaries, investments, land use, and crop yields for different sizes and types of farms in northern and southern Illinois. The definitions of terms and accounting measures that precede these tables will aid in using the data.

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SUMMARY OF ILLINOIS FARM BUSINESS RECORDS, 1966

Farm business trends in 1966

Illinois agriculture is based largely on crop production, especially the corn and soybean crops. Year-to-year variations in net farm income are related to variable climatic conditions and their effect on crop yields. In 1966, a high level of crop production was attained in spite of adverse weather conditions during the growing season. Adverse weather was especially severe in the southern half of Illinois, with high temperatures and drouth in July. By the first week in August, 51 counties in central and southern Illinois were declared drouth disaster areas. In 1966, average corn yields for the state as reported by the Illinois Crop Reporting Service were 80 bushels per acre, 14 bushels below the revised estimate of 94 bushels in 1965 but slightly above the 5-year average yield. Soybean yields in 1966 were 27 bushels per acre, 2.5 bushels below the 1965 yield and .5 bushel below the 5-year average. Winter wheat yields were 41 bushels an acre, a record high for the state, and 6.3 bushels above the 5-year average.

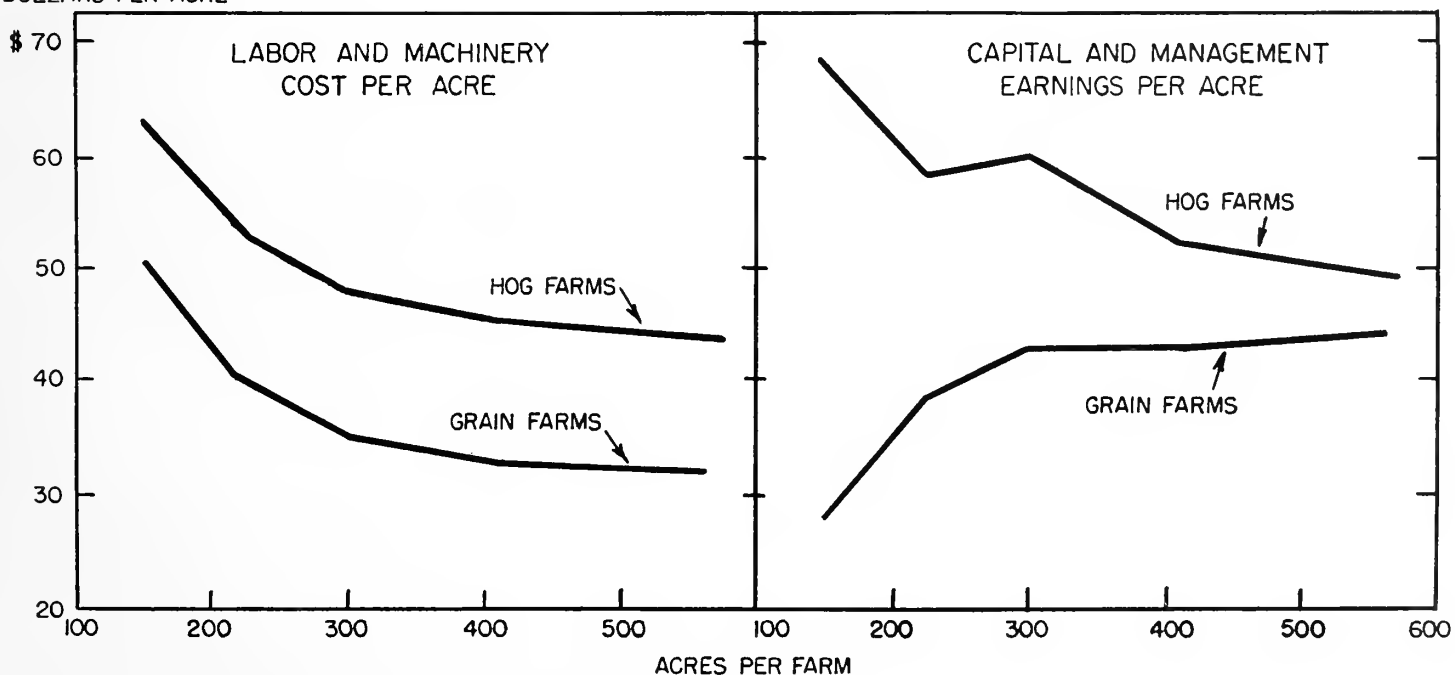
Crop and livestock prices. A second major determinant of change in farm income is the price farmers receive for crop and livestock products. In 1966, market prices received by farm account cooperators for grain crops were above the 1965 prices for all major grain products. Market prices for livestock and livestock products were generally higher in 1966

than in 1965. Market prices for hogs averaged \$23.09, up from the \$20.68 received in 1965. Milk prices averaged \$4.43 per 100 pounds in 1966, up 66 cents from a year earlier. Prices for eggs were 38 cents a dozen, an increase of 7 cents from 1965. Little change was recorded in the average price level for slaughter steers and heifers.

Farm costs and farm income. According to the Census of Agriculture, the average Illinois farm in 1964 contained 226 acres compared with 196 acres per farm in 1959. The incentive to operate a larger-sized farm to obtain lower costs and higher earnings is illustrated in Figure 1. Savings in labor and machinery costs amount to about \$10 per acre as farm size increases from 100 to 200 acres (Figure 1, left side), \$5 from 200 to 300 acres, and average \$2 to \$1 per acre lower for each 100 acres as farm size increases beyond 300 acres. Most economies in labor and machinery costs per acre can be realized when size of farm reaches about 400 acres.

Figure 1 (right side) shows earnings per acre to capital and management on the same farms shown in the left side of the figure. Grain farms, which rely on land resources for the efficient utilization of fixed inputs, approach an optimum size with land areas of over 300 acres. The higher earnings per acre on the smaller hog farms illustrate higher levels of intensity

DOLLARS PER ACRE



Labor and machinery cost (left) and capital management earnings (right) by size of farm, grain and hog farms in northern Illinois, 1964-1966. (Fig. 1)

in the use of capital and labor in the business on the smaller hog farms. The productivity of the added labor and capital associated with land on hog farms tends to offset the diseconomies that are related to size of business measured in acres. The 160- and 220-acre hog farms had \$45 more capital invested per acre and fed about \$85 more feed per acre than the grain farms.

The higher rate of earnings on 300-acre hog farms as compared with 220-acre farms is a consistent phenomenon that has been observed for many years and has never been clearly explained. It is believed that there are more above-average hog producers in the 300-acre size than in the 220-acre size, and more of these farms may be committed to a hog program with two men rather than stretching the labor available from one man. These facts, when combined with the size efficiencies in crop production, are likely to result in a farm business operated at a higher level of efficiency.

Income changes on Illinois farms

Comparative costs and returns between years and among major types of farming in northern and southern Illinois are reported in Tables 1 to 3. The separa-

tion of farms into northern and southern Illinois is based on soil-type regions, and divides the state approximately on an east-west line from Mattoon to Jacksonville. The sample of farms ranged between 260 and 339 acres in size, and averaged about 300 acres. Labor used on farms of this size averaged 15 months on grain farms, 17 months on hog and beef farms, and 22 months on dairy farms. The data in these tables are presented as if the farms were all owner-operated. Landlord and tenant shares of the business were combined where farms were leased.

Size of farm, type of farm, quality of soil, and managerial inputs were held reasonably constant over time by the sampling procedure used in selecting farms within each type of farm. Variations between 1965, 1966, and the 10-year average are due to changes in farm prices and costs, weather, and internal farming adjustments made within each system of farming. The data in these tables are particularly helpful for evaluating changes in farm costs and returns within a particular size and type of farm, and in making comparisons between types of farming. The data do not reflect over-all farming adjustments resulting from farm enlargement or major changes in resource use.

Table 1. — Average Selected Total Farm Items on 260–339 Acre Northern Illinois Grain, Hog, and Dairy Farms

Items	Grain farms			Hog farms			Dairy farms		
	1966	1965	1957–66 average	1966	1965	1957–66 average	1966	1965	1957–66 average
Number of farms.....	119	166	151	78	94	96	15	20	22
Total acres.....	304	305	302	300	299	298	297	291	293
Soil-productivity rating.....	78	81	80	74	75	75	69	70	71
Total cash sales.....	\$34,513	\$34,303	\$28,446	\$62,164	\$56,175	\$44,817	\$46,603	\$39,426	\$34,366
Less purchased feed and livestock....	4,578	4,347	4,008	19,048	17,211	15,879	8,732	5,910	6,138
Net cash sales.....	29,935	29,956	24,438	43,116	38,964	28,938	37,871	33,516	28,228
Inventory change.....	3,610	2,660	1,299	1,259	7,898	1,673	4,175	2,589	936
Farm products consumed.....	116	114	138	211	229	253	307	319	337
Value of farm production.....	33,661	32,730	25,875	44,586	47,091	30,864	42,353	36,424	29,501
Cash operating expenses.....	\$12,401	\$11,900	\$ 9,698	\$16,237	\$14,681	\$11,944	\$16,115	\$16,235	\$12,737
Annual depreciation.....	3,834	3,882	3,364	5,724	4,992	4,201	6,302	5,845	5,066
Farm and family earnings.....	17,426	16,948	12,813	22,625	27,418	14,719	19,936	14,344	11,698
Unpaid labor charge.....	3,797	3,117	2,864	4,183	3,382	3,103	4,530	4,019	3,733
Returns to capital and management....	13,629	13,831	9,949	18,442	24,036	11,616	15,406	10,325	7,965
Interest charge on capital.....	8,925	8,184	7,185	9,830	8,161	7,221	10,095	8,100	7,289
Management returns.....	4,704	5,647	2,764	8,612	15,875	4,395	5,311	2,225	676
Total cash income ^a	\$34,690	\$34,517	\$28,659	\$62,478	\$56,447	\$45,007	\$46,608	\$39,696	\$34,672
Total cash expenditures ^a	21,882	20,981	17,352	45,026	39,536	33,211	32,657	29,348	21,358
Cash balance.....	12,808	13,536	11,307	17,452	16,911	11,796	13,951	10,348	13,314
FARM INVESTMENT									
Livestock inventory.....	5,070	4,894	4,746	21,632	16,363	16,064	18,419	18,088	15,402
Grain inventory.....	15,808	14,863	13,067	15,811	14,204	12,520	13,014	11,054	10,068
Remaining capital cost in:									
Machinery.....	9,348	8,682	7,160	11,198	9,592	8,200	13,399	12,608	10,800
Buildings and fence.....	12,107	14,270	13,039	20,216	19,704	15,879	35,187	26,226	24,615
Soil fertility.....	92	124	347	57	68	352	4	12	234
Auto.....	854	791	805	832	794	767	706	781	869
Value of land (current basis).....	158,209	150,080	129,578	141,126	128,128	111,553	131,288	116,533	102,733
Total farm investment.....	201,488	193,704	168,742	210,872	188,853	165,335	212,017	185,302	164,721

^a Includes sales or purchases of capital items.

The farm and family earnings measure includes returns to the farm family for all unpaid labor, interest on invested capital, and managerial inputs used in farming. Changes in value of farm inventories and value of farm products consumed are included as income. Farm and family earnings are calculated by accounting methods that are generally comparable to the accrual method of calculating taxable farm income for the federal income tax. Important differences in accrual income tax accounting methods are the provision for capital gains on livestock sales, and the inclusion of interest paid as a farm expense.

The cash balance figure is the amount taken out of the farm business to pay for living costs, income and social security taxes, interest, and debt repayment, and to add to savings. Purchases of new capital investments for the farm business have been included with total cash expenditures. Although the cash balance figure reflects the cash position of the farm business, it is influenced by purchase and sale transactions of feed and livestock, and changes in liabilities and borrowed funds.

The investment per farm is for January 1 of each year. Physical quantities of grain and livestock are valued at farm market prices. Machinery, buildings, soil fertility, and auto are valued at remaining capital cost; that is, original cost less depreciation charged to date. Land is priced at current values. A basic value is established for each farm, based on a soil productivity rating, and is adjusted to a current value each year by using an index of land prices in Illinois.

Northern Illinois Farms

Grain farms. Farm and family earnings on northern Illinois 300-acre grain farms in 1966 were \$17,426 compared with \$16,948 in 1965. Most of the increase in net income on grain farms was reflected in a greater quantity of farm grains on inventory at the end of the year. This is the second consecutive year of increase in inventory values. While crop yields were down 15 percent, this was offset by higher inventory prices for corn and soybeans and a 4-percent increase in acreage of row crops grown. Cash operating expenses increased by \$501 per farm. Investment in new capital items exceeded the depreciation charged against capital investment by more than \$1,000 per farm in 1966. With favorable net farm incomes in 1966, farmers added to their investment in machinery and received above-average returns on their investments.

Hog farms. Even though farm and family earnings on 300-acre northern Illinois hog farms dropped nearly \$5,000 in 1966 from 1965, they were still the second highest on record. In 1966, the earnings were

\$22,625, compared with \$27,418 in 1965 and with a ten-year average (1957-1966) of \$14,719.

Lower livestock inventory values at the end of the year and higher cash operating expenses and annual depreciation in 1966 more than offset the higher cash sales from livestock and grain.

The total weight of pork produced per farm in 1966 was up 10,350 pounds or 6.3 percent (about 6 litters) above the 1965 weight. Hog farms have become more specialized in recent years. The increase in total pounds of pork produced contributed to larger market supplies and lower hog prices near the end of 1966.

Dairy farms. Farm and family earnings on 300-acre northern Illinois dairy farms in 1966 were \$19,936, or \$5,592 above net earnings in 1965. Most of this increase resulted from a 66¢ per cwt. higher average milk price for the year. The ten-year average management return for dairy farms has consistently been below other types of farms. In 1966, the return of \$5,311 was double of that in 1965 and is more comparable to returns from other types of farms in northern Illinois.

Table 2. — Average Selected Total Farm Items on 260-339 Acre Northern Illinois Beef Farms

Items	1966	1965	1957-66 average
Number of farms.	43	52	59
Total acres.	301	301	300
Soil-productivity rating.	76	76	78
Total cash sales.	\$80,022	\$70,914	\$64,680
Less purchased feed and livestock.	42,733	34,223	35,991
Net cash sales.	\$37,289	\$36,691	\$28,689
Inventory change.	3,683	6,158	2,108
Farm products consumed.	437	263	310
Value of farm production.	41,409	43,112	31,107
Cash operating expenses.	16,515	15,550	12,413
Annual depreciation.	5,934	5,837	4,977
Farm and family earnings.	18,960	21,725	13,716
Unpaid labor charge.	4,162	3,447	3,104
Returns to capital and management.	14,798	18,278	10,613
Interest charge on capital.	11,519	9,318	8,902
Management returns.	3,279	8,960	1,711
Total cash income ^a	\$80,275	\$71,151	\$64,860
Total cash expenditures ^a	67,080	59,694	54,002
Cash balance.	13,195	11,457	10,858
FARM INVESTMENT			
Livestock inventory.	\$33,481	\$28,814	\$30,993
Grain inventory.	17,694	16,141	15,249
Remaining capital cost in:			
Machinery.	13,521	10,192	9,545
Buildings and fence.	26,455	23,543	22,317
Soil fertility.	131	179	388
Auto.	726	788	846
Value of land (current basis).	149,967	133,358	121,070
Total farm investment.	241,975	213,015	200,408

^a Includes sales or purchases of capital items.

The number of dairy farms has been declining rapidly in Illinois, but the average number of dairy cows per farm in this sample was 50.7 in 1966 compared with 50.8 in 1965.

Beef farms. Farm and family earnings on 300-acre northern Illinois beef farms in 1966 averaged \$18,960, a drop of \$2,765 from 1965. Livestock and grain sales increased \$598 in 1966 over 1965, but cash operating expenses increased \$965. This, combined with a \$2,475 decrease in inventory values of grain and livestock during 1966, resulted in the lower net farm income.

Beef farms had substantial increases in building and machinery investments in 1965 and again in 1966. Labor and interest costs also increased \$1,458 in 1966 over 1965. This combination of higher costs and 5-percent-lower crop yields and lower end-of-year livestock prices contributed to the lower net earnings on these farms. If it were not for the very high hog prices to offset some of these factors, earnings on beef farms would have been even lower in 1966.

Southern Illinois Farms

Grain farms. Farm and family earnings on southern Illinois 300-acre grain farms averaged \$12,651 in 1966, which was about the same as the 1965 earnings. This is the highest net income for grain farms on record. It takes a higher income today to provide interest returns on larger investments. Grain sales were up enough to cover the increase in cash operating expenses and lower inventories at the end of the year. Corn yields were down 10 to 15 bushels per acre but this was offset by more acres of row crops and higher grain prices.

Hog farms. Farm and family earnings on southern Illinois 300-acre hog farms averaged \$17,208, the second highest hog farm income on record and nearly two and a half times the 1964 earnings of \$7,182, and \$7,165 above the 1957-1966 average of \$10,043. As in northern Illinois, higher grain and hog prices and more hogs and more acres of row crops offset most of the higher costs and lower corn yields. The lower hog

Table 3.—Average Selected Total Farm Items on 260-339 Acre Southern Illinois Grain, Hog, and Dairy Farms

Items	Grain farms			Hog farms			Dairy farms		
	1966	1965	1957-66 average	1966	1965	1957-66 average	1966	1965	1957-66 average
Number of farms.....	41	57	48	31	47	38	23	23	27
Total acres.....	304	300	300	293	295	296	311	297	297
Soil-productivity rating.....	36	35	34	32	31	33	30	26	29
Total cash sales.....	\$27,920	\$25,495	\$21,144	\$46,639	\$40,342	\$32,357	\$36,378	\$29,420	\$26,244
Less purchased feed and livestock...	3,337	3,065	3,052	17,272	13,807	11,875	6,418	6,119	4,934
Net cash sales.....	\$24,583	\$22,430	\$18,092	\$29,367	\$26,535	\$20,482	\$29,960	\$23,301	\$21,310
Inventory change.....	1,305	2,700	810	3,994	6,943	1,662	3,287	2,744	1,170
Farm products consumed.....	122	153	168	216	201	257	297	375	350
Value of farm production.....	26,010	25,283	19,070	33,577	33,679	22,401	33,544	26,420	22,830
Cash operating expenses.....	9,872	9,376	7,510	11,912	10,974	9,196	14,253	11,454	9,785
Annual depreciation.....	3,487	3,405	2,973	4,457	3,534	3,162	5,123	3,995	3,870
Farm and family earnings.....	12,651	12,502	8,587	17,208	19,171	10,043	14,168	10,971	9,175
Unpaid labor charge.....	3,626	3,042	2,775	3,694	3,215	2,954	4,418	3,576	3,442
Returns to capital and management...	9,025	9,460	5,812	13,514	15,956	7,089	9,750	7,395	5,733
Interest charge on capital.....	4,475	3,581	3,208	4,665	3,590	3,429	5,103	3,740	3,559
Management returns.....	4,550	5,879	2,604	8,849	12,366	3,660	4,647	3,655	2,174
Total cash income ^a	\$28,312	\$25,672	\$21,304	\$46,669	\$40,410	\$32,466	\$36,610	\$29,444	\$26,339
Total cash expenditures ^a	17,592	17,182	14,212	36,590	30,499	25,545	29,169	24,140	19,820
Cash balance.....	10,720	8,490	7,092	10,079	9,911	6,921	7,441	5,304	6,519
FARM INVESTMENT									
Livestock inventory.....	5,074	3,922	3,848	14,322	9,977	10,182	12,192	11,014	9,533
Grain inventory.....	8,417	7,093	6,426	9,502	7,007	7,138	7,837	5,601	6,133
Remaining capital cost in:									
Machinery.....	10,466	9,031	7,210	9,040	7,916	6,754	12,781	9,913	9,372
Buildings and fence.....	6,591	5,726	5,904	9,112	8,004	7,366	13,651	11,296	10,761
Soil fertility.....	186	227	534	121	262	479	246	253	474
Auto.....	715	658	608	894	602	674	776	847	711
Value of land (current basis).....	64,703	56,205	48,740	52,138	47,532	43,920	56,340	44,845	41,546
Total farm investment.....	96,152	82,862	73,270	95,129	81,300	76,513	103,823	83,769	78,530

^a Includes sales or purchases of capital items.

prices anticipated in 1967 due to increased supplies were reflected in lower inventory prices at the end of the year. With favorable net farm incomes in 1966, farmers added an additional \$3,872 to investments in capital items above the annual depreciation charges.

Dairy farms. Farm and family earnings on 300-acre southern Illinois dairy farms in 1966 were \$14,168, an increase of \$3,197 over 1965. The 1957-1966 average earnings on southern Illinois dairy farms were \$9,175 compared with the \$14,168 in 1966. Total value

of grain and livestock inventories continued to increase on dairy farms. These increases resulted from an increase in average number of cows from 40.7 to 42.8, increased prices of grain, and more acres of row crops which offset the effect of 15-percent-lower corn yields.

Over the ten-year period (1957-1966) livestock systems of farming in southern Illinois have averaged greater net farm incomes than grain farms. Hog and dairy farms have had similar income levels of \$10,043 to \$9,175 per farm for the ten-year period.

LIVESTOCK ENTERPRISES

Table 4 shows the returns per \$100 feed fed to various livestock enterprises, and the price of corn during each of the past 15 years. Fifteen-year (1952-1966) averages are also shown. The difference between the average return figure and \$100 feed cost represents the margin available to pay cash expenses other than feed, labor, depreciation on equipment, and interest on investment, and also to provide for profit.

The margin needed to cover non-feed costs varies with the kind of livestock and depends on the proportion of total production costs represented by feed. The 15-year averages represent the approximate level of returns at which farmers have been willing to maintain livestock production. This average may not represent break-even returns on all farms because some farmers may discount market prices for some resources used in producing livestock. If a farmer already has facilities for livestock, he need only cover operating costs to continue production. However, when he views live-

stock production as a new or long-run enterprise, he hopes to cover all costs — fixed and variable — or he may not undertake the enterprise.

As individual farmers try to increase profits, they tend to curtail livestock production when returns per \$100 of feed fed are below the 15-year average, and to increase production when returns are above average. This tendency on the part of producers causes supplies of livestock products to fluctuate.

The hog enterprise is the best illustration. Since 1953 the pattern of hog returns has been to exceed the 15-year average for two to three years, and then to fall below for one to two years. This pattern is referred to as the hog cycle and is related to the supply and demand for pork. Higher feed prices and lower selling prices for hogs indicate that returns for 1967 may be near the long-run average.

Feeder cattle returns were below the 15-year average in six of the past eight years. Except for 1962 and 1965, the average cattle feeder has had to justify any profits on the basis that some of his feed, buildings, or labor had no alternative uses.

Feeder cattle returns vary greatly from year to year. Long-run average returns shown here indicate the cattle feeding business is very competitive. Above-average skills are needed in buying, selling, and feeding to meet competition of other uses for time and money on farms feeding cattle. It is more difficult to identify cyclic income movements over a 15-year period in the beef cattle industry because it is more complex and adjusts more slowly than other livestock enterprises.

Dairy and poultry returns fluctuate less than beef cattle returns from year to year. In both enterprises, 15-year average returns are below the margin needed to cover all fixed and variable costs. The implication is that these enterprises compete most favorably on farms with plentiful labor, capital, and management resources that have few alternative uses.

The business of raising livestock is very competi-

Table 4. — Returns per \$100 Feed Fed to Different Classes of Livestock

Year	Beef cow herds	Dairy cow herds	Feeder cattle bought	Native sheep raised	Feeder pigs	Hogs	Poultry	Yearly price of corn
1952	99	175	86	67	...	116	116	\$1.65
1953	64	147	81	84	...	178	148	1.44
1954	95	141	126	97	...	154	104	1.46
1955	94	168	106	103	95	109	142	1.28
1956	103	177	117	137	129	142	133	1.30
1957	134	189	143	138	149	172	136	1.15
1958	162	199	144	98	144	180	142	1.10
1959	147	191	112	102	92	114	123	1.10
1960	129	200	117	108	143	164	157	1.03
1961	139	196	116	110	132	164	150	1.01
1962	149	190	148	126	129	159	144	.98
1963	117	171	88	126	108	131	141	1.11
1964	107	174	112	124	122	142	141	1.12
1965	127	174	151	143	176	210	143	1.15
1966	132	190	117	129	140	178	168	1.23
1952-66 aver.	120	179	118	113	130 ^a	154	139	1.21

^a Twelve-year average.

tive. Average profit margins are very narrow. Large numbers of farmers are willing to stay in business as long as their returns cover only operating costs. Expansion plans involving large investments for new facilities should be based on estimated returns that are high enough to cover all costs. Fluctuations in livestock returns also involve a risk in years when returns are low.

Hog enterprises

The information in Table 5 is based on a sample of 702 farms farrowing ten or more litters per year. Farms were omitted from the sample if the number of hogs purchased exceeded 10 percent of pigs weaned. This eliminated from the sample those farms with combined farrowing and feeder-pig operations. Feeder-pig enterprise information is included in Table 6.

Returns per \$100 feed fed to hogs were \$178 in 1966. This was a \$32 decrease from 1965 but the third highest return since 1951. These returns were \$27 above the 1951-65 average. The fluctuation in returns above and below the 15-year average is related to changes in supplies of and demand for pork and to the price of corn. In 1966, the average price received per 100 pounds of pork sold was up 12 percent, and the

average price per bushel of corn fed (see Table 4) was up 7 percent.

In 1966, returns above feed per litter decreased \$42 from \$204 in 1965 to \$162. While returns above feed per litter of \$162 in 1966 were \$39 above the last six-year average of \$123, four out of the past six years were below this average.

Until 1966, feed cost per 100 pounds produced has never varied more than a range of 65 cents in the past six years, but pounds of concentrates per 100 pounds produced have been dropping at the rate of about 1 percent every three years. In 1966, feed cost per 100 pounds produced increased \$1.11, primarily due to the higher price of corn. The average size of the hog enterprise on all record-keeping farms has been increasing at the rate of about 3 litters per year, from 41 litters (299 pigs weaned) per farm in 1956 to 74 litters (553 pigs weaned) in 1966.

The high-return group of farms had returns per \$100 feed fed that ranged from \$190 to \$209, and returns for the low-return group ranged from \$140 to \$159. Most of the differences between high- and low-return groups were caused by differences in feed conversions and in feed costs per 100 pounds produced.

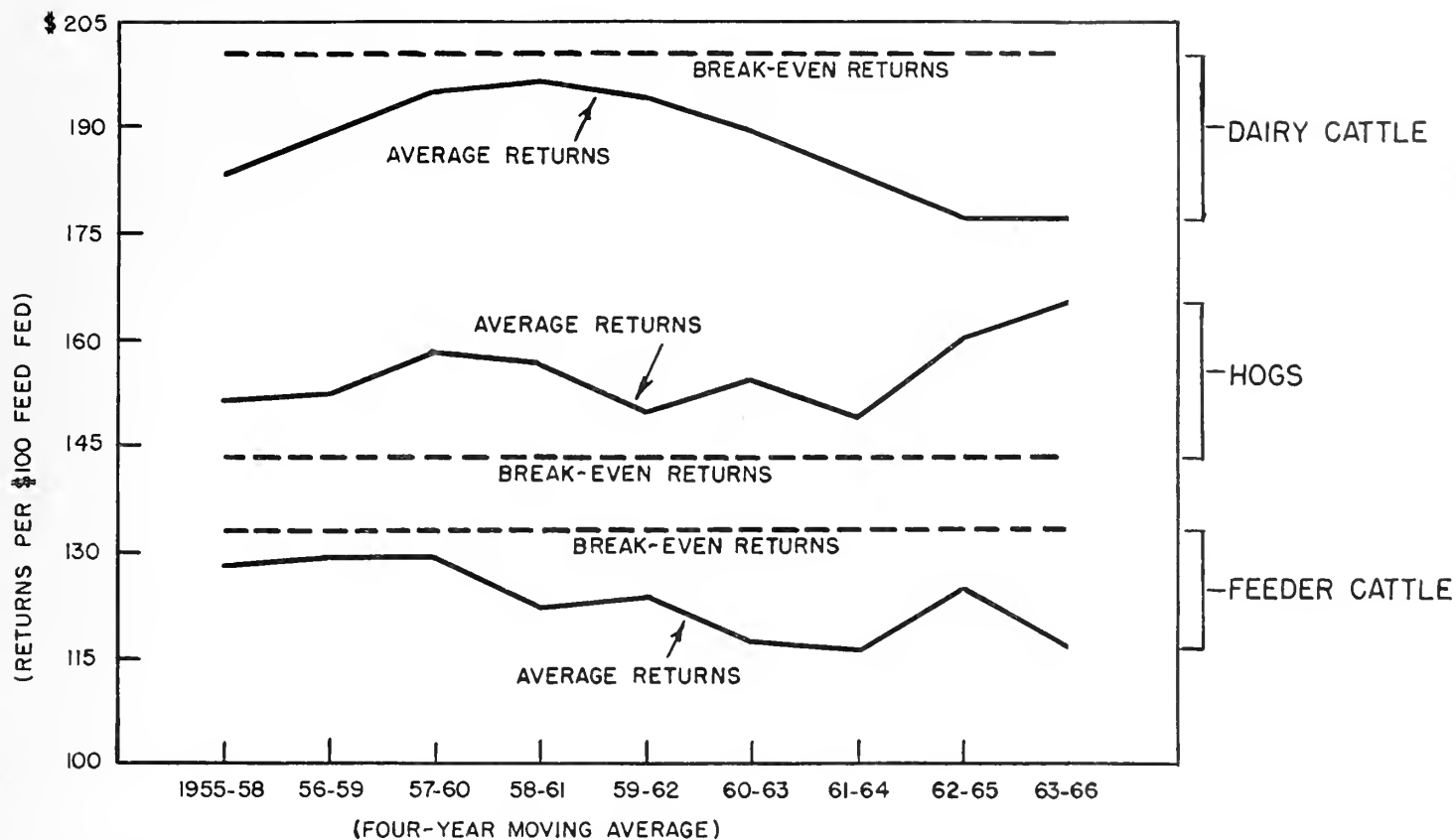
The high-return farms used 53 pounds less farm grains and 22 pounds less commercial feeds to produce 100 pounds pork than the low-return farms. This saving in feed was equivalent to about 1,325 bushels of corn and 15.4 tons of protein per farm, or about \$3,550. Other differences show 0.3 more pigs weaned per litter, 0.3 percent lower death loss, and 58 cents per 100 pounds higher selling price for pork sold for the high-return farms. There are wide variations in profits from swine enterprises on individual farms since these same differences between high- and low-return farms occur each year.

The hog enterprise has been a very profitable business for the farmers in the high-return group and a moderately profitable business for the average hog producer. If nonfeed costs are estimated from detailed cost studies at \$5 per 100 pounds over the past ten years, the high-return farmer sold his hogs at \$3.21 more per hundred pounds than his total cost. The average producer received \$1.76 more per hundred pounds than his total cost. Assuming the low-return group would have had the same \$5 per 100 pounds non-feed cost, it would have received 13 cents more than its total cost of production.

The relationship of average returns per \$100 feed fed to hogs to the estimated breakeven returns necessary to cover all nonfeed costs is shown in Figure 2. The estimate of breakeven returns assumes feed to represent 70 percent of the total cost of producing hogs while labor and capital represent 30 percent. The dif-

Table 5. — Hog Enterprises, 1966

Items	All farms	High-return farms	Low-return farms
Number of farms.	702	123	108
Average per farm			
Pounds of pork produced.	127,323	152,234	130,904
Total returns.	\$27,368	\$33,344	\$27,269
Value of feed fed.	\$15,397	\$16,936	\$18,015
Returns per \$100 feed fed.	\$ 178	\$ 197	\$ 151
Returns above feed per litter.	\$ 162	\$ 193	\$ 117
Number of litters farrowed.	74	85	79
Pigs farrowed per litter.	9.2	9.2	8.9
Pigs weaned per litter.	7.5	7.6	7.3
Number of pigs weaned.	553	645	578
Number that died after weaning.	18	20	21
Death loss, percent of pounds produced.	1.3	1.2	1.5
Weight per hog sold.	237	238	240
Price received per 100 pounds.	\$ 23.09	\$ 23.28	\$ 22.70
Feed cost per 100 pounds produced.	\$ 12.09	\$ 11.12	\$ 13.76
Feed per 100 pounds produced			
Farm grains, lb.	343	320	373
Commercial feeds, lb.	71	65	87
Total concentrates, lb.	414	385	460
Pasture (pasture days). . . . .	.7	.8	.8
Cost per 100 pounds of commercial feeds.	\$ 6.23	\$ 6.15	\$ 6.31
Cost per 100 pounds of concentrates.	\$ 2.89	\$ 2.86	\$ 2.97



Returns per \$100 feed fed to dairy, hogs, and feeder cattle, and estimated break-even returns, 1955-1966. (Fig. 2)

ference between the average return figure and \$100-feed cost represents the margin available to pay for cash expenses, labor, depreciation, and interest on investment, and to provide for profit.

The data in Figure 2 indicate there is a reservation profit that exists after all costs of production are paid before managers are willing to enter or continue hog production. Evidently, there is a human preference factor that causes hog production to expand less than economic conditions warrant, creating a continual margin of profit above feed and other costs.

If the relationship between hog prices and production costs continues to be favorable enough in the years ahead to compete with returns from selling cash grain, it should encourage increased hog production on many Illinois farms.

Feeder-cattle and feeder-pig enterprises

Calendar-year operations for feeder-cattle and feeder-pig enterprises are presented in Table 6. These involved weights and values on partly finished animals purchased in prior years as well as on animals purchased in the current year.

Pork produced per farm from feeder-pig enterprises was 70,709 pounds in 1966 (see Table 6), more than two times the 35,041 pounds produced per farm in 1956. Farmers were not only buying more feeder pigs; they were also buying healthier pigs. Death loss

has dropped steadily the past six years from 2.7 percent of weight produced in 1960 to 1.6 percent in 1966. Returns follow the cyclical pattern of the sow and litter enterprise. Returns per \$100 feed fed averaged \$140 in 1966.

The 81,129 pounds of beef produced per farm in 1966 (Table 6) is 84 percent greater than the average production per farm for 1956-1958. Returns per \$100 feed fed for feeder-cattle enterprises were \$117 in 1966, down \$34 from 1965. The six-year average re-

Table 6. — Feeder-Cattle and Feeder-Pig Enterprises, 1966

Items	Feeder cattle	Feeder pigs
Number of farms.....	384	112
Average per farm		
Total pounds produced.....	81,129	70,709
Total returns.....	\$18,900	\$11,655
Value of feed fed.....	\$16,204	\$ 8,343
Returns per \$100 feed fed.....	\$ 117	\$ 140
Death loss, percent of pounds produced	1.7	1.6
Average weight purchased.....	549	53
Price paid per 100 pounds.....	\$ 26.88	\$ 40.51
Price received per 100 pounds.....	\$ 24.78	\$ 23.55
Feed cost per 100 pounds produced....	\$ 19.97	\$ 11.80
Feed per 100 pounds produced		
Grain, lb.....	573	327
Protein and mineral feeds, lb.....	59	81
Total concentrates, lb.....	632	408
Hay, lb.....	109	...
Silage, lb.....	635	...
Pasture (pasture days).....	3	...

turns per \$100 feed fed of \$122 are still below the return needed to pay all nonfeed costs.

The relationship of average returns per \$100 feed fed to the estimated breakeven returns necessary to cover all nonfeed costs is shown in Figure 2 for feeder cattle. The estimated breakeven return assumes feed to represent 75 percent of the total cost of feeder cattle production, while labor and capital represent 25 percent.

For the years covered by Figure 2, the average returns are below the breakeven returns but above the cost of feed or \$100. This relationship means that the margin available was not large enough to pay cash expenses and market prices for all feeds, labor, depreciation, and interest on investment.

The low returns shown in Figure 2 for feeder cattle indicate that many farmers have been willing to discount the returns for labor, buildings, or nonmarketable feeds, especially if these resources have few or no alternative uses. Evidently Illinois farmers have strong personal preferences for feeding cattle during a period when economic conditions were not favorable for this enterprise. This observation has important implications when considering expansion of the feeder cattle enterprise on farms where there are no nonmarketable feed resources, underemployed labor, or fixed capital investments.

Prices paid for feeders bought were \$2.72 per 100 pounds higher during 1966 than in 1965, while prices received for cattle sold in 1966 were only 5 cents higher. Average weight purchased was down 5 pounds per steer. Pounds of beef produced per farm in 1966 was 4 percent higher than in 1965. Beef produced per farm has followed an upward trend since 1956 of about 3,000 pounds a year with more than this in years of favorable outlook and less in years of unfavorable outlook.

Pounds of grain and pounds of hay used per 100 pounds of beef produced has trended downward from 1960 to 1966, while the pounds of silage used has increased during the same period. Feed costs per 100 pounds produced were \$19.97 in 1966, an increase of \$1.48 from 1965. The increase was caused primarily by the higher price of corn. The shift to the use of more corn silage in the ration reflects attempts by feeders to increase production from existing land by intensifying the crop system and to reduce labor by mechanizing the feeding operation.

These data do not show the wide variation in profits that exists among cattle feeding programs and individual feeders. Since 1961 prices paid for feeders have varied as much as \$3.79 per 100 pounds from the past six-year average while prices received have varied by as much as \$2.17 per 100 pounds sold from the past six-year average. Many farmers are now feeding more

than one drove of cattle each year to provide a better utilization of fixed investments in mechanized feedlots. The increase in investments and complexity of the cattle feeding operation makes good records more important than ever to evaluate returns to resources used in cattle feeding.

Dairy enterprises

The minimum size of herd included in this analysis was 10 milk cows. The average size of dairy herd was 36.1 cows in 1966, compared with 23.5 cows per farm on record-keeping farms in 1956.

The rate of increase in the size of dairy herds since 1956 has been a little more than one cow per year.

Table 7. — Dairy Cattle Enterprises, 1966

Items	All farms	Pasture days per animal unit		
		0	1-119	120+
Number of farms.	253	61	120	72
Average per farm				
Number of cows in herd.	36.1	42.0	38.3	27.2
Number of milk cows.	36.0	42.0	38.3	27.0
Percent of milk cows dry.	15	15	15	16
Animal units in herd.	61.8	77.0	64.9	43.6
Pounds of beef produced.	18,771	20,268	20,169	15,172
Total returns.	\$22,210	\$25,576	\$24,143	\$16,135
Value of feed fed.	\$11,690	\$14,001	\$12,603	\$ 8,212
Returns per \$100 feed fed.	\$ 190	\$ 183	\$ 192	\$ 196
Returns above feed per milk cow.	\$ 292	\$ 276	\$ 301	\$ 293
Total pounds of milk produced.	421,700	486,725	456,135	309,219
Pounds of milk per milk cow.	11,714	11,589	11,910	11,453
Pounds of butterfat per milk cow.	434	434	439	426
Pounds of beef per cow in herd.	520	483	527	558
Death loss, percent of pounds produced.	7.5	7.9	7.3	7.3
Feed cost per unit*.	\$ 19.18	\$ 20.31	\$ 19.16	\$ 17.82
Price received for:				
100 lb. milk.	\$ 4.43	\$ 4.46	\$ 4.46	\$ 4.32
100 lb. beef.	\$ 19.21	\$ 18.77	\$ 19.50	\$ 19.12
Feed per unit of milk and beef:				
Grain, lb.	283	296	284	267
Protein and minerals, lb.	62	61	63	61
Total concentrates, lb.	345	357	347	328
Hay and dry roughage, lb.	344	319	335	396
Hay silage and soilage, lb.	331	624	288	63
Corn and other silage, lb.	768	964	808	427
Pasture (pasture days).	6	...	5	15
Pasture days per animal unit.	60	...	56	160

* 1,000 pounds of milk or 100 pounds of beef.

Total number of milk cows in Illinois has been declining steadily at the rate of about 4 percent a year in this same period, but total pounds of milk produced in the state has been declining only about 2 percent a year. While there are 42 percent fewer milk cows in the state than 10 years ago, the remaining cows are in herds that are 56 percent larger and that produce 26 percent more milk per cow.

Returns per \$100 feed fed to dairy enterprises in 1966 were \$190, up \$16 from 1965. Higher milk prices (66 cents per cwt.) and higher beef prices (\$3.70 per cwt.) were partially offset by \$1.77 higher feed costs per 1,000 pounds of milk or 100 pounds of beef produced (Table 7).

Dairy farmers have reduced the amount of pasture and increased the amounts of grain and silage fed. Pasture days per unit (1,000 pounds of milk or 100 pounds of beef) remained at 15 days prior to 1959, but since 1960 have declined steadily to 6 days in 1966.

The dairy herds in Table 7 were divided into three groups: herds with no pasture days per animal unit, those with 1 to 119 days, and those with 120 days or more. Each year a few more farmers have been adopting the practice of feeding cows in drylot. Dairy herds averaged 42.0 cows on farms with no direct grazing compared with 27.2 cows on farms using a full pasture season.

The main difference among these three groups of dairy herds is the amount of land required per cow to produce roughage. When pasture and hay yields are figured at 150 pasture days and 3 tons per acre respectively, the farms with drylot feeding required only 1.7 acres per cow to produce grass-legume forages, while the farms with over 120 pasture days per animal unit used 2.9 acres. Additional roughage was obtained through corn silage on the no-grazing farms. Milk production per cow did not vary greatly between the groups of farms. Part of the additional cost of harvesting roughage to be fed in drylot is included in the cost of feed. Farmers using the drylot system must relate the higher cost of feed to the increased returns that may result either from shifting land from pasture to grain crops, from an increase in size of dairy herd on fixed acres of hay and pasture, or from higher production per cow.

The relationship of average returns per \$100 feed fed to the estimated breakeven returns necessary to cover all nonfeed costs is shown in Figure 2 for dairy cattle. The estimated breakeven return assumes feed to represent 50 percent of the total cost of the dairy enterprise while labor and capital make up the other 50 percent.

For the years covered by Figure 2, the average returns are below the breakeven returns but above the cost of feed or \$100. This relationship means that the

margin available was not large enough to pay cash expenses and market prices for all feed, labor, depreciation, and interest on investment.

The low returns shown in Figure 2 for dairy cattle indicate the reason for many farmers discontinuing the dairy operation. Some farmers have been willing to discount the returns for labor, buildings, or nonmarketable feeds, especially if these resources have few or no alternative uses, or if they have strong personal preferences for dairy cattle during a period when economic conditions were not favorable for this enterprise. This observation has important implications when considering expansion of the dairy enterprise on farms where there are no nonmarketable feed resources, underemployed labor, or fixed capital investments.

Beef-cow herds

The minimum size of a beef-cow herd included in Table 8 was 10 or more cows. Farms with combinations of cow herds and purchased feeder cattle were not included. In addition to an analysis of all farms, Table 8 shows an analysis of farmers with cow herds who sold calves at weaning time, comparing them with those who finished their calves to slaughter weights. The average size of cow herd on all farms has changed little since 1956, ranging from 25 to 28 cows. This reflects the decision of the majority of Illinois farmers to maintain a beef-cow herd as a supplemental enterprise to market nonsalable feeds and labor.

Table 8. — Beef Cow Enterprises, 1966

Items	All farms	Calves sold	Calves fed out
Number of farms.	231	90	115
Average per farm			
Number of cows in herd.	28.2	28.5	27.1
Animal units in herd.	43.3	38.2	45.3
Total pounds produced.	20,423	14,294	24,729
Total returns.	\$ 4,617	\$ 3,303	\$ 5,419
Value of feed fed.	\$ 3,511	\$ 2,371	\$ 4,329
Returns per \$100 feed fed.	\$ 132	\$ 139	\$ 125
Pounds of beef per cow in			
herd.	724	502	912
Average weight per head sold	761	574	919
Pounds of death loss.	779	651	893
Percent of pounds			
produced.	3.8	4.6	3.6
Feed cost per unit ^a	\$ 17.19	\$ 16.59	\$ 17.51
Price received per 100 pounds	\$ 23.57	\$ 23.63	\$ 23.16
Feed per unit of milk and beef			
Grain, lb.	214	78	278
Protein and mineral feeds, lb.	28	18	32
Total concentrates, lb.	242	96	310
Hay and dry roughage, lb.	508	596	451
Hay silage, lb.	15	...	25
Corn and other silage, lb.	219	274	240
Pasture (pasture days).	188	202	180

^a 1,000 pounds of milk or 100 pounds of beef.

Table 9. — Poultry Enterprises, 1966

Items	All farms	Number of hens per farm			
		100-299	300-999	1,000-1,999	Over 2,000
Number of farms.....	127	69	32	16	10
Average per farm					
Pounds of poultry produced.....	1,874	747	1,411	2,428	10,248
Total returns.....	\$ 5,088	\$ 896	\$ 3,198	\$ 7,476	\$ 36,244
Value of feed fed.....	\$ 3,034	\$ 775	\$ 2,141	\$ 4,591	\$ 18,986
Returns per \$100 feed fed.....	\$ 168	\$ 116	\$ 149	\$ 163	\$ 191
Returns above feed cost per hen.....	\$ 2.37	\$.65	\$ 1.94	\$ 2.11	\$ 2.99
Average number of hens.....	866	187	544	1,370	5,773
Eggs produced per hen.....	216	180	204	204	228
Percent production.....	59	49	56	56	62
Feed requirement units ^a	16,803	3,326	10,109	24,627	118,697
Feed cost per unit.....	\$.18	\$.23	\$.21	\$.19	\$.16
Pounds of concentrates per unit.....	5.4	7.0	6.4	5.4	4.9
Cost per 100 pounds of concentrates.....	\$ 3.32	\$ 3.35	\$ 3.30	\$ 3.42	\$ 3.28
Price per pound sold.....	\$.09	\$.09	\$.09	\$.08	\$.09
Price per dozen eggs sold.....	\$.38	\$.34	\$.37	\$.41	\$.38
Pounds of death loss.....	572	176	476	949	3,007

^a One dozen eggs or 1.5 pounds of weight produced.

Returns per \$100 feed fed to beef-cow herds in 1966 averaged \$132. Increased beef prices during 1966 and higher feeder calf prices continued to raise cow-herd returns upward from the low level of 1964.

In 1966, farms that sold calves received \$33 per cow above value of feed fed, and farms that sold cattle at slaughter weights received \$40 per cow above value of feed fed. This is the second year since 1962 that those who sold slaughter cattle received higher returns to apply against the added costs for labor, buildings, and capital required to feed them out.

Poultry enterprises

The minimum size of flock included in Table 9 is 100 hens. The average size of flock, omitting farms with less than 100 hens has increased from 304 hens in 1956 to 866 in 1966. In the same period, pounds of concentrates per dozen eggs or 1½ pounds of weight produced have declined steadily each year from 7.0 in 1956 to 5.4 pounds in 1966.

In 1966, the feed cost of 18 cents per dozen eggs or 1½ pounds of weight produced remained the same as in 1965. Improved feed conversion was offset by the higher price of concentrates.

Eggs per hen increased from 197 to 210 during the 1956-1959 period but since 1960 have varied over a range from 208 to 216 eggs per hen.

The price per dozen eggs sold in 1966 was 38 cents, an increase of 7 cents from 1965. Returns above feed cost per hen of \$2.37, on all farms, were the highest since 1950.

Larger flocks received more returns above feed cost per hen than the smaller flocks (Table 9). Farms with over 2,000 hens had returns above feed cost per hen of \$2.99, compared with only 65 cents on farms with 100-299 hens. This difference may not reflect the actual

contribution of poultry laying flocks to farm income, since small flocks may utilize inputs of labor, equipment, and buildings that have limited alternative uses. However, the higher production per hen on the farms with larger flocks indicates better management and a potentially higher return for labor and capital.

Sheep enterprises

Sheep production is a minor enterprise on record-keeping farms. The minimum size of enterprise in Table 10 was set at 3 animal units. One animal unit of sheep is defined as 750 pounds of liveweight. Returns per \$100 feed fed in 1966 were \$129 for native flocks. Pounds of wool and mutton produced per farm have remained fairly constant for the past ten years. The majority of Illinois farmers who keep sheep do so as a supplemental enterprise to market nonsalable feeds and labor.

Table 10. — Sheep Enterprises, 1966

Items	Native flocks
Number of farms.....	112
Average per farm	
Pounds of wool and mutton produced.....	3,729
Total returns.....	\$ 898
Value of feed fed.....	\$ 697
Returns per \$100 feed fed.....	\$ 129
Percent lamb crop.....	115
Pounds of death loss.....	536
Death loss, percent of pounds produced.....	14.4
Feed cost per 100 pounds produced.....	\$ 18.69
Price received per 100 pounds.....	\$ 26.02
Price paid for sheep bought.....	\$ 21.53
Feed per 100 pounds produced	
Concentrates, lb.....	286
Hay, lb.....	562
Silage, lb.....	7
Pasture (pasture days).....	42

DEFINITION OF TERMS AND ACCOUNTING MEASURES

Soil-productivity rating

An average index representing the inherent productivity (low level of management) of all tillable land in the farm. Individual soil types on each farm are assigned an index ranging downward from 100.

Type of farm

Sampling technique. The records in each size group for northern Illinois were sampled to provide a proportional representation of all farms of that size range according to the 1964 census.

Grain farms. Farms where the value of feed fed was less than one-half of the feed and grain returns and value of feed to dairy or poultry was not more than one-sixth of the feed and grain returns.

Hog or beef farms. Farms where the value of feed fed was more than one-half of the feed and grain returns and either hog or beef-cattle enterprises received more than one-half of the value of feed fed.

Dairy or poultry farms. Farms where the value of feed fed was more than one-half of feed and grain returns and either dairy or poultry enterprises received more than one-third of the value of feed fed.

Cost items

Value of feed fed. Includes grains priced per bushel at the farm average as follows: corn—\$1.23; oats—69 cents; barley—88 cents; soybeans—\$2.97; rye—\$1.06; wheat—\$1.66. Commercial feeds were priced at actual cost, hay and silage at farm values, and pasture at 13 cents per animal unit pasture day. A pasture day represents an intake of approximately 20 to 25 pounds of dry matter. It has been defined as

16 pounds of total digestible nutrients (TDN) from pasture.

Cash operating expenses. Includes annual cash outlays for non-depreciable items of fertilizer, machinery repairs, machine hire, gas and oil, electricity and telephone, farm share of auto, hired labor, seed and crop expense, taxes, building repairs, livestock, and miscellaneous expense. It does not include purchased feed and livestock since these have been deducted from gross receipts in computing the value of farm production.

Machinery and equipment. Includes depreciation, repairs, machine hire, gas and oil, electricity and telephone, and farm share of auto.

Labor. Includes hired labor plus family and operator's labor charged in 1966 at \$300 and \$280 a month respectively for northern and southern Illinois.

Interest charge on capital. Interest charged at 6 percent on January 1 inventory of remaining capital investment in grain, livestock, machinery, buildings, soil fertility, and farm share of auto, plus 4 percent interest on bare land priced at current land values.

Total nonfeed costs. Includes cash operating expenses, depreciation, and charges for unpaid labor and interest. Purchased feeds and livestock are omitted.

Value of land (current basis). A basic value on bare land is established for each farm according to the soil-productivity rating. This basic value is adjusted each year according to the index of land prices in Illinois as reported by the USDA.

Return items

Feed and grain returns. The sum of grain and feed sales, value of all feeds fed (except milk), and change in value of feed and grain inventories less the value of feed purchased.

Value of farm production. Total cash sales of products and services, less purchased feed and livestock, plus change in inventory values of grain and livestock, plus value of farm products consumed.

Farm and family earnings. Value of farm production less cash operating expenses and depreciation. This figure includes the return to the farm and family for unpaid labor, interest on invested capital, and returns to management.

Labor and management earnings. Farm and family earnings less the value of family labor and interest charge on capital invested. It is the residual return to operator's labor and management efforts.

Capital and management earnings. Farm and family earnings less a charge for all unpaid labor.

Management returns. The residual surplus left after a charge for unpaid labor and interest charge on capital are deducted from farm and family earnings.

Table 11. — Average Prices Received and Paid by Farm Record Keepers

	1966		1965	
	Northern Illinois	Southern Illinois	Northern Illinois	Southern Illinois
Grain prices				
Corn sold.	\$1.19	\$1.24	\$1.13	\$1.15
Soybeans sold.	2.83	2.77	2.59	2.46
Wheat sold.	1.81	1.67	1.40	1.32
Oats sold. . . . .	.71	.74	.68	....
Corn purchased.	1.25	1.25	1.19	1.18
Oats purchased. . . . .	.74	....	.69	....
Livestock prices				
Hogs, all weights.	\$23.09		\$20.68	
Fat cattle, all weights. . .	24.78		24.73	
Feeder cattle, all weights, prices paid	26.88		24.16	
Dairy cattle, all weights	19.21		15.51	
Sheep, all weights.	26.02		25.11	
Poultry. . . . .	.09		.07	
Milk.	4.43		3.77	
Eggs. . . . .	.38		.31	

Table 12. — Average Costs, Returns, and Financial Summary of Grain Farms by Size and Soil Rating, Northern Illinois, 1966

	GRAIN FARMS WITH SOIL RATING 76-100						GRAIN FARMS WITH SOIL RATING 56-75					
	Under 180 22	180-259 62	260-339 67	340-499 73	500-649 83	650+ 61	180-259 29	260-339 52	340-499 61	500-649 34	650+ 24	
Range in size (total acres).....	161	227	301	414	565	801	223	308	416	566	798	
Number of farms.....	154	213	279	384	521	732	204	281	367	497	660	
Size of farm.....	85	84	84	84	84	84	70	69	69	69	69	
Acres of tillable land.....	31	51	45	3	10	4	39	16	5	125	11	
Soil rating on tillable land.....	3.7	2	1	4	4	.5	.1	1.1	2.1	.9		
Hens, number.....	19	77	58	113	264	248	60	85	132	162	240	
Dairy cows, number.....	156	210	300	247	363	390	227	266	319	233	434	
Beef produced, hundredweight.....												
Pork produced, hundredweight.....												
DOLLAR COSTS PER FARM												
Soil fertility.....	\$ 1,719	\$ 2,786	\$ 3,407	\$ 5,636	\$ 7,536	\$12,527	\$ 2,655	\$ 3,445	\$ 4,583	\$ 5,910	\$10,385	
Buildings and fence.....	1,292	1,400	1,454	1,917	2,526	3,497	1,361	1,615	1,927	2,098	2,823	
Machinery and equipment.....	4,433	5,446	6,336	8,575	10,778	15,330	5,269	6,283	7,942	9,554	13,987	
Labor.....	3,962	3,967	4,318	4,826	6,836	8,697	3,972	4,182	4,958	5,476	7,823	
Taxes.....	1,506	1,816	2,271	3,039	4,000	5,606	1,597	1,993	2,762	3,514	4,677	
Seed expense.....	493	641	789	1,164	1,722	2,490	642	756	1,026	1,429	2,415	
Crop expense.....	501	783	1,182	1,677	2,488	3,691	879	987	1,253	1,416	3,096	
Livestock and miscellaneous expense.....	419	445	481	575	815	922	470	503	710	596	1,008	
Interest charge on capital.....	5,466	7,591	9,548	13,083	17,779	24,518	5,979	8,123	10,642	13,730	19,081	
Total nonfeed costs.....	19,791	24,875	29,786	40,492	54,480	77,278	22,824	27,887	35,803	43,723	65,295	
Total value of feed fed.....	3,067	4,451	4,924	5,269	9,284	9,249	4,180	5,616	7,566	6,784	9,767	
DOLLAR RETURNS PER FARM												
Livestock returns above feed cost.....	\$ 2,558	\$ 2,171	\$ 3,016	\$ 2,817	\$ 3,606	\$ 4,338	\$ 2,286	\$ 2,543	\$ 3,691	\$ 3,195	\$ 5,090	
Feed and grain returns.....	16,184	24,189	31,566	44,052	59,207	86,567	20,942	28,114	37,144	48,700	72,596	
Other cash income.....	669	645	716	920	1,117	1,895	665	894	880	1,093	1,585	
Total value of farm production.....	19,411	27,005	35,298	47,789	63,930	92,800	23,893	31,551	41,715	52,988	79,271	
Management returns.....	-380	2,130	5,512	7,297	9,450	15,522	1,069	3,664	5,912	9,265	13,976	
Farm production per \$1.00 of nonfeed costs.....	.98	1.09	1.18	1.18	1.17	1.20	1.05	1.13	1.17	1.21	1.21	
Farm production per man.....	17,646	24,737	29,414	34,968	33,355	39,350	21,397	27,239	30,338	34,370	38,513	
FINANCIAL SUMMARY												
Cash sales of products and services.....	\$19,512	\$29,577	\$36,040	\$49,030	\$66,396	\$97,415	\$26,771	\$32,545	\$47,154	\$55,316	\$87,729	
Sales of capital items.....	110	211	89	615	463	577	222	289	139	105	631	
Total cash income.....	19,622	29,788	36,129	49,645	66,859	97,992	26,993	32,834	47,293	55,421	88,360	
Purchased livestock.....	694	2,288	1,755	3,080	5,847	7,454	877	3,018	5,838	5,512	7,195	
Purchased feed.....	1,175	1,819	2,305	2,210	3,190	3,541	1,971	2,226	3,120	3,293	3,086	
Cash operating expenses.....	7,997	10,288	12,658	18,563	25,585	38,124	10,071	12,069	16,346	19,935	33,569	
Purchase of capital items.....	2,818	4,123	5,208	6,692	8,734	13,667	3,996	4,512	5,744	8,067	8,923	
Total cash expenditures.....	12,684	18,518	21,926	30,545	43,356	62,786	16,915	21,825	31,048	36,807	52,773	
Cash balance.....	\$ 6,938	\$11,270	\$14,203	\$19,100	\$23,503	\$35,206	\$10,078	\$11,009	\$16,245	\$18,614	\$35,587	
Inventory change.....	1,671	1,411	3,206	3,912	6,394	6,249	-153	4,131	3,346	6,288	1,673	
Capital change.....	116	596	1,309	951	1,384	3,561	701	359	752	1,950	197	
Farm products consumed.....	97	124	112	137	177	131	123	119	173	189	150	
Farm and family earnings.....	8,822	13,401	18,830	24,100	31,458	45,147	10,749	15,618	20,516	27,041	37,607	
Labor and management earnings.....	3,943	5,681	9,108	10,889	13,043	19,102	4,556	7,177	9,473	12,821	17,538	
Capital and management earnings.....	5,086	9,721	15,060	20,380	27,229	40,040	7,048	11,787	16,554	22,995	33,057	
Capital and management earnings per acre.....	31.59	42.82	50.03	49.23	48.19	49.99	31.61	38.27	39.79	40.63	41.42	

Table 12a. — Average Operating Costs, Investments, and Land Use of Grain Farms by Size and Soil Rating, Northern Illinois, 1966

	GRAIN FARMS WITH SOIL RATING 76-100					GRAIN FARMS WITH SOIL RATING 56-75					
	Under 180 22	180-259 62	260-339 67	340-499 73	500-649 83	650+ 61	180-259 29	260-339 52	340-499 61	500-649 34	650+ 24
Range in size (total acres).....											
Number of farms.....											
COSTS AND RETURNS PER TILLABLE ACRE											
Soil fertility.....	\$ 11.16	\$ 13.08	\$ 12.21	\$ 14.68	\$ 14.46	\$ 17.11	\$ 13.01	\$ 12.26	\$ 12.49	\$ 11.89	\$ 15.73
Buildings and fence.....	8.39	6.57	5.21	4.99	4.85	4.78	6.67	5.75	5.25	4.22	4.28
Machinery and equipment.....	28.79	25.57	22.71	22.33	20.69	20.94	25.83	22.36	21.64	19.22	21.19
Labor.....	25.73	18.62	15.48	12.57	13.12	11.88	19.47	14.88	13.51	11.02	11.85
Value of feed fed.....	19.92	20.90	17.65	13.72	17.82	12.64	20.49	19.99	20.62	13.65	14.80
Livestock returns above feed cost.....	16.61	10.19	10.81	7.34	6.92	5.93	11.21	9.05	10.06	6.43	7.71
Feed and grain returns.....	105.09	113.56	113.14	114.72	113.64	118.26	102.66	100.05	101.21	97.99	109.99
Total value of farm production.....	126.05	126.78	126.52	124.45	122.71	126.78	117.12	112.28	113.66	106.62	120.11
Total nonfeed costs.....	128.51	116.78	106.76	105.45	104.57	105.57	111.88	99.24	97.56	87.98	98.93
Management returns.....	-2.46	10.00	19.76	19.00	18.14	21.21	5.24	13.04	16.10	18.64	21.18
SELECTED COST ITEMS											
Fertilizer, annual application.....	\$ 1,690	\$ 2,763	\$ 3,336	\$ 5,593	\$ 7,419	\$12,437	\$ 2,599	\$ 3,429	\$ 4,534	\$ 5,883	\$10,299
Lime and rock phosphate depreciation.....	29	23	71	43	117	90	56	16	49	27	86
Building repairs and maintenance.....	431	352	381	466	762	1,007	462	475	567	582	1,019
Building depreciation.....	861	1,048	1,073	1,451	1,764	2,490	899	1,140	1,360	1,516	1,804
Machinery and equipment depreciation.....	1,427	1,976	2,370	3,287	4,641	6,498	1,871	2,424	3,143	4,079	5,796
Machinery repairs and supplies.....	927	1,136	1,354	2,020	2,353	3,783	1,057	1,274	1,743	2,023	3,298
Machinery hire.....	493	593	656	702	833	979	625	614	765	762	1,306
Gasoline and oil.....	792	952	1,095	1,565	1,861	2,719	925	1,117	1,342	1,561	2,373
Unpaid labor charge.....	3,736	3,680	3,770	3,720	4,229	5,107	3,701	3,831	3,962	4,046	4,550
Hired labor charge.....	226	287	548	1,106	2,607	3,590	271	351	996	1,430	3,273
Total months of labor.....	13.2	13.1	14.4	16.4	23.0	28.3	13.4	13.9	16.5	18.5	24.7
Months of labor hired.....	.7	.8	1.8	4.0	8.9	11.3	1.1	1.1	3.3	5.0	9.5
FARM INVESTMENT											
Livestock inventory.....	\$ 3,803	\$ 5,048	\$ 4,832	\$ 6,630	\$11,728	\$12,539	\$ 4,624	\$ 5,378	\$ 7,742	\$ 7,790	\$14,326
Grain inventory.....	9,110	14,488	16,681	24,318	29,977	45,515	10,681	14,683	18,874	21,569	37,707
Remaining capital cost in:											
Machinery.....	4,789	7,254	9,263	13,038	17,736	23,500	7,067	9,457	12,022	14,900	23,435
Buildings and fence.....	8,806	10,795	11,785	17,027	21,788	29,652	9,106	12,522	16,820	16,178	19,318
Soil fertility.....	69	40	141	57	94	154	71	30	126	69	144
Auto.....	813	756	940	1,007	967	1,144	710	744	860	891	1,030
Value of land (current basis).....	95,555	132,207	173,235	233,967	321,030	444,205	101,086	138,846	181,393	251,155	333,082
Total farm investment.....	122,945	170,588	216,877	296,044	403,320	556,709	133,345	181,660	237,837	312,552	429,042
Total farm investment per acre.....	763.63	751.49	720.52	715.08	713.84	695.02	597.96	589.81	571.72	552.21	537.65
PERCENT OF TILLABLE LAND IN											
Corn and corn silage.....	52.1	54.1	52.8	60.0	57.4	59.1	54.8	52.2	54.2	53.0	64.6
Soybeans.....	20.1	29.8	31.3	27.3	26.9	30.6	27.6	26.7	27.4	28.5	20.9
Wheat.....	2.1	2.6	3.4	2.1	3.1	2.5	2.0	4.1	3.7	4.5	3.7
Other small grains.....	9.0	3.9	3.4	2.7	3.2	1.0	3.8	4.4	2.9	3.0	3.0
Diverted acres.....	6.5	3.9	3.7	3.3	4.7	4.0	5.3	4.4	5.7	6.2	5.3
All hay and pasture crops.....	8.5	4.8	5.3	4.5	4.5	2.7	6.2	7.3	5.8	4.6	2.4
CROP YIELDS, bushels per acre											
Corn.....	99.6	99.3	99.8	98.5	100.6	100.3	93.5	89.8	88.9	88.4	93.8
Soybeans.....	35.7	33.6	34.0	34.4	34.4	33.1	30.7	30.6	31.3	30.6	30.4
Wheat.....	45.7	48.1	50.0	47.8	51.1	50.7	44.8	45.1	43.0	46.2	48.5
Oats.....	60.0	73.7	70.8	77.5	71.7	64.2	59.9	63.6	59.3	67.5	60.2

Table 13. — Average Costs, Returns, and Financial Summary of Hog Farms by Size and Soil Rating, Northern Illinois, 1966

	HOG FARMS WITH SOIL RATING 76-100					HOG FARMS WITH SOIL RATING 56-75				
	Under 180 38	180-259 55	260-339 39	340-499 21	500+ 18	Under 180 27	180-259 39	260-339 39	340-499 39	500+ 24
Range in size (total acres).....	149	224	297	408	662	147	225	303	397	683
Number of farms.....	139	204	263	366	586	130	194	249	311	492
Size of farm.....	83	82	82	81	81	67	68	67	65	66
Acres of tillable land.....	73	45	14	299	15	35	88	38	36	11
Soil rating on tillable land.....	95	167	255	275	758	82	205	204	303	607
Hens, number.....	1,470	1,634	1,942	2,249	2,837	1,139	1,372	1,569	1,694	2,515
Dairy cows, number.....										
Beef produced, hundredweight.....										
Pork produced, hundredweight.....										
DOLLAR COSTS PER FARM										
Soil fertility.....	\$ 1,891	\$ 2,796	\$ 4,025	\$ 5,085	\$11,298	\$ 1,763	\$ 2,593	\$ 3,441	\$ 4,209	\$ 7,527
Buildings and fence.....	1,780	2,463	3,278	3,989	7,001	1,070	2,211	2,700	2,692	4,094
Machinery and equipment.....	5,325	7,070	9,132	11,576	16,791	4,824	6,648	7,469	8,667	14,069
Labor.....	4,357	4,875	6,039	7,397	10,633	4,362	4,577	4,768	5,849	9,138
Taxes.....	1,318	1,766	2,335	2,916	4,975	1,048	1,599	1,923	2,234	3,490
Seed expense.....	527	765	907	1,379	2,530	435	653	786	911	1,457
Crop expense.....	658	892	1,264	1,978	3,700	674	822	1,078	1,371	1,778
Livestock and miscellaneous expense.....	1,350	1,473	1,792	2,579	3,309	943	1,261	1,292	1,585	2,661
Interest charge on capital.....	6,037	8,748	11,091	14,536	23,497	4,660	7,046	8,569	10,009	16,047
Total nonfeed costs.....	23,243	30,848	39,923	51,435	83,734	20,379	27,410	32,026	37,527	60,261
Total value of feed fed.....	19,491	24,578	29,065	33,403	54,532	16,947	20,777	22,951	26,790	42,707
DOLLAR RETURNS PER FARM										
Livestock returns above feed cost.....	\$14,490	\$13,785	\$17,884	\$22,485	\$25,157	\$ 9,545	\$13,786	\$14,950	\$16,343	\$26,007
Feed and grain returns.....	15,438	22,920	30,348	41,547	69,885	12,815	18,230	24,192	30,351	47,775
Other cash income.....	562	699	950	1,056	2,178	413	646	849	917	1,567
Total value of farm production.....	30,490	37,404	49,182	65,088	97,220	22,773	32,662	39,991	47,611	75,349
Management returns.....	7,247	6,556	9,259	13,653	13,486	2,394	5,252	7,965	10,084	15,088
Farm production per \$1.00 of nonfeed costs.....	1.31	1.21	1.23	1.27	1.16	1.12	1.19	1.25	1.27	1.25
Farm production per man.....	25,409	27,707	30,112	34,256	35,897	18,718	25,956	29,807	30,070	32,178
FINANCIAL SUMMARY										
Cash sales of products and services.....	\$43,980	\$55,384	\$69,584	\$84,496	\$142,248	\$33,559	\$49,862	\$54,744	\$64,761	\$101,918
Sales of capital items.....	107	133	434	171	101	4	267	194	151	245
Total cash income.....	44,087	55,517	70,018	84,667	142,349	33,563	50,129	54,938	64,912	102,163
Purchased livestock.....	3,489	4,816	7,227	8,158	26,937	2,918	5,246	4,341	6,573	12,345
Purchased feed.....	9,841	12,940	14,880	13,588	24,066	7,845	10,640	11,648	11,745	20,256
Cash operating expenses.....	10,255	13,514	18,053	25,315	42,976	8,919	12,108	14,422	17,920	30,734
Purchase of capital items.....	4,144	7,166	10,096	13,178	17,390	4,112	6,496	8,787	11,273	16,942
Total cash expenditures.....	27,729	38,436	50,856	60,239	111,369	23,794	34,490	39,198	47,511	80,277
Cash balance.....	\$16,358	\$17,081	\$19,162	\$24,428	\$30,980	\$ 9,769	\$15,639	\$15,740	\$17,401	\$21,886
Inventory change.....	-310	-417	1,517	2,014	5,727	-169	-1,557	1,002	915	5,643
Capital change.....	768	2,352	3,895	5,509	4,745	1,138	1,850	3,511	5,717	8,061
Farm products consumed.....	150	193	188	324	248	146	243	234	253	389
Farm and family earnings.....	16,966	19,209	24,762	32,275	41,700	10,884	16,175	20,487	24,286	35,979
Labor and management earnings.....	10,768	10,112	12,813	17,239	17,053	5,950	8,798	11,542	13,684	18,688
Capital and management earnings.....	13,284	15,304	20,350	28,189	36,983	7,054	12,298	16,534	20,093	31,135
Capital and management earnings per acre.....	89.15	68.32	68.52	69.09	55.87	47.99	54.66	54.57	50.61	45.59

Table 13a. — Average Operating Costs, Investments, and Land Use of Hog Farms by Size and Soil Rating, Northern Illinois, 1966

	HOG FARMS WITH SOIL RATING 76-100					HOG FARMS WITH SOIL RATING 56-75				
	Under 180 38	180-259 55	260-339 39	340-499 21	500+ 18	Under 180 27	180-259 39	260-339 39	340-499 39	500+ 24
Range in size (total acres).....										
Number of farms.....										
COSTS AND RETURNS PER TILLABLE ACRE										
Soil fertility.....	\$ 13.60	\$ 13.71	\$ 15.30	\$ 13.89	\$ 19.28	\$ 13.56	\$ 13.37	\$ 13.82	\$ 13.53	\$ 15.30
Buildings and fence.....	12.81	12.07	12.46	10.90	11.95	12.85	11.40	10.84	8.66	8.32
Machinery and equipment.....	38.31	34.66	34.73	31.63	28.65	37.11	34.27	30.00	27.87	28.60
Labor.....	31.35	23.90	22.96	20.21	18.14	33.55	23.59	19.15	18.81	18.57
Value of feed fed.....	140.22	120.48	110.51	91.26	93.06	130.36	107.10	92.17	86.14	86.80
Livestock returns above feed cost.....	104.24	67.57	68.00	61.43	42.93	73.42	71.06	60.04	52.55	52.86
Feed and grain returns.....	111.06	112.35	115.39	113.52	119.26	98.58	93.97	97.16	97.59	97.10
Total value of farm production.....	219.35	183.35	187.00	177.83	165.90	175.18	168.36	160.61	153.09	153.15
Total nonfeed costs.....	167.22	151.22	151.80	140.53	142.89	156.76	141.29	128.62	120.67	122.48
Management returns.....	52.13	32.13	35.20	37.30	23.01	18.42	27.07	31.99	32.42	30.67
SELECTED COST ITEMS										
Fertilizer, annual application.....	\$ 1,855	\$ 2,755	\$ 3,995	\$ 5,023	\$11,272	\$ 1,751	\$ 2,535	\$ 3,407	\$ 4,187	\$ 7,487
Lime and rock phosphate depreciation.....	36	41	30	62	26	12	58	34	22	40
Building repairs and maintenance.....	540	745	987	1,546	2,458	644	673	912	835	1,404
Building depreciation.....	1,240	1,718	2,291	2,443	4,543	1,026	1,538	1,788	1,857	2,690
Machinery and equipment depreciation.....	1,720	2,624	3,694	4,577	7,552	1,630	2,426	2,990	3,234	5,612
Machinery repairs and supplies.....	1,328	1,565	2,132	2,795	3,702	969	1,457	1,653	2,062	3,378
Machinery hire.....	656	874	796	1,005	1,419	575	777	675	958	1,591
Gasoline and oil.....	749	976	1,287	1,678	2,442	731	991	1,205	1,425	2,212
Unpaid labor charge.....	3,682	3,905	4,412	4,086	4,717	3,830	3,877	3,953	4,193	4,844
Hired labor charge.....	675	970	1,627	3,311	5,916	532	700	815	1,656	4,294
Total months of labor.....	14.4	16.2	19.6	22.8	32.5	14.6	15.1	16.1	19.0	28.1
Months of labor hired.....	2.1	3.2	4.9	9.2	16.8	1.8	2.2	2.9	5.0	12.0
FARM INVESTMENT										
Livestock inventory.....	\$14,016	\$19,123	\$24,259	\$28,388	\$50,828	\$12,439	\$17,483	\$19,005	\$24,267	\$36,960
Grain inventory.....	10,044	14,415	17,234	24,754	38,148	8,161	12,032	14,388	16,417	25,550
Remaining capital cost in:										
Machinery.....	6,096	9,044	12,627	16,742	23,439	5,467	9,422	9,769	11,986	16,659
Buildings and fence.....	12,684	18,811	22,384	24,540	45,124	9,918	15,293	18,048	16,637	23,567
Soil fertility.....	77	116	56	148	45	25	92	58	45	70
Auto.....	705	812	880	1,077	1,242	724	875	785	844	684
Value of land (current basis).....	85,482	125,225	161,126	219,925	349,179	61,392	93,353	121,125	144,954	245,936
Total farm investment.....	129,104	187,546	238,566	315,574	508,005	98,126	148,550	183,178	215,150	349,426
Total farm investment per acre.....	866.47	837.26	803.25	773.47	767.38	667.52	660.22	604.55	541.94	511.60
PERCENT OF TILLABLE LAND IN										
Corn and corn silage.....	67.9	66.8	63.9	62.8	75.0	66.7	64.9	57.2	60.3	57.5
Soybeans.....	4.8	9.7	15.3	14.2	8.2	5.8	9.3	16.8	12.6	13.9
Wheat.....	5	7	2.1	8	9	4	2.4	4.2	4.0	5.1
Other small grains.....	9.6	9.7	6.6	8.2	5.5	11.5	9.5	5.7	5.9	6.8
Diverted acres.....	2.4	1.1	2.5	3.9	2.7	2.8	1.7	4.7	4.1	2.3
All hay and pasture crops.....	13.4	11.5	9.5	10.0	7.4	12.5	12.0	11.0	13.0	14.4
CROP YIELDS, bushels per acre										
Corn.....	98.4	100.2	101.7	101.8	99.0	90.0	86.2	90.4	89.4	90.3
Soybeans.....	38.0	35.6	35.5	35.9	33.8	32.3	31.7	31.1	31.9	33.4
Wheat.....	48.1	45.3	44.8	48.7	45.1	36.7	36.3	40.2	39.0	32.3
Oats.....	75.7	74.3	78.6	70.0	75.7	66.3	67.8	67.8	58.1	63.0

Table 14. — Average Costs, Returns, and Financial Summary of Grain and Hog Farms by Size and Soil Rating, Southern Illinois, 1966

	GRAIN FARMS WITH SOIL RATING 5-55					HOG FARMS WITH SOIL RATING 5-55				
	180-259 37	260-339 41	340-499 67	500-749 47	750+ 24	Under 180 18	180-259 34	260-339 31	340-499 43	500+ 19
Range in size (total acres).....	214	304	412	604	1,015	133	220	293	403	731
Number of farms.....	189	261	346	507	832	114	176	221	314	527
Size of farm.....	36	36	34	33	34	29	35	32	33	33
Acres of tillable land.....	76	32	44	49	5	22	5	65	66	109
Soil rating on tillable land.....	..	2.2	1.6	2.6	..	..	..	1.0	..	..
Hens, number.....	66	81	122	111	340	50	140	127	206	268
Dairy cows, number.....	163	185	317	447	487	1,024	961	1,479	1,782	2,457
Beef produced, hundredweight.....										
Pork produced, hundredweight.....										
DOLLAR COSTS PER FARM										
Soil fertility.....	\$ 2,166	\$ 2,939	\$ 3,588	\$ 6,186	\$10,773	\$ 1,616	\$ 2,420	\$ 2,851	\$ 4,673	\$ 6,760
Buildings and fence.....	824	1,160	1,404	1,720	2,803	1,237	1,362	1,779	2,500	3,436
Machinery and equipment.....	4,593	5,763	7,437	9,768	14,597	4,209	5,459	7,528	9,537	12,379
Labor.....	3,600	4,230	4,680	5,836	7,475	4,127	4,202	4,565	5,879	7,716
Taxes.....	914	1,131	1,391	1,826	2,599	576	861	1,066	1,308	2,155
Seed expense.....	539	598	821	1,298	2,392	361	518	622	1,111	1,352
Crop expense.....	467	734	1,070	1,528	3,129	345	520	706	1,269	2,440
Livestock and miscellaneous expense.....	451	430	552	651	840	765	740	946	1,381	1,606
Interest charge on capital.....	3,159	4,475	5,524	7,518	12,654	2,628	3,821	4,665	6,576	9,859
Total nonfeed costs.....	16,713	21,460	26,467	36,331	57,262	15,864	19,903	24,728	34,234	47,703
Total value of feed fed.....	3,334	4,352	6,524	7,577	10,975	12,929	14,410	20,256	25,036	35,792
DOLLAR RETURNS PER FARM										
Livestock returns above feed cost.....	\$ 1,660	\$ 3,054	\$ 4,307	\$ 5,311	\$ 9,056	\$ 8,876	\$ 9,632	\$14,881	\$17,853	\$24,034
Feed and grain returns.....	15,400	22,274	27,679	39,243	65,274	9,056	14,760	18,023	24,803	37,870
Other cash income.....	621	682	1,041	1,330	1,622	405	652	673	1,268	2,074
Total value of farm production.....	17,681	26,010	33,027	45,884	75,952	18,337	25,044	33,577	43,924	63,978
Management returns.....	968	4,550	6,560	9,553	18,690	2,473	5,141	8,849	9,690	16,275
Farm production per \$1.00 of nonfeed costs.....	1.06	1.21	1.25	1.26	1.33	1.16	1.26	1.36	1.28	1.34
Farm production per man.....	16,447	20,670	23,452	27,668	34,655	14,382	19,265	24,569	25,340	28,435
FINANCIAL SUMMARY										
Cash sales of products and services.....	\$18,754	\$27,920	\$35,475	\$47,800	\$85,141	\$30,511	\$35,336	\$46,639	\$65,743	\$90,955
Sales of capital items.....	10	392	221	248	324	..	21	30	211	110
Total cash income.....	18,764	28,312	35,696	48,048	85,465	30,511	35,357	46,669	65,954	91,065
Purchased livestock.....	1,311	1,801	2,477	2,433	5,807	5,131	3,910	4,510	8,387	5,346
Purchased feed.....	1,020	1,536	2,430	2,960	3,984	8,244	7,894	12,762	15,193	22,612
Cash operating expenses.....	7,749	9,872	12,850	18,940	31,504	6,750	9,108	11,912	17,575	25,331
Purchase of capital items.....	3,150	4,383	5,729	10,038	13,133	5,282	5,485	7,406	11,099	14,767
Total cash expenditures.....	13,230	17,592	23,486	34,371	54,428	25,407	26,397	36,590	52,254	68,056
Cash balance.....	\$ 5,534	\$10,720	\$12,210	\$13,677	\$31,037	\$ 5,104	\$ 8,960	\$10,079	\$13,700	\$23,009
Inventory change.....	1,153	1,305	2,234	3,253	400	1,056	1,292	3,994	1,500	616
Capital change.....	513	504	1,276	4,048	4,804	2,716	2,056	2,919	5,122	7,471
Farm products consumed.....	105	122	225	224	202	145	220	216	261	365
Farm and family earnings.....	7,305	12,651	15,945	21,202	36,443	9,021	12,528	17,208	20,583	31,461
Labor and management earnings.....	3,851	7,814	9,845	12,781	21,992	5,786	8,403	12,083	12,992	19,635
Capital and management earnings.....	4,127	9,025	12,084	17,071	31,344	5,101	8,962	13,514	16,266	26,134
Capital and management earnings per acre.....	19.28	29.69	29.33	28.26	30.88	38.35	40.74	46.12	40.36	35.75

Table 14a. — Average Operating Costs, Investments, and Land Use of Grain and Hog Farms by Size and Soil Rating, Southern Illinois, 1966

	GRAIN FARMS WITH SOIL RATING 5-55					HOG FARMS WITH SOIL RATING 5-55				
	180-259 37	260-339 41	340-499 67	500-749 47	750+ 24	Under 180 18	180-259 34	260-339 31	340-499 43	500+ 19
Range in size (total acres).....										
Number of farms.....										
COSTS AND RETURNS PER TILLABLE ACRE										
Soil fertility.....	\$ 11.46	\$ 11.26	\$ 10.37	\$ 12.20	\$ 12.95	\$ 14.18	\$ 13.75	\$ 12.90	\$ 14.88	\$ 12.83
Buildings and fence.....	4.36	4.44	4.06	3.39	3.37	10.85	7.74	8.05	7.96	6.52
Machinery and equipment.....	24.30	22.08	21.49	19.27	17.54	36.92	31.02	34.06	30.38	23.49
Labor.....	19.05	16.21	13.53	11.51	8.98	36.20	23.88	20.66	18.72	14.64
Value of feed fed.....	17.64	16.67	18.86	14.94	13.19	113.41	81.88	69.13	79.73	67.92
Livestock returns above feed cost.....	8.78	11.70	12.45	10.48	10.89	77.85	54.73	67.33	56.86	45.61
Feed and grain returns.....	81.48	85.34	80.00	77.40	78.45	79.45	83.86	81.55	78.99	71.86
Total value of farm production.....	93.55	99.65	95.45	90.50	91.29	160.85	142.30	151.93	139.89	121.40
Total nonfeed costs.....	88.43	82.22	76.49	71.66	68.82	139.16	113.09	111.89	109.03	90.52
Management returns.....	5.12	17.43	18.96	18.84	22.47	21.69	29.21	40.04	30.86	30.88
SELECTED COST ITEMS										
Fertilizer, annual application.....	\$ 2,121	\$ 2,850	\$ 3,525	\$ 6,086	\$10,506	\$ 1,574	\$ 2,345	\$ 2,788	\$ 4,552	\$ 6,618
Lime and rock phosphate depreciation.....	45	89	63	100	267	42	75	63	121	142
Building repairs and maintenance.....	308	396	576	763	1,418	479	852	732	1,152	1,689
Building depreciation.....	516	764	828	957	1,385	758	510	1,047	1,348	1,747
Machinery and equipment depreciation.....	1,850	2,373	3,067	4,412	5,973	1,611	2,252	3,080	4,027	4,970
Machinery repairs and supplies.....	930	1,271	1,880	2,251	3,990	989	1,168	1,768	2,312	3,094
Machinery hire.....	442	343	453	556	861	359	486	732	816	1,118
Gasoline and oil.....	707	1,024	1,205	1,673	2,626	656	781	1,117	1,360	1,981
Unpaid labor charge.....	3,178	3,626	3,861	4,131	5,099	3,920	3,566	3,694	4,317	5,327
Hired labor charge.....	422	604	819	1,705	2,376	207	636	871	1,562	2,389
Total months of labor.....	12.9	15.1	16.9	19.9	26.3	15.3	15.6	16.4	20.8	27.0
Months of labor hired.....	1.5	2.1	3.1	5.1	8.1	1.3	2.9	3.2	5.4	8.0
FARM INVESTMENT										
Livestock inventory.....	\$ 4,027	\$ 5,074	\$ 7,249	\$ 7,794	\$16,783	\$ 8,545	\$12,172	\$14,322	\$22,022	\$31,322
Grain inventory.....	5,594	8,417	9,729	14,425	19,922	6,105	6,724	9,502	12,342	19,941
Remaining capital cost in:										
Machinery.....	6,472	10,466	11,399	14,840	21,966	5,215	7,194	9,040	11,961	14,523
Buildings and fence.....	5,014	6,591	7,178	8,739	12,363	6,629	7,786	9,112	12,358	12,966
Soil fertility.....	96	186	161	215	457	73	160	121	72	437
Auto.....	566	715	836	824	1,148	628	566	894	626	1,062
Value of land (current basis).....	46,336	64,703	83,260	117,698	207,404	24,905	43,613	52,138	75,311	126,100
Total farm investment.....	68,105	96,152	119,812	164,535	280,043	52,100	78,215	95,129	134,692	206,351
Total farm investment per acre.....	318.25	316.29	290.81	272.41	275.90	391.73	355.52	324.67	334.22	282.29
PERCENT OF TILLABLE LAND IN										
Corn and corn silage.....	40.4	39.9	40.3	42.8	48.5	57.3	48.3	50.7	50.9	42.9
Soybeans.....	29.7	30.6	30.4	27.0	21.5	12.1	18.1	20.6	20.3	17.2
Wheat.....	13.5	13.8	13.5	14.0	13.0	14.0	12.8	14.8	11.8	12.0
Other small grains.....	.9	.4	1.1	.4	.5	.8	1.6	.9	.6	1.2
Diverted acres.....	6.4	6.9	7.0	5.9	2.7	1.2	4.5	3.0	3.7	7.2
All hay and pasture crops.....	7.6	7.2	7.1	7.6	10.0	14.1	14.2	8.9	11.0	16.5
CROP YIELDS, bushels per acre										
Corn.....	79.2	78.2	75.0	75.1	73.4	73.6	77.1	75.3	72.6	72.6
Soybeans.....	24.2	26.4	23.7	22.9	26.4	23.4	26.2	23.7	22.4	25.2
Wheat.....	48.4	48.1	50.0	49.0	49.0	47.4	48.5	47.6	46.5	47.1

Table 15. — Average Costs, Returns, and Financial Summary of Dairy Farms by Size and Soil Rating, Northern and Southern Illinois, 1966

	DAIRY FARMS, NORTHERN ILLINOIS, WITH SOIL RATING OF					DAIRY FARMS, SOUTHERN ILLINOIS, WITH SOIL RATING OF								
	76-100	56-75	76-100	56-75	56-100	Under 180	180-259	76-100	56-75	56-100	Under 180	180-259	260-339	340+
	12	27	11	34	15	17	26	23	23	29	17	26	23	29
Range in size (total acres).....														
Number of farms.....	12	27	11	34	15	17	26	23	23	29	17	26	23	29
Size of farm.....	128	149	220	220	297	138	216	311	311	508	138	216	311	508
Acres of tillable land.....	118	126	200	184	265	114	194	255	255	403	114	194	255	403
Soil rating on tillable land.....	83	66	66	66	69	34	29	30	30	29	34	29	30	29
Hens, number.....	82	51	23	23	67	26	29	18	18	2	26	29	18	2
Dairy cows, number.....	28.1	33.5	47.3	38.2	50.7	30.9	35.5	42.8	42.8	59.5	30.9	35.5	42.8	59.5
Beef produced, hundredweight.....	10	6	3	28	7	73	41	2	2	25	73	41	2	25
Pork produced, hundredweight.....	17	164	208	200	384	73	41	84	84	191	73	41	84	191
DOLLAR COSTS PER FARM														
Soil fertility.....	\$ 1,311	\$ 1,031	\$ 2,039	\$ 1,375	\$ 2,211	\$ 1,055	\$ 1,934	\$ 2,721	\$ 2,721	\$ 4,140	\$ 1,055	\$ 1,934	\$ 2,721	\$ 4,140
Buildings and fence.....	1,528	2,027	2,869	2,302	3,514	1,100	1,585	2,471	2,471	3,008	1,100	1,585	2,471	3,008
Machinery and equipment.....	5,041	5,253	8,165	6,953	9,154	4,677	6,545	8,262	8,262	10,931	4,677	6,545	8,262	10,931
Labor.....	5,088	4,526	6,212	5,397	6,297	4,554	4,999	6,402	6,402	7,969	4,554	4,999	6,402	7,969
Taxes.....	1,195	1,226	2,018	1,701	2,308	694	924	1,264	1,264	1,668	694	924	1,264	1,668
Seed expense.....	444	411	773	627	968	351	572	693	693	1,014	351	572	693	1,014
Crop expense.....	164	170	644	430	785	182	226	514	514	667	182	226	514	667
Livestock and miscellaneous expense.....	1,463	1,230	1,707	1,355	1,710	943	1,301	1,467	1,467	1,901	943	1,301	1,467	1,901
Interest charge on capital.....	5,043	4,827	8,937	6,710	10,095	2,780	3,991	5,103	5,103	7,850	2,780	3,991	5,103	7,850
Total nonfeed costs.....	21,277	20,701	33,364	26,850	37,042	16,336	22,077	28,897	28,897	39,148	16,336	22,077	28,897	39,148
Total value of feed fed.....	12,734	13,271	18,812	15,783	22,230	10,822	12,666	15,087	15,087	22,452	10,822	12,666	15,087	22,452
DOLLAR RETURNS PER FARM														
Livestock returns above feed cost.....	\$ 9,411	\$ 10,504	\$ 13,451	\$ 10,635	\$ 15,823	\$ 9,146	\$ 11,241	\$ 14,249	\$ 14,249	\$ 18,830	\$ 9,146	\$ 11,241	\$ 14,249	\$ 18,830
Feed and grain returns.....	11,840	11,946	21,116	15,751	25,738	8,932	14,713	17,976	17,976	27,496	8,932	14,713	17,976	27,496
Other cash income.....	468	486	586	848	792	507	747	1,319	1,319	1,712	507	747	1,319	1,712
Total value of farm production.....	21,719	22,936	35,153	27,234	42,353	18,585	26,701	33,544	33,544	48,038	18,585	26,701	33,544	48,038
Management returns.....	442	2,235	1,789	3,384	5,311	2,249	4,624	4,647	4,647	8,890	2,249	4,624	4,647	8,890
Farm production per \$1.00 of nonfeed costs.....	1.02	1.11	1.05	1.01	1.14	1.14	1.21	1.16	1.16	1.23	1.14	1.21	1.16	1.23
Farm production per man.....	15,701	17,756	20,478	17,858	24,672	13,517	17,413	16,913	16,913	20,370	13,517	17,413	16,913	20,370
FINANCIAL SUMMARY														
Cash sales of products and services.....	\$ 26,993	\$ 25,189	\$ 40,135	\$ 30,767	\$ 46,603	\$ 21,583	\$ 29,565	\$ 36,378	\$ 36,378	\$ 53,025	\$ 21,583	\$ 29,565	\$ 36,378	\$ 53,025
Sales of capital items.....	70	383	60	187	5	455	109	232	232	78	455	109	232	78
Total cash income.....	27,063	25,572	40,195	30,954	46,608	22,038	29,674	36,610	36,610	53,103	22,038	29,674	36,610	53,103
Purchased livestock.....	1,236	1,669	2,104	1,921	3,114	541	814	1,358	1,358	2,258	541	814	1,358	2,258
Purchased feed.....	5,498	3,472	4,846	3,596	5,618	3,967	4,214	5,060	5,060	7,516	3,967	4,214	5,060	7,516
Cash operating expenses.....	8,959	8,636	14,137	11,221	16,115	6,845	9,949	14,253	14,253	18,578	6,845	9,949	14,253	18,578
Purchase of capital items.....	3,719	3,650	7,635	5,894	7,810	3,135	5,569	8,498	8,498	13,609	3,135	5,569	8,498	13,609
Total cash expenditures.....	19,412	17,427	28,722	22,632	32,657	14,488	20,546	29,169	29,169	41,961	14,488	20,546	29,169	41,961
Cash balance.....	\$ 7,651	\$ 8,145	\$ 11,473	\$ 8,322	\$ 13,951	\$ 7,550	\$ 9,128	\$ 7,441	\$ 7,441	\$ 11,142	\$ 7,550	\$ 9,128	\$ 7,441	\$ 11,142
Inventory change.....	1,245	2,464	1,477	1,641	4,175	1,231	1,801	3,287	3,287	4,348	1,231	1,801	3,287	4,348
Capital change.....	749	29	1,894	1,315	1,503	37	1,512	3,143	3,143	6,372	37	1,512	3,143	6,372
Farm products consumed.....	215	424	491	343	307	279	363	297	297	439	279	363	297	439
Farm and family earnings.....	9,860	11,062	15,335	11,621	19,936	9,097	12,804	14,168	14,168	22,301	9,097	12,804	14,168	22,301
Labor and management earnings.....	4,017	5,824	5,389	3,975	8,911	5,460	7,919	7,958	7,958	12,230	5,460	7,919	7,958	12,230
Capital and management earnings.....	5,485	7,062	10,726	7,094	15,406	5,029	8,615	9,750	9,750	16,740	5,029	8,615	9,750	16,740
Capital and management earnings per acre.....	42.85	47.40	48.75	32.25	51.87	36.44	39.88	31.35	31.35	32.95	36.44	39.88	31.35	32.95

Table 15a. — Average Operating Costs, Investments, and Land Use of Dairy Farms by Size and Soil Rating, Northern and Southern Illinois

	DAIRY FARMS, NORTHERN ILLINOIS, WITH SOIL RATING OF					DAIRY FARMS, SOUTHERN ILLINOIS, WITH SOIL RATING OF							
	76-100	56-75	76-100	56-75	56-100	Under 180	180-259	260-339	340+	Under 180	180-259	260-339	340+
	12	27	11	34	15	17	26	23	29	17	26	23	29
Range in size (total acres).....													
Number of farms.....													
COSTS AND RETURNS PER TILLABLE ACRE													
Soil fertility.....	\$ 11.11	\$ 8.18	\$ 10.20	\$ 7.47	\$ 8.34	\$ 9.25	\$ 9.97	\$ 10.67	\$ 10.27	\$ 9.65	\$ 9.17	\$ 10.67	\$ 10.27
Buildings and fence.....	12.95	16.09	14.34	12.51	13.26	9.65	8.17	9.69	7.46	41.03	33.74	32.40	27.12
Machinery and equipment.....	42.72	41.69	40.82	37.79	34.54	41.03	33.74	32.40	27.12	39.95	25.77	25.11	19.77
Labor.....	43.12	35.92	31.06	29.33	23.76	94.93	65.29	59.16	55.71	80.23	57.94	55.88	46.72
Value of feed fed.....	107.92	105.33	94.06	85.78	83.89	78.35	75.84	70.49	68.23	163.03	137.63	131.55	119.20
Livestock returns above feed cost.....	79.75	83.36	67.26	57.80	59.71	143.30	113.80	113.32	97.14	19.73	23.83	18.23	22.06
Feed and grain returns.....	100.34	94.81	105.58	85.60	97.12								
Total value of farm production.....	184.06	182.03	175.77	148.01	159.82								
Total nonfeed costs.....	180.31	164.29	166.82	145.92	139.78								
Management returns.....	3.75	17.74	8.95	2.09	20.04								
SELECTED COST ITEMS													
Fertilizer, annual application.....	\$ 1,311	\$ 1,006	\$ 2,007	\$ 1,367	\$ 2,209	\$ 1,011	\$ 1,785	\$ 2,605	\$ 3,993	44	149	116	147
Lime and rock phosphate depreciation.....	456	738	910	741	1,025	366	604	1,112	980	734	981	1,359	2,028
Building repairs and maintenance.....	1,072	1,289	1,959	1,561	2,489	1,672	2,643	3,434	4,722	1,046	1,443	1,957	2,792
Machinery and equipment depreciation.....	1,055	1,226	1,878	1,615	2,002	513	726	759	513	599	904	1,160	1,686
Machinery repairs and supplies.....	616	603	600	655	997	4,068	4,189	4,418	5,561	486	810	1,984	2,408
Gasoline and oil.....	871	789	1,040	1,039	1,366	16.5	18.4	23.8	28.3	2.0	3.4	8.0	8.4
Unpaid labor charge.....	4,375	4,000	4,609	4,527	4,530								
Hired labor charge.....	713	526	1,603	870	1,767								
Total months of labor.....	16.6	15.5	20.6	18.3	20.6								
Months of labor hired.....	2.0	2.2	5.2	3.2	5.5								
FARM INVESTMENT													
Livestock inventory.....	\$ 9,819	\$ 10,725	\$ 16,689	\$ 13,674	\$ 18,419	\$ 8,489	\$ 10,580	\$ 12,192	\$ 19,764	4,413	6,893	7,837	11,355
Grain inventory.....	6,947	5,957	11,874	8,275	13,014	6,931	9,522	12,781	18,831	7,168	11,285	13,651	21,042
Remaining capital cost in:						107	394	246	244	769	502	776	811
Machinery.....	5,511	6,962	13,281	9,605	13,399	27,698	41,010	56,340	88,179	55,575	80,186	103,823	160,226
Buildings and fence.....	12,506	16,712	24,159	20,293	35,187	402.72	371.23	333.84	315.41	40.8	36.9	36.0	41.3
Soil fertility.....	560	38	84	38	4	8.2	15.2	12.7	17.2	9.9	13.2	11.6	14.7
Auto.....	73,065	522	812	554	706	.7	2.2	1.5	.9	39.0	27.6	29.0	20.4
Value of land (current basis).....	108,408	100,216	189,979	141,550	212,017	71.0	73.2	76.8	59.8	25.5	22.6	19.4	18.8
Total farm investment.....	846.94	672.59	863.54	643.41	713.86	44.7	48.1	45.8	45.5	44.7	48.1	45.8	45.5
Total farm investment per acre.....						...	...	...	...	...	...	...	...
PERCENT OF TILLABLE LAND IN													
Corn and corn silage.....	51.3	45.8	55.5	44.3	48.0	40.8	36.9	36.0	41.3	8.2	15.2	12.7	17.2
Soybeans.....	5.1	...	3.1	3.5	9.0	9.9	13.2	11.6	14.7	9.9	13.2	11.6	14.7
Wheat.....	11.8	15.3	11.3	14.1	11.5	.7	2.2	1.5	.9	3.9	2.2	3.9	2.2
Other small grains.....	3.8	...	8	4.8	4.4	39.0	27.6	29.0	20.4	...	...	...	...
Diverted acres.....	26.6	38.1	26.2	31.2	25.8	...	...	...	...	...	...	...	...
All hay and pasture crops.....						...	...	...	...	...	...	...	...
CROP YIELDS, bushels per acre													
Corn.....	94.6	92.8	97.5	85.3	97.6	71.0	73.2	76.8	59.8	25.5	22.6	19.4	18.8
Soybeans.....	39.9	...	33.4	27.1	29.3	44.7	48.1	45.8	45.5	44.7	48.1	45.8	45.5
Wheat.....	51.0	...	77.1	67.7	68.1	...	...	...	...	...	...	...	...
Oats.....	79.1	69.6	77.1	67.7	68.1	...	...	...	...	...	...	...	...

Table 16. — Average Costs, Returns, and Financial Summary of Beef Cattle and Poultry Farms by Size and Soil Rating, Northern and Southern Illinois, 1966

	BEEF CATTLE FARMS, NORTHERN ILLINOIS SOIL RATING 56-100					BEEF CATTLE FARMS, SOUTHERN ILLINOIS SOIL RATING 5-55					POULTRY FARMS, NORTHERN ILL. SOIL RATING 56-100
	Under 180 18	180-259 36	260-339 43	340-499 46	500+ 35	180-259 9	260-339 11	340-499 7	500+ 18	Under 260 8	
Range in size (total acres).....	155	227	301	410	677	220	293	428	692	191	
Number of farms.....	138	199	269	367	546	171	251	326	490	182	
Size of farm.....	75	74	76	77	74	28	31	33	38	82	
Acres of tillable land.....	41	3	32	45	7	69	118	136	1	4,758	
Soil rating on tillable land.....	.1	.8	1.6	1.4	1.32	464	932	639	1,377	38	
Hens, number.....	596	873	1,107	1,427	1,832	263	637	386	708	216	
Dairy cows, number.....	295	443	640	679	1,226						
Beef produced, hundredweight.....											
Pork produced, hundredweight.....											
DOLLAR COSTS PER FARM											
Soil fertility.....	\$ 1,369	\$ 2,776	\$ 4,015	\$ 5,376	\$ 8,127	\$ 2,130	\$ 2,732	\$ 4,188	\$ 7,632	\$ 2,742	
Buildings and fence.....	1,706	2,686	3,118	4,403	5,541	1,577	2,578	2,042	3,286	2,683	
Machinery and equipment.....	4,784	6,492	8,445	10,698	14,810	4,628	7,876	8,676	12,971	8,335	
Labor.....	3,957	4,592	5,394	6,685	9,844	4,090	4,941	4,619	7,701	6,209	
Taxes.....	1,257	1,971	2,416	3,191	4,411	4,090	1,376	1,599	2,202	1,605	
Seed expense.....	470	687	1,028	1,268	1,935	415	675	1,200	1,388	644	
Crop expense.....	623	751	999	1,549	2,553	374	1,006	1,208	1,402	934	
Livestock and miscellaneous expense.....	739	923	1,196	1,645	2,096	494	938	1,013	1,122	929	
Interest charge on capital.....	5,945	8,744	11,519	16,121	21,713	4,215	6,657	7,060	11,083	7,528	
Total nonfeed costs.....	20,850	29,622	38,130	50,936	71,030	18,873	28,779	32,205	48,787	31,609	
Total value of feed fed.....	15,716	23,505	31,613	39,791	52,219	12,498	23,326	17,987	33,584	20,789	
DOLLAR RETURNS PER FARM											
Livestock returns above feed cost.....	\$ 3,142	\$ 5,822	\$ 8,369	\$ 8,060	\$15,918	\$ 5,430	\$14,129	\$ 6,420	\$11,980	\$17,983	
Feed and grain returns.....	13,948	21,553	31,880	43,690	57,675	13,852	22,491	26,865	40,536	20,397	
Other cash income.....	486	659	1,160	1,011	1,821	912	429	600	1,578	576	
Total value of farm production.....	17,576	28,034	41,409	52,761	75,414	20,194	37,049	33,885	54,094	38,956	
Management returns.....	-3,274	-1,588	3,279	1,825	4,384	1,321	8,270	1,680	5,307	7,347	
Farm production per \$1.00 of nonfeed costs.....	.84	.95	1.09	1.04	1.06	1.07	1.29	1.05	1.11	1.23	
Farm production per man.....	16,100	22,132	27,606	29,311	30,574	16,484	24,977	23,236	23,018	23,257	
FINANCIAL SUMMARY											
Cash sales of products and services.....	\$41,853	\$57,644	\$80,022	\$111,260	\$152,557	\$31,399	\$70,198	\$51,232	\$99,488	\$57,828	
Sales of capital items.....	57	53	253	256	169	...	52	186	535	59	
Total cash income.....	41,910	57,697	80,275	111,516	152,726	31,399	70,250	51,418	100,023	57,887	
Purchased livestock.....	19,410	25,191	31,490	46,605	66,469	13,509	30,628	12,542	37,693	5,295	
Purchased feed.....	4,851	7,466	11,243	14,339	17,624	3,230	12,469	6,179	13,622	14,458	
Cash operating expenses.....	8,295	12,453	16,515	22,283	34,596	7,662	12,299	16,121	20,155	13,707	
Purchase of capital items.....	2,787	5,093	7,832	9,199	14,488	6,862	7,599	9,575	8,413	8,408	
Total cash expenditures.....	35,343	50,203	67,080	92,426	133,177	31,263	62,995	44,417	85,883	41,868	
Cash balance.....	\$ 6,567	\$ 7,494	\$13,195	\$19,090	\$19,549	\$ 136	\$ 7,255	\$ 7,001	\$14,140	\$16,019	
Inventory change.....	-252	2,729	3,683	2,030	6,553	5,226	9,610	1,005	5,704	675	
Capital change.....	-180	519	1,645	960	4,261	3,537	1,695	3,565	747	2,775	
Farm products consumed.....	236	318	437	415	397	308	338	369	217	206	
Farm and family earnings.....	6,371	11,060	18,960	22,495	30,760	9,207	18,898	11,940	20,808	19,675	
Labor and management earnings.....	309	1,904	6,865	5,405	7,980	4,401	11,579	4,560	8,574	10,947	
Capital and management earnings.....	2,671	7,156	14,798	17,946	26,097	5,536	14,927	8,740	16,390	14,875	
Capital and management earnings per acre	17.23	31.52	49.16	43.77	38.55	25.16	50.97	20.42	23.68	77.88	

Table 16a. — Average Operating Costs, Investments, and Land Use of Beef Cattle and Poultry Farms by Size and Soil Rating, Northern and Southern Illinois, 1966

	BEEF CATTLE FARMS, NORTHERN ILLINOIS SOIL RATING 56-100				BEEF CATTLE FARMS, SOUTHERN ILLINOIS SOIL RATING 56-100				POULTRY FARMS, NORTHERN ILL. SOIL RATING 56-100	
	Under 180 18	180-259 36	260-339 43	340-499 46	500+ 35	180-259 9	260-339 11	340-499 7		500+ 18
Range in size (total acres).....	Under 180	180-259	260-339	340-499	500+	180-259	260-339	340-499	500+	Under 260
Number of farms.....	18	36	43	46	35	9	11	7	18	8
COSTS AND RETURNS PER TILLABLE ACRE										
Soil fertility.....	\$ 9.92	\$ 13.95	\$ 14.93	\$ 14.65	\$ 14.88	\$ 12.46	\$ 10.88	\$ 12.85	\$ 15.58	\$ 15.07
Buildings and fence.....	12.36	13.50	11.59	12.00	10.15	9.22	10.27	8.10	6.71	14.74
Machinery and equipment.....	34.67	32.62	31.39	29.15	27.12	27.06	31.38	26.61	26.47	45.80
Labor.....	28.67	23.08	20.05	18.22	18.03	23.92	19.69	14.17	15.72	34.12
Value of feed fed.....	113.88	118.12	117.52	108.42	95.64	73.09	92.93	55.17	68.54	114.23
Livestock returns above feed cost.....	22.77	29.26	31.11	21.96	29.15	31.75	56.29	19.69	24.45	98.81
Feed and grain returns.....	101.07	108.30	118.51	119.05	105.63	81.01	89.61	82.41	82.73	112.07
Total value of farm production.....	127.36	140.87	153.94	143.76	138.12	118.09	147.61	103.94	110.40	214.04
Total nonfeed costs.....	151.08	148.85	141.75	138.79	130.09	110.37	114.66	98.79	99.57	173.68
Management returns.....	-23.72	-7.98	12.19	4.97	8.03	7.72	32.95	5.15	10.83	40.36
SELECTED COST ITEMS										
Fertilizer, annual application.....	\$ 1,296	\$ 2,749	\$ 3,959	\$ 5,260	\$ 8,075	\$ 2,073	\$ 2,607	\$ 4,093	\$ 7,530	\$ 2,689
Lime and rock phosphate depreciation.....	73	27	56	116	52	57	125	95	102	53
Building repairs and maintenance.....	561	899	803	1,129	1,898	326	744	949	1,496	786
Building depreciation.....	1,145	1,787	2,315	3,274	3,643	1,251	1,834	1,693	1,790	1,897
Machinery and equipment depreciation.....	1,491	2,452	3,270	4,220	5,904	1,795	3,606	3,812	4,779	3,258
Machinery repairs and supplies.....	1,192	1,459	1,813	2,445	3,727	821	1,455	2,046	3,408	1,761
Machinery hire.....	749	683	1,060	1,135	1,434	533	461	385	1,655	1,782
Gasoline and oil.....	674	1,037	1,286	1,693	2,250	805	1,462	1,588	1,923	1,091
Unpaid labor charge.....	3,700	3,904	4,162	4,549	4,663	3,671	3,971	3,200	4,418	4,800
Hired labor charge.....	257	688	1,232	2,136	5,181	3,419	970	1,419	3,283	1,409
Total months of labor.....	13.1	15.2	18.0	21.6	29.6	14.7	17.8	17.5	28.2	20.1
Months of labor hired.....	.8	2.2	4.1	6.4	14.0	1.6	3.6	6.1	12.4	4.1
FARM INVESTMENT										
Livestock inventory.....	\$17,126	\$27,042	\$33,481	\$52,182	\$67,021	\$17,600	\$25,430	\$26,007	\$42,944	\$ 9,576
Grain inventory.....	10,027	13,636	17,694	24,498	33,774	8,898	14,580	9,627	18,890	11,813
Remaining capital cost in:										
Machinery.....	6,213	9,253	13,521	17,028	21,224	7,497	12,074	12,740	17,710	10,770
Buildings and fence.....	13,215	21,813	26,455	36,666	41,174	11,039	16,526	13,006	15,246	19,293
Soil fertility.....	153	51	131	276	75	136	243	290	226	113
Auto.....	532	677	726	937	1,407	927	718	734	1,055	1,096
Value of land (current basis).....	77,746	109,883	149,967	205,670	295,810	36,237	62,069	82,903	132,975	109,208
Total farm investment.....	125,012	182,355	241,975	337,257	460,485	82,334	131,640	145,307	229,046	161,869
Total farm investment per acre.....	806.53	803.33	803.90	822.58	680.18	374.25	449.28	339.50	330.99	847.48
PERCENT OF TILLABLE LAND IN										
Corn and corn silage.....	56.2	61.9	63.6	71.3	59.7	49.3	49.9	40.0	49.3	63.4
Soybeans.....	2.8	7.4	8.4	6.6	10.5	7.3	11.9	16.1	16.7	17.1
Wheat.....	.7	...	.6	.6	3.2	11.0	14.3	12.3	11.2	.6
Other small grains.....	16.4	12.1	9.4	6.7	6.0	1.2	1.3	1.6	.6	4.1
Diverted acres.....	2.3	1.4	3.5	3.3	4.2	2.3	3.8	3.9	4.0	9.1
All hay and pasture crops.....	20.6	16.4	14.2	11.0	15.1	28.9	17.1	22.9	17.4	5.7
CROP YIELDS, bushels per acre										
Corn.....	100.6	98.6	106.9	99.4	94.9	74.6	86.3	85.8	77.9	99.3
Soybeans.....	33.1	31.9	32.7	32.1	35.1	26.7	26.7	28.4	24.1	30.6
Wheat.....	24.2	34.8	42.5	55.5	43.6	45.2	45.8	50.7	48.3	48.8
Oats.....	70.3	70.3	77.8	75.0	71.5	...	...	...	...	65.4

This report results from the cooperation of state and local Farm Bureau Farm Management Associations and staff members of the Department of Agricultural Economics and the Cooperative Extension Service at the University of Illinois. The information is for farmers and workers in farm management extension, teaching, and research and for others assisting Illinois farmers in business analysis. The report supplements work of FBFM fieldmen by providing comparative standards for farmers enrolled in the service.

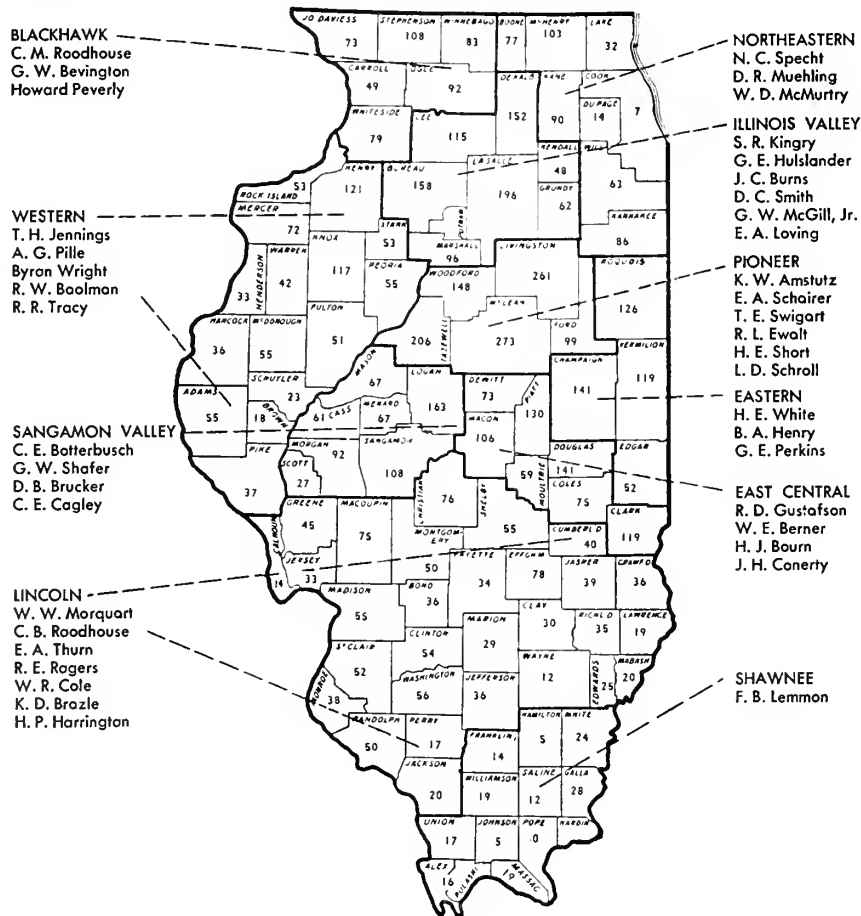
The cooperative effort of the university staff working with 42 fieldmen who are supported largely by fees paid by farmers makes this educational and service program possible. By participating in this program each farmer-cooperator (6,635 reporting this year) increases his chances for successful farm operation and contributes to the improvement of Illinois agriculture.

Each year more farmers are adopting improved production techniques based on studies of their farm records. Specialized crop and livestock farms are becoming more common. The Illinois Farm Business Record is now being revised to facilitate allocating nonfeed costs to the individual farm enterprises. This revision is also being adapted to electronic data processing methods as records become more important for the individual farmer in order to evaluate his competitive position in the farming business.

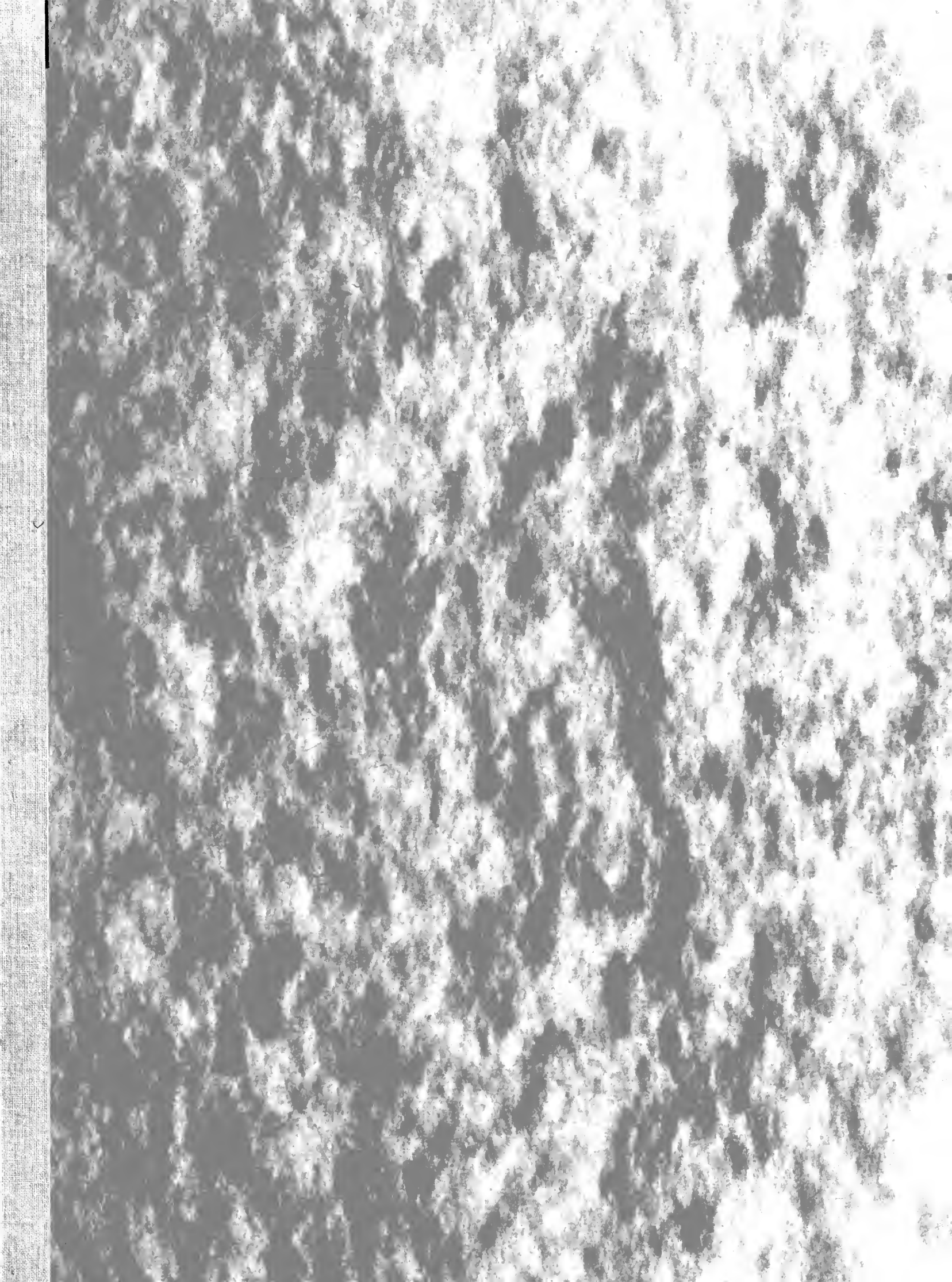
We hope that this 42nd Annual Report will be used to contribute to more profitable farm operation and a more desirable level of family living.

Harold G. Halcrow, Head
Department of Agricultural Economics

ASSOCIATIONS, FIELDMEN, AND COOPERATORS ENROLLED



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