

91st ANNUAL

SUMMARY OF
ILLINOIS
FARM BUSINESS
RECORDS
2015

Commercial Farms
Production Costs
Income
Investments



UNIVERSITY OF ILLINOIS
EXTENSION

COLLEGE OF AGRICULTURAL, CONSUMER
AND ENVIRONMENTAL SCIENCES

C1388-16

Contents

Source of data	1	Livestock enterprises	12
Uses for this report.....	1	Patterns and fluctuations	12
Terms and accounting methods.....	2	Hog enterprises.....	13
Farm business trends in 2015.....	3	Feeder cattle and feeder pig finishing enterprises	15
Crop production	3	Dairy enterprises	17
Livestock production.....	4	Beef-cow herds.....	18
Labor and management income	4	Sheep enterprises.....	20
Financial characteristics	6	Appendix A: Tables 19–23a.....	21
Family living expenditures.....	7	Operators’ share of labor and management income.....	32
Income changes on Illinois farms	8	Selected FBFM factors—2006 to 2015	33
		Financial characteristics of Illinois FBFM grain farms	34

In-Text Tables

1	Average Prices Received and Paid by Farm Recordkeepers for Grain, Livestock, and Milk	4
2	Operator’s 5-Year Average Share of Labor and Management Income by Size and Type of Farm, 2011 Through 2015	5
3	Financial Characteristics of Illinois Farms for 2015 by Type of Farm.....	6
4	Average Sources and Uses of Funds Over a 4-Year Period and by Noncapital Living Expenses for Selected Illinois Farms	7
5	Percent of Illinois Farms and Operator Net Farm Income by Interest Paid as a Percent of Gross Farm Returns, 2011 Through 2015	8
6	Averages for Selected Total Farm Items on 800- to 1,199-Acre Illinois Grain Farms	9
7	Average Cost per Tillable Acre to Grow Corn and Soybeans on Central Illinois Grain Farms with No Livestock	10
8	Averages for Selected Total Farm Items on Illinois Hog, Beef, and Dairy Farms.....	11
9	Returns per \$100 of Feed Fed to Different Classes of Livestock	13
10	Variations in Returns to Livestock Enterprise Units, 2011 through 2015	14
11	Hog Enterprises, 2015 Averages per Farm	15
12	Average Costs and Returns for Farrow-to-Finish Hog Enterprises, 2012 Through 2015	15
13	Feeder Cattle and Feeder Pig Finishing Enterprises, 2015 Averages per Farm	16
14	Average Costs and Returns for Beef-Feeding Enterprises, 2012 Through 2015	17
15	Dairy Cattle Enterprises, 2015 Averages Per Farm.....	18
16	Average Milk Production Costs and Returns by Size of Herd, 2013 Through 2015	19
17	Beef-Cow Enterprises, 2015 Averages per Farm	19
18	Sheep Enterprises, 2015 Averages per Farm (Native Flocks).....	20

Summary of Illinois Farm Business Records for 2015
was prepared by B.M. Krapf, D.D. Raab, and B.L. Zwilling
of the Department of Agricultural and Consumer Economics,
College of Agricultural, Consumer and Environmental Sciences.

Copyright © 2016, Board of Trustees, University of Illinois

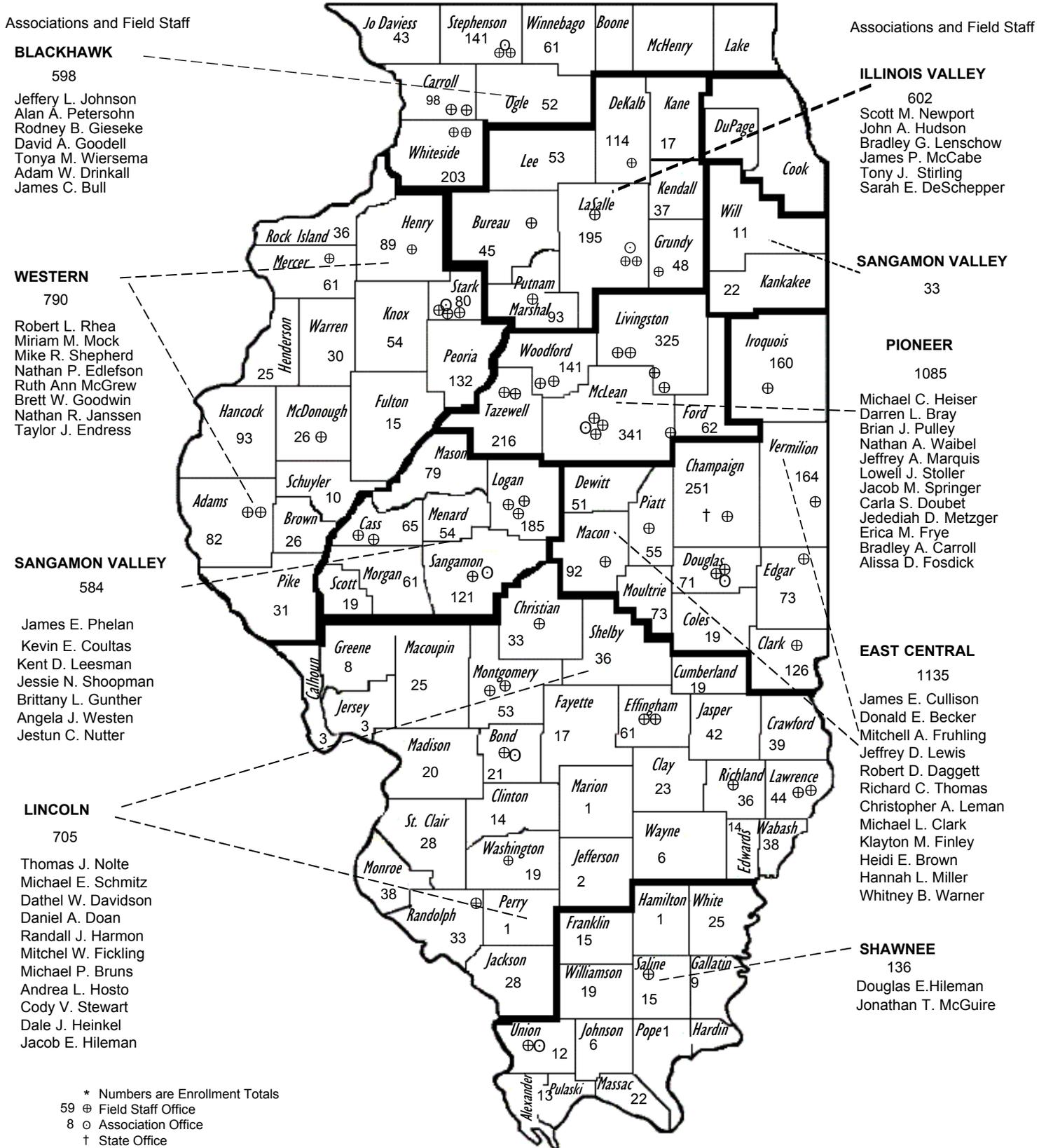
Issued in furtherance of Cooperative Extension Work Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. George F. Czapar, Director, University of Illinois Extension, University of Illinois at Urbana-Champaign.
University of Illinois Extension provides equal opportunities in programs and employment.



ILLINOIS FARM BUSINESS FARM MANAGEMENT ASSOCIATION

cooperating with nine local farm management associations and the
 Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences,
 University of Illinois at Urbana-Champaign

STATE TOTAL --- 5,668 cooperating farmers and 63 member field staff*
 July 1, 2016, distribution of cooperators by counties and associations



SOURCE OF DATA

This report is based on data obtained from farm business records on 5,668 Illinois farms. It is the 91st annual summary of such records obtained from farmers cooperating with University of Illinois Extension, the Department of Agricultural and Consumer Economics, and the Illinois Farm Business Farm Management (FBFM) Association.

At present, about one out of every five Illinois commercial farms with over 1,000 acres or total farm sales over \$250,000 is enrolled in this service. Except for 1988, 2000, and 2015, enrollment has declined slightly each year since 1982. One factor contributing to this decline has been the continued decline in the number of farms in the state. In 2015, 8 associations in 102 counties were being served by 62 full-time field staff specialists and one half-time field staff specialist. Participation in this farm business analysis program is voluntary; cooperating farmers pay a fee for the educational services. The program's development since 1940 is shown below.

Year	Associa- tions	Counties involved	Field staff employed	Farmers involved
1940.....	3	23	3	680
1950.....	8	59	15	2,760
1960.....	10	100	33	5,494
1970.....	10	102	42	6,553
1980.....	10	102	67	8,205
1990.....	10	102	70	7,192
2000.....	9	102	66	6,647
2010.....	9	102	61	5,775

Estimates for 2015 indicate that over 95 percent of the 5,668 farms covered in this report have total sales over \$100,000. In the 2012 Census of Agriculture, farms selling \$100,000 or more accounted for 96 percent of all sales from Illinois farms.

The segment of Illinois agriculture that includes farms with more than \$100,000 in total sales is often referred to as "commercial farming." In 2012, there were 24,809 farms in Illinois with sales of \$100,000 or more. The figures that follow, taken from the 2012 Census of Agriculture, show that these farms represented about 60 percent of the 40,946 farms with more than \$10,000 in sales. These farms produced more almost 96 percent of the agricultural products sold from Illinois farms.

Total farm sales (\$)	% of all farms, \$10,000+ sales	% of census farms enrolled	No. of farms enrolled
10,000–99,999	39.4	1.4	225
100,000–249,999	21.1	5.5	473
250,000–499,900	16.2	12.1	806
500,000+	23.3	31.4	2,993

Most of the 2015 recordkeeping farms covered in this report are within the larger groups. There were 16,172 farms identified by the census with more than \$250,000 total sales

in 2012. About a fourth of these farms (23.4 percent) were enrolled in the Illinois FBFM Association. Of the 8,637 farms in the group having from \$100,000 to \$249,999 in total sales, only 5.5 percent participated in the farm record program. Only about 1 percent of the farms enrolled in FBFM had less than \$100,000 in sales. The average acreage size of all farms larger than 180 acres enrolled in FBFM in 2015 was 1,177 acres, compared with an average of 851 acres for all Illinois farms sorted similarly.

This report presents only the operator's share of income and expenses for the farm business. The group averages are 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 recordkeeping farms may be used with reasonable confidence, even though the recordkeeping 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, choosing a proper combination of crop and livestock enterprises, and effective business administration of the farming operations. A basic analysis of a farm business involves a careful study of past performance to detect problems and strengths in the farming operation. Also involved is the process of planning and developing future operations to realize the full potential of the land, labor, and capital resources available and to improve the 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 to develop plans for future farming operations. This report summarizes the information so that specialists involved in agricultural extension, research, teaching, and agribusiness activities may use the data to help them perform their duties effectively. The definition of terms and accounting measures on the following pages will be of assistance in using the data.

The first part of the report (Tables 1 to 8) summarizes selected recent changes in farm income on Illinois farms. It also identifies economic forces and factors that contribute to these changing trends. Some of the data used in the text are drawn from previous issues of this report.

The second section (Tables 9 to 18) presents data on livestock enterprises. This information is the total of operator and landlord data. The comprehensive and detailed information contained in this section is a valuable resource for anyone interested in livestock production. Because part of the feed grains and roughages produced on Illinois farms is marketed through livestock, the margins of income from livestock enterprises are important in interpreting the economic results of some farming operations.

The third section (Tables 19 to 23a) discusses costs, returns, financial summaries, land use, and crop yields for different sizes and types of farms in northern, central, and southern Illinois. This section contains only the operator data. It reports on the 33 percent of grain farms that received the highest return to management per dollar of cost and the 33 percent that received the lowest return. It also reports on hog farms with over and under 6,000 hundredweight of pork produced.

TERMS AND ACCOUNTING METHODS

Soil productivity rating

This rating is an average index representing the inherent productivity of all tillable land on the farm. Individual soil types on each farm are assigned an index ranging downward from 100. All ratings were revised in 1971 to reflect a basic level of management as outlined in University of Illinois Extension Circular 1156, *Soil Productivity in Illinois*. New land values were assigned in 1980. The adjustment of land values brings them to current market levels.

Operator(s)

This is the person providing labor and management to the active farming operation. If months of operator labor are 12 or less, then there is one operator for the farm. If months of operator labor are more than 12, then the number of operators is determined by dividing the months of operator labor by 12.

Hay equivalents, tons

To get the equivalents, we took the total of 1.0 multiplied by the pounds of hay, 0.45 multiplied by the pounds of hay silage, 0.33 multiplied by the pounds of corn silage, and 24 multiplied by the pasture days per feed unit (which are also multiplied by the total feed units per cow). This total was then divided by 2,000.

Sampling technique

Data from all records certified usable for analysis by field staff were aggregated by size (acres or number of livestock), type of farm, value of feed fed, and soil productivity rating.

Type of farm

Grain farms are farms where the value of the feed fed was less than 40 percent of the crop returns and where the value of feed fed to dairy or poultry was not more than one-sixth of the crop returns. Since 1973, farms with livestock have been essentially excluded from the sample of grain farms in northern and central Illinois in Table 19; since 1978, from the grain farm sample in Table 20; and since 1982, from the grain farm sample in Table 6.

Hog or beef farms are farms where the value of feed fed was more than 40 percent of crop returns and where

either the hog or beef-cattle enterprise received more than one-half the value of feed fed.

Dairy farms are farms where the value of feed fed was more than 40 percent of crop returns and where the dairy enterprise received more than one-third the value of feed fed.

Cost items

The **value of feed fed** includes on-the-farm grains with the following average prices per bushel: corn, \$3.70; oats, \$2.71; and wheat, \$4.24. Commercial feeds were priced at actual cost, hay and silage at farm values, and pasture at 40 cents per animal unit per pasture day. A "pasture day" represents an intake of about 20 to 25 pounds of dry matter, defined as 16 pounds of total digestible nutrients (TDN) from the pasture used.

Cash operating expenses include the annual cash outlays for the following nondepreciable items:

- Fertilizer
- Pesticides
- Seeds (including homegrown seeds)
- Machinery repairs
- Machine hire and lease
- Fuel and oil
- Farm share of electricity, telephone, and light vehicle expenses
- Building repairs and rents
- Drying and storage
- Hired labor
- Livestock expenses
- Taxes
- Insurance
- Miscellaneous expenses

Purchased feed, grain, and livestock are not included because they have been deducted from gross receipts in computing the value of farm production. The interest paid is not included because an interest charge is made on the operator's total farm investment. But the total interest paid by the operator on all debt—operating debt plus longer-term debt—is listed separately in Tables 19 to 23a under "Selected returns and costs per operator tillable acre."

Power and equipment includes depreciation, repairs, machine hire and lease, fuel and oil, and the farm share of expenses for electricity, telephone, and light vehicles.

Labor includes hired labor plus family and operator's labor, charged in 2015 at \$3,900 per month.

A change in the method of calculating the **depreciation deduction** for machinery and buildings was adapted in 2003 and continued to be used in 2015. Until 2003, the depreciation deduction was based on Internal Revenue Service guidelines; the depreciation expense used for analysis purposes was the same as that used for completing the tax return. As changes in tax law allowed larger and larger write-offs in the year machinery and buildings were purchased, the depreciation method used for analysis was changed to more closely reflect the actual decline in value of machinery and buildings. The new method does not use the additional bonus depreciation or expense election write-off in the year of purchase; it uses instead a slightly longer life and a lower rate than the IRS-allowed methods

for tax depreciation. The change in methods does not increase or decrease the total amount of depreciation that can be claimed on an item; it is simply an issue of timing as to when the depreciation is deducted.

Interest on nonland capital covers the interest charged at 4.0 percent on the sum of one-half the average of the January 1 and December 31 inventory values of grain, plus the average of the January 1 and December 31 inventories of remaining capital investment in livestock, machinery and light vehicles, buildings, and soil fertility, plus one-half the cash operating expense, exclusive of interest paid. In Tables 6 and 8, this charge is combined with the land charge or net rent and labeled “interest charge on capital.” The average cash interest paid per farm by all farm operators was \$27,378.

Land charge or net rent is the bare land priced at current land values multiplied by 2.10 percent to reflect net rents received by the landlord.

Total nonfeed costs include cash operating expenses, adjustments for accrued expenses and farm produced inputs, depreciation, and charges for unpaid labor and interest including land charge. Purchased feeds and livestock are omitted.

The **basic value of land** (the **current basis**) is adjusted each year according to the index of land prices in Illinois as reported by the United States Department of Agriculture (USDA). The land value index for 2015, using a base earning value of 1979 = 100, was 366.

The **capital account adjustment** includes the gain or loss on capital items sold, less amortization deduction.

Return items

Crop returns are the sum of grain, seed, and feed sales; the value of homegrown seed used; the value of all feed fed (except milk); government farm program payments received and accrued; crop insurance payments received and accrued; and the change in value for feed and grain inventories, less the value of feed and grain purchased.

The **total value of farm production** is the cash and accrued value of sales of products and services, less the cost of purchased feed, grain, and livestock, plus the change in inventory values for grain and livestock, plus the value of farm products used.

Net farm income is the value of farm production, less total operating expenses and depreciation, plus gain or loss on machinery or buildings sold. Net farm income includes the return to the farm and family for unpaid labor, the interest on all invested capital, and the returns to management.

Labor and management income per operator is total net farm income, less the value of family labor and the interest—including net rent—charged on all capital invested. This figure, as the residual return to all unpaid operators’ labor and management efforts, is divided by the months of unpaid operator labor and multiplied by 12 to reflect income for one operator on multiple-operator farms.

Capital and management earnings are net farm income, less a charge for all unpaid labor. **Management return** is the residual surplus after a charge for unpaid labor and the interest or land charge on capital are deducted from net farm income.

Farm production per man year is the value of farm production, including the landlord’s share of value of farm production divided by the outcome of total months of labor divided by 12. If total months of labor are less than 12, then the divisor is equal to one.

FARM BUSINESS TRENDS IN 2015

Illinois agriculture is based largely on crop production, especially corn and soybeans. In 2015, Illinois ranked first in the nation in soybean production and second in corn production when measured in dollars. The total value of corn produced on Illinois farms was 15 percent of total U.S. production, while the total value of soybeans produced on Illinois farms was 14 percent of total U.S. production.

Crop production

Year-to year variations in net income are related to the growing season, crop yields, grain prices, and acres in high-cash-value crops. Normal growing conditions in the first part of 2015 led to an ideal start to planting, with 15 percent of the corn crop being planted by April 19. As of April 26, 31 percent of the corn crop was planted, which was below the historical 5-year average of 37 percent but above the 2014 average of 28 percent. Ninety-four percent of the corn was reported as planted by May 17, compared with 83 percent the year before and 82 percent for the 5-year average. Soybeans were reported 88 percent planted by June 7, compared to 91 percent in 2014 and 83 percent for the 5-year average. A more normal growing season led to regular crop development. In June of 2015, Illinois received more than 5 inches of rain above average, which led to some drowned-out areas in fields and some lower yields than in 2014. Moderate temperatures and a dry fall allowed corn and soybean harvest to run above 2014 and the five-year average.

Crop yields. Given the season’s normal yearly temperature and above-average precipitation, corn yields were lower in 2015 than in 2014. Excessive rains in June decreased yields in all parts of the state. The average corn yield for Illinois farms reported by the Illinois Crop Reporting Service was 175 bushels per acre, 25 bushels below the previous year’s yield, which was the highest yield on record. The average for 2011 through 2015 is 163 bushels per acre. Farmers participating in the Illinois FBFM program averaged 190 bushels of corn per acre in 2015, 24 bushels below the year before.

Soybean yields for all Illinois farms were reported at 56 bushels per acre in 2015. This was the same as in 2014 as

well as 6 bushels more than the 5-year average and tied for the highest on record. FBFM recordkeeping farms averaged 61 bushels of soybeans per acre in 2015, 5 bushels above their 5-year average and tied for the highest on record. Crop yields on the 5,668 recordkeeping farms covered in this report averaged 9 percent above the average for all Illinois farms.

Grain prices. Sales for corn and soybeans have been divided between old and new crop sales. The prices received for old-crop soybeans sold during the year averaged \$2.89 to \$3.08 per bushel below 2014 prices (Table 1). Old-crop corn prices received in 2015 averaged 70 cents to 74 cents below those received in 2014. New-crop prices received were mostly lower for soybeans and corn compared to the year before. The price received for new-crop corn averaged 5 cents lower to 15 cents higher than the year before, and new-crop soybeans averaged \$1.25 to \$1.62 lower. Wheat sold for \$1.19 to \$1.33 less per bushel during the year. Prices received for old-crop corn sold in 2015 were above their inventory prices, resulting in a positive marketing margin. Old-crop soybeans sold for less than their inventory price, resulting in a negative marketing margin. The year-end, new-crop inventory price for corn was 15 cents lower than the year before; for soybeans it was \$1.90 lower. Both corn and soybean prices have been high enough that neither crop was eligible for loan deficiency payments.

Crop production. Corn production totaled 2.013 billion bushels in 2015, 338 million bushels less than the previous year. The final yield was 175 bushels per acre, which was 25 bushels below the previous year's yield. The yield for the 2015 soybean crop was 56 bushels per acre, the same as the 2014 yield. Production totaled 544 million bushels, 1 percent below the previous year.

The 2015 yield for sorghum for grain was 94 bushels per acre, 12 bushels below the yield in 2014. Sorghum production, at 3.20 million bushels, was up 44 percent from the previous year. The yield for the 2015 winter wheat crop was 65 bushels per acre, which is 2 bushels below the previous year. Total production was 33.8 million bushels, 25 percent below the 2014 production of 44.9 million bushels. The oats yield, at 77 bushels per acre, was 3 bushels below 2014. Production of all hay in 2015 was 1.53 million tons, 13 percent below 2014. Alfalfa hay production was down 25 percent, to 805,000 tons. All other hay production increased to 728,000 tons. The alfalfa yield decreased from 4 to 3.5 tons per acre, while all other hay yields increased from 2.7 to 2.8 tons per acre.

Livestock production

Two major determinants in farm income are the price farmers receive for livestock and livestock products and the value of feed fed in producing livestock. Gross returns to all livestock enterprises were lower in 2015 compared to 2014. With much lower gross returns, returns above feed

Table 1. Average Prices Received and Paid by Farm Recordkeepers for Grain, Livestock, and Milk

	2015		2014	
	Northern & central	South-ern	Northern & central	South-ern
Grain prices per bushel				
Sold				
Corn, old crop	\$ 3.80	\$ 3.94	\$ 4.50	\$ 4.68
Corn, new crop	3.78	3.83	3.83	3.68
Soybeans, old crop	10.48	10.48	13.37	13.56
Soybeans, new crop	9.08	9.08	10.70	10.33
Wheat	4.06	4.65	5.39	5.84
Livestock prices per cwt				
Hogs, all weights	\$ 52.65		\$ 78.07	
Fed cattle, all weights	150.68		149.09	
Feeder cattle, all weights, prices paid	206.79		208.36	
Dairy cattle, all weights	112.41		109.64	
Milk per cwt	17.89		24.88	

cost were lower for all livestock enterprises. In 2015, the average prices received by farm record-keepers in the Illinois FBFM Association were 33 percent lower for hogs, 1 percent higher for fed cattle, and 28 percent lower for milk than they were in 2014 (Table 1). The prices paid for all weights of feeder cattle purchases averaged 1 percent below the 2014 price for feeder cattle, and feeder pigs weighing below 20 pounds averaged 11 percent below the 2014 price paid per pig. Lower returns resulted in returns above feed and purchased animals for feeder cattle enterprises decreasing from \$70.06 per hundredweight produced to a *negative* \$5.75 (Table 10). This is below the 5-year average of \$27.30. Mainly due to lower pig prices, returns above feed costs for farrow-to-finish hog producers decreased to \$11.87 per hundredweight produced in 2015. This was below both 2014 and the 5-year average. Lower milk prices and lower beef prices caused dairy returns above feed cost per cow to decrease from \$3,734 in 2014 to \$2,167 in 2015. This is 42 percent below 2014 and below the 5-year average. Returns for beef cow herds with calves sold decreased to a *negative* \$34, which is below the 5-year average of \$262.

Labor and management income

The average operator's share of labor and management income for the 5-year period from 2011 through 2015 on all northern Illinois grain farms (located north of a line from Kankakee to Moline) was \$100,832 (Table 2). Operators on about 1,500 grain farms in central Illinois had 5-year average earnings of \$90,048. Central Illinois occupies the area between the Kankakee–Moline line in the north and the Mattoon–Alton line in the south. Better growing conditions and higher prices in the beginning of this 5-year period have led to larger earnings from crops.

The grain farms in northern Illinois averaged 1,070 tillable acres per farm, compared with an average of 1,139 tillable acres on grain farms in central Illinois. The figure

for labor and management income varies considerably with the location and type of farm. For the period from 2011 through 2015, grain farm operators in southern Illinois averaged \$59,795 for labor and management. This average decreased by \$52,529 compared with the average for the 5-year period from 2010 through 2014.

When the average earnings on Illinois grain farms for the 5-year period from 2011 through 2015 are compared with the earnings from 2010 through 2014, earnings decreased in all areas of the state. The average for the 5-year period from 2011 through 2015 decreased 30 percent in northern Illinois, 29 percent in central Illinois, and 47 percent in southern Illinois as compared to the 5-year period 2010 through 2014. The 2015 return to operator's labor and management was lower in all parts of the state than the 2014 earnings, and all areas were below the 2011–2015 5-year average. The year dropped from the 5-year average, 2010, averaged about \$223,000 higher earnings than in 2015.

When average earnings on Illinois livestock farms for the 5-year period from 2011 through 2015 are compared with the earnings from 2010 through 2014, earnings decreased for all enterprises. The average for the 5-year period from 2011 through 2015 decreased 42 percent for hog farms, 82 percent for beef farms, and 24 percent for dairy farms as compared to the 5-year period 2010 through 2014.

In 2015, the labor and management income for all areas of Illinois averaged a *negative* \$67,198 per farm. This figure is \$106,905 below the 2014 state average. Returns to labor and management for 2015 averaged \$165,604 below the average for the 5-year period 2011 through 2015. Lower crop prices and lower corn yields were the main reasons for the lower incomes.

Corn yields were well below the yields recorded the year before. The average corn yield on the 2,647 farms in 2015 was 190 bushels per acre, 24 bushels below the 2014 yield. The average soybean yield in 2015 was 61 bushels per acre, the same as reported in 2014. Corn and soybean yields were generally highest in the central part of the state from east to west. Wet conditions in the spring led to later planting and many drowned-out acres in other portions of the state. The average soybean yield was tied for the highest on record.

Year-end inventory price for the 2015 corn crop of \$3.60 per bushel was 15 cents per bushel lower than a year earlier. Soybeans were inventoried at \$8.60 per bushel, \$1.90 lower than December 31, 2014. The average sales price received for the 2014 corn crop sold in 2015 was above the inventory price, resulting in a positive marketing margin. Crop returns averaged \$670 per tillable acre, \$124 per acre lower than the 2014 crop returns.

The income or salary of the farm operator, whether tenant or part-owner, is the return for the labor and management provided by the operator. The level of income received is a measure of overall farming efficiency and includes compensation for the risk involved. The income includes

Table 2. Operator's 5-Year Average Share of Labor and Management Income by Size and Type of Farm, 2011 Through 2015

	Number of acres per farm ^a			
	Under 800	800 to 1,199	1,200+	All
Northern Illinois				
Tillable acres	480	994	2,140	1,070
Labor and management earnings by type of farm				
Grain.....	\$45,610	\$100,700	\$196,025	\$100,832
Central Illinois				
Tillable acres	519	762	1,947	1,139
Labor and management earnings by type of farm				
Grain ^b	\$49,487	\$98,435	\$164,128	\$107,917
Grain ^c	40,471	69,663	111,163	66,188
All.....	45,693	86,447	142,766	90,048
Southern Illinois				
Tillable acres	497	981	2,213	1,394
Labor and management earnings by type of farm				
Grain.....	\$17,618	\$46,976	\$94,907	\$59,795
Illinois livestock				
Labor and management earnings by type of farm				
Hog.....	.. ^d	.. ^d	.. ^d	\$74,871
Beef.....	.. ^d	.. ^d	.. ^d	8,534
Dairy.....	.. ^d	.. ^d	.. ^d	47,690

^aTillable acres.

^bHighly productive soils, with soil productivity ratings from 86 to 100.

^cHeavy-till and transition soils, with soil productivity ratings from 56 to 85.

^dData not available.

the operator's gross sales and the net change in inventory. This income is reduced by operating expenses, depreciation, a charge for unpaid family labor, 4 percent interest on nonland investment, and a land-use charge equivalent to the average net rent received by landowners for crop-share leases from 2011 to 2014.

Whenever the income figures in Table 2 fall below the amounts required for living expenses and income and Social Security taxes, operators must use the charges deducted for interest on equity capital to pay these expenses. If we assume that \$80,000 is needed to pay living expenses and income and Social Security taxes, figures for the lowest of the 5-year average labor and management incomes indicate that the average farm operator's family uses up to \$71,000 of the return for equity capital, depending on location and type of farm. Some average labor and management incomes were high enough that the operator did not need to use any of the return for equity capital to meet living expenses. Using part of the return to equity to pay family living expenses indicates that farm operators are not receiving a competitive return for either their labor and management or their equity in the business. Off-farm income could be used to pay for some living expenses.

Financial characteristics

The Farm Financial Standards Council has identified several key measures to analyze the financial strength of a farm business. These measures are in the areas of liquidity, solvency, profitability, and financial efficiency. The averages for these key measures for 2,594 Illinois farms can be found in Table 3. These measures are also calculated by farm type. Due to the effects that weather and other outside factors may have on a farm business for any one year, it is better to monitor these measures over time and to identify trends than it is to rely too heavily on these measures for any one year when making business decisions. More detail and in-depth analysis of these financial characteristics can be found in *Financial Characteristics of Illinois Farms*, published by the Department of Agricultural and Consumer Economics at the University of Illinois.

Liquidity is an assessment of a farm’s ability to meet current cash-flow needs. The amount of working capital and the current ratio (current assets divided by current liabilities) are two measures of liquidity. The average amount of working capital as of December 31 for the 2,594 farms was \$232,173, down 21 percent from \$293,067 a year earlier. Grain farms had the greatest working capital, averaging \$237,508, while dairy farms had the least, averaging \$56,843. Most of the assets of a dairy farm—the dairy herd, buildings, and land—are noncurrent assets. The average current ratio for all the farms was 2.07, down from 2.34 a year ago. Grain farms recorded the highest (most healthy) current ratio, and hog farms the lowest. The 2015 current ratio was the lowest since 2006.

Solvency is a measure of the farm’s overall financial strength and risk-taking ability. The average net worth of

the 2,594 farms at the end of 2015 was \$2,920,753, down from \$2,966,419 the year before. Average farm and non-farm incomes in 2015 were below family living requirements, thus enabling net worth decreases. Grain farms had the highest net worth, followed by beef farms, with dairy farms recording the lowest. The **debt-to-farm equity** and **debt-to-farm asset** indicators show how debt capital is combined with equity capital. This is useful in looking at the risk exposure of the business. The average debt-to-farm asset percentage for all farms was 20.2. The debt-to-farm asset percentage ranged from 19.9 for grain farms to 35.3 for hog farms. The average debt-to-farm asset level of 18.2 from 2012 was at its lowest level for at least 20 years.

A measure of a farm’s **profitability** is useful in examining its ability to meet family living demands and retire term debt. It is also useful in measuring the farm’s ability to utilize assets and equity to generate income. The average return on farm assets for the 2,594 farms was a *negative* 0.8 percent, down from 1.6 percent a year earlier. Grain farms recorded the highest returns, averaging a *negative* 0.7 percent, while hog farms recorded the lowest, averaging a *negative* 5.8 percent. Return on farm equity in 2015 ranged from a *negative* 1.7 percent for grain farms to a *negative* 11.8 percent for hog farms. The average was a *negative* 1.8 percent, down from 1.3 percent in 2014.

The interest, operating, and depreciation expense ratios relate these various expense categories as a percentage of the value of farm production. The farm operating income ratio measures the return to labor, capital, and management as a percentage of the value of farm production. These measures can be used to evaluate the financial efficiency of the farm business. The interest–expense ratio averaged 3.0

Table 3. Financial Characteristics of Illinois Farms for 2015 by Type of Farm

	All farms	Grain farms	Hog farms	Dairy farms	Beef farms
Number of farms.....	2,594	2,484	30	55	25
Liquidity					
Working capital.....	\$232,173	\$237,508	\$147,138	\$56,843	\$187,360
Current ratio.....	2.07	2.09	1.61	1.69	2.07
Solvency					
Net worth (market).....	\$2,920,753	\$2,954,958	\$2,418,922	\$1,720,301	\$2,765,416
Debt-farm equity (%).....	25.2	24.8	54.7	48.4	35.3
Debt-farm asset (%).....	20.2	19.9	35.3	32.6	26.1
Profitability					
Farm operating income.....	-\$3,580	-\$538	-\$170,363	\$4,421	-\$123,267
Return on farm assets (%).....	-0.8	-0.7	-5.8	-1.4	-5.6
Return on farm equity (%).....	-1.8	-1.7	-11.8	-3.5	-6.7
Financial efficiency					
Interest expense ratio (%).....	3.0	2.9	6.0	6.1	9.4
Operating expense ratio (%).....	81.0	80.8	107.9	75.6	111.9
Depreciation expense ratio (%)..	13.2	13.3	11.6	11.2	19.5
Farm operating income ratio (%)	1.5	1.7	-26.7	6.4	-40.3
Asset turnover ratio.....	0.18	0.18	0.21	0.19	0.07

percent for the 2,594 farms, ranging from 2.9 percent for grain farms to 9.4 percent for beef farms. The 3.0 percent was up from 2.3 percent in 2014. The 2012 figure of 1.9 percent is the lowest since at least 1995. The farm operating income ratio ranged from a high of 6.4 percent for dairy farms to a *negative* 40.3 percent for beef farms. The average for all farms in 2015 was 1.5 percent, down from 14.1 percent in 2014. The 2011 through 2015 5-year average farm operating income ratio is 20.2 percent. The 2015 farm operating income ratio is below the 5-year average.

Family living expenditures

Total cash living expenditures for a sample of 1,377 Illinois sole-proprietor, farm-operator families in 2015 averaged \$78,538 (Table 4). This figure is 4 percent lower than the 2014 average. Capital purchases for family living expenses of \$6,241 include the family’s share of the auto, plus items that exceed \$250 and will last more than 1 year. Capital purchases for family living were 7.4 percent of the total cash outlay for all family living expenditures in 2015.

The average farmer in this sample paid \$23,961 in interest in 2015 on operating, machinery, and long-term real

estate debts. This interest expense was 5 percent of total operating expense (including interest paid) and 4 percent of total farm receipts. The average amount of interest paid in 2015 was \$2,695 more than the amount paid in 2014. Here are the most significant financial facts about 2015:

- Net farm income plus net nonfarm income was \$71,367 less than the sum of family living capital purchases, total living expenses, and payments for income and Social Security taxes. This compares to the 5-year average of total income averaging \$63,538 more than family living expense and taxes for the period 2011 through 2015. The 2012 figure of \$187,966 is the largest positive margin ever.
- Net nonfarm income averaged \$40,662 and was the highest amount since this study began. This was \$986 more than the 2014 figure of \$39,676.
- Capital purchases were \$63,852, compared to \$89,020 in 2014, or 28.3 percent less. They were \$37,611 lower than the average for 2011 through 2015 and were at their highest level ever in 2013.
- The amount of money borrowed exceeded principal payments for the 27th year in a row. Money borrowed

Table 4. Average Sources and Uses of Funds Over a 4-Year Period and by Noncapital Living Expenses for Selected Illinois Farms

	All records, average per farm				Family of 3 to 5, 2015 ^a	
	2015	2014	2013	2012	High-third	Low-third
Number of farms.....	1,377	1,350	1,307	1,300	152	152
Age of operator.....	57	56	55	56	51	47
Number in family.....	2.7	2.7	2.7	2.8	4.0	3.7
Net farm income	\$5,188	\$95,885	\$105,902	\$262,917	\$38,235	\$20,388
Source of dollars						
Net nonfarm income	\$ 40,662	\$ 39,676	\$ 38,019	\$ 36,778	\$ 55,130	\$ 25,830
Money borrowed.....	449,744	439,315	418,038	428,234	508,993	329,354
Farm receipts.....	<u>665,466</u>	<u>715,621</u>	<u>736,101</u>	<u>777,953</u>	<u>846,590</u>	<u>522,691</u>
Total sources	\$1,155,872	\$1,194,612	\$1,192,158	\$1,242,965	\$1,410,713	\$877,875
Use of dollars						
Interest paid.....	\$ 23,961	\$ 21,266	\$ 20,530	\$ 22,425	\$ 29,054	\$ 18,437
Cash operating expenses.....	494,496	519,618	497,855	491,725	626,974	386,118
Capital farm purchases.....	63,852	89,020	130,006	119,816	73,472	55,980
Payments on principal	423,513	390,179	365,513	396,479	479,651	278,076
Income and Social Security taxes	32,438	38,801	40,328	26,718	40,453	22,537
Net new savings and investments.....	32,833	46,792	48,796	100,790	25,457	58,578
Contributions	3,537	3,698	3,874	3,823	4,475	1,861
Medical expenses.....	11,102	11,213	10,417	10,100	14,818	7,288
Life insurance	4,627	4,626	4,492	4,036	5,387	2,436
Expendables.....	<u>59,272</u>	<u>62,174</u>	<u>61,933</u>	<u>58,709</u>	<u>104,017</u>	<u>39,746</u>
Total living expenses	(\$ 78,538)	(\$ 81,711)	(\$ 80,716)	(\$ 76,668)	(\$ 128,696)	(\$ 51,330)
Living—capital purchases.....	<u>6,241</u>	<u>7,225</u>	<u>8,414</u>	<u>8,344</u>	<u>6,956</u>	<u>6,819</u>
Total uses	\$1,155,872	\$1,194,612	\$1,192,158	\$1,242,965	\$1,410,713	\$887,875

^aRecords were sorted into thirds according to total noncapital living expenses.

exceeded principal payments by \$26,231. For the 2011 through 2015 time period, money borrowed has exceeded principal payments by an average of \$37,549.

- Of the total living expenses—excluding family capital purchases—charitable contributions accounted for 5 percent, life insurance 6 percent, medical expenses 14 percent, and family living expendables the remaining 75 percent.
- Income and Social Security taxes paid decreased by \$6,363, and the total amount of taxes paid, \$32,438, was \$836 above the 5-year average for the period 2011 through 2015.
- Medical expenses averaged \$11,102, the second time in a row that the average has exceeded \$11,000. Expenses were 1 percent lower than the year before.

The 2015 records from 3- to 5-member families were sorted into high one-third and low one-third groups according to total living expenses (Table 4). The total cash living expenses for the high-third group averaged \$128,696, compared with \$51,330 for the low-third group. The high-third group had gross farm receipts of \$846,590, compared to \$522,691 for the low-third group. The results indicate that the high-third group had more nonfarm taxable income and a higher net farm income. When net farm income is added to net nonfarm income, and total family living expenses (including capital purchases for family living) and payments for income and Social Security tax are subtracted, the low-third group had \$48,272 more remaining than the high-third group. The high-third group had a balance remaining of a *negative* \$82,740 compared to a *negative* \$34,468 for the low-third group.

Living expenses included cash expenditures for food, operating expenses, clothing, personal items, recreation, entertainment, education, transportation, life insurance, contributions, and medical expenses.

The sample of 1,377 represents slightly smaller farms than the average size of all recordkeeping farms in the

state. Management was considered slightly above average. In view of these factors, average total living expenses for all recordkeeping families (excluding capital purchases) are estimated to be between \$62,800 and \$66,800, or 15 to 20 percent below the average total living expenses of these 1,377 Illinois farms. When the \$40,662 net nonfarm income for 2015 is used for living expenses, the remaining \$44,117 must be generated from the farm business to pay the \$84,779 used for total living expenses, including family living capital purchases. The figure of \$44,117 amounts to 6.6 percent of total farm receipts.

Income changes on Illinois farms

The average operator’s net farm income for all farms in 2015 was a *negative* \$2,971; it was \$107,290 in 2014 (Table 5). The 2012 net farm income was the highest for any year out of at least the last 10 years. Generally, operator net farm incomes decrease steadily as a higher percent of gross farm returns is used to pay interest. Frequently, when more than 20 percent of the gross farm return is used to pay interest, the operator’s net farm income is usually negative. Interest paid as a part of gross farm returns for all operators averaged 4.2 percent in 2015, 3.0 percent in 2014, 2.8 percent in 2013, 2.5 percent in 2012, and 2.8 percent in 2011. The 2.5 percent figure for 2012 was one of the lowest for any year during the last 20 years.

Comparative costs and returns between years and among major types of farming operations are reported in Tables 6 and 8. The sample consisted of grain farms having between 800 and 1,199 acres, or an average of 968 tillable acres. It also includes hog, beef, and dairy farms with 180 or more acres. Labor available on farms of this size averaged 15 months on grain farms, 37 months on hog farms, 17 months on beef farms, and 42 months on dairy farms. These tables contain only operator data; landlord data are not included.

Size of farm, type of farm, and managerial inputs have been held reasonably constant by the sampling procedure used in selecting farms in each category. Variations among

Table 5. Percent of Illinois Farms and Operator Net Farm Income by Interest Paid as a Percent of Gross Farm Returns, 2011 Through 2015

	Interest paid as a percent of gross farm returns						All
	Under 1	1–4.9	5–9.9	10–14.9	15–19.9	20+	
Percent of farms							
2011	33	50	13	3	... ^a	... ^a	100
2012	37	50	11	2	... ^a	... ^a	100
2013	36	46	14	3	1	... ^a	100
2014	33	48	15	3	1	... ^a	100
2015	29	41	21	6	2	1	100
Net farm income							
2011	270,468	305,089	227,664	158,433	42,705	(51,794)	273,612
2012	296,370	329,186	197,285	217,127	(17,723)	(487,188)	298,028
2013	144,794	135,286	83,677	65,677	(37,411)	(64,720)	127,664
2014	128,273	109,973	76,491	34,470	(11,703)	(23,508)	107,290
2015	37,764	7,585	(45,493)	(67,679)	(80,735)	(180,879)	(2,971)

^aLess than 1 percent.

figures for 2015 are due to changes in farm prices and to costs, weather, and internal farming adjustments. The data in Tables 6 and 8 are particularly helpful for comparing types of farming and for evaluating changes in farm costs and returns for a particular size and kind of farm. The data do not reflect overall farming adjustments due to the enlargement of farms or to major changes in the use of resources.

The figure for net farm income comprises returns to the farm family for all unpaid labor, interest on all invested capital, and the managerial inputs used in farming. Changes in the value of farm inventories and the value of consumed farm products are included as income. Net farm income is calculated by accounting methods comparable to the accrual method used in calculating taxable farm income for the federal income tax except for using economic depreciation. An important difference in the accrual method of income tax accounting should be noted: the inclusion of interest paid as a farm expense. The operator's share of net farm income has the interest expense deducted from it.

The figures for net farm income are the amounts available from the farm business for living costs, income and Social Security taxes, debts, new investments, and savings. New capital investments for the farm business have been included with total cash expenditures. Although the cash balance reflects the cash position of the farm business, the figure is influenced by purchases and sales of feed and livestock and by changes in liabilities and borrowed funds.

Grain farms. The operator's net farm income for Illinois grain farms having 800 to 1,199 acres and no livestock averaged \$2,773 in 2015 (Table 6). This income was \$80,522 below that of 2014 and \$141,140 below the 5-year average income for 2011 through 2015. The 2012 net farm income of \$268,291 was the highest in the last 30 years. The value of farm production averaged \$530,678, which was \$108,718 below 2014 and \$128,249 below the 2011 through 2015 average. The value of farm production included a \$73,821 decrease in inventory values compared to 2014, when the inventory value decreased by \$4,466. Net cash operating income (adjusted gross) was \$591,146, \$63,951 lower than the 5-year average. Total cash operating expenses were \$28,017 lower than the year before, while depreciation of \$71,088 was 1 percent lower than the year before and 14 percent higher than the 2011 through 2015 average. Total cash operating expenses for 2014 were the highest on record.

Incomes were lower on these farms in 2015 compared to 2014. Lower prices and lower corn yields were the main factors for the lower incomes. The average soybean yield on these farms in 2015 was 61 bushels per acre, compared to 60 the year before. The average corn yield was 187 bushels per acre, compared to 214 the previous year. Corn was inventoried 15 cents lower at the end of 2015 compared to the beginning; soybeans were inventoried \$1.90 lower.

The lower quantities in ending inventory caused the value of inventories to decrease \$73,821 at the end of the year compared to the beginning. Crop returns averaged \$653 per tillable acre in 2015 compared to \$776 in 2014. Crop expenses per acre decreased 3.7 percent. This was the second year for the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) Program. The producer had to make a one-time election for either ARC or PLC. For the ARC program, producers would receive a payment the following year after the year of production if the county trigger or farm trigger was met (depending if the producer selected county or individual). For the PLC program, producers receive a payment the following year after the year of production if the effective price is less than the reference price. It is estimated there will be many counties in Illinois that will see a county ARC payment for 2015. As in the old program, producers can also receive loan deficiency payments (LDPs) or take marketing loan gains when market prices are below

Table 6. Averages for Selected Total Farm Items on 800- to 1,199-Acre Illinois Grain Farms

	2015	2014	2011-15 average
Number of farms	580	559	590
Total acres	1,007	1,027	1,021
Soil-productivity rating	81	82	81
Percent land owned.....	19	19	18
Percent land crop-shared....	40	40	42
Percent land cash-rented	42	41	39
Cash operating income.....	\$605,887	\$664,235	\$669,009
Less purch. feed, livestock ..	<u>14,741</u>	<u>16,807</u>	<u>13,912</u>
Net cash operating income..	\$591,146	\$647,428	\$655,097
Accounts receivable chg.....	13,353	(3,566)	4,988
Inventory change	<u>(73,821)</u>	<u>(4,466)</u>	<u>(1,158)</u>
Value of farm prod	\$530,678	\$639,396	\$658,927
Total cash op. expenses.....	\$446,683	\$474,700	\$453,510
Prepaid-unpaid change	10,135	9,421	(960)
Annual depreciation.....	<u>71,088</u>	<u>71,981</u>	<u>62,464</u>
Net farm income	\$2,773	\$83,295	\$143,913
Net farm inc. per operator....	\$ 2,506	\$78,249	\$136,674
Unpaid labor charge	43,755	43,794	41,163
Returns to capital & mgmt ...	(40,983)	39,501	102,750
Interest charge on capital	<u>57,717</u>	<u>61,402</u>	<u>54,846</u>
Management returns	(\$98,699)	(\$21,901)	\$ 47,904
Total cash income ^a	\$591,146	\$647,428	\$655,097
Total cash expenditures ^a	<u>506,963</u>	<u>564,549</u>	<u>558,762</u>
Cash balance.....	\$ 84,182	\$ 85,880	\$ 96,336
Capital purchases.....	60,281	86,849	105,252

^aIncludes sales or purchases of capital items.

the loan rate. All of these receipts are included in net farm income and crop returns. Total tillable land planted to corn and soybeans in 2015 was 96.3 percent, down from 96.4 percent in 2014. Corn acres decreased slightly from 52.7 percent of tillable acres in 2014 to 52.0 percent in 2015, while soybean acres increased from 43.7 to 44.3 percent.

The average prices received in 2015 for new-crop corn and soybeans of \$3.78 and \$9.09, respectively, were similar for corn and lower for soybeans than in the previous year. The average prices received for old-crop corn and soybeans, \$3.76 and \$10.42, respectively, were lower than the year before for corn and soybeans. Capital purchases of \$60,281 in 2015 were \$26,568 less than in 2014 and \$44,971 below the 2011 through 2015 average. Capital purchases of \$137,226 were the highest in 2013 of any year during the last 10 years.

While accrual net farm incomes averaged \$2,773, management returns were a *negative* \$98,699 in 2015, compared to a *negative* \$21,901 in 2014 and the 2011 through 2015 average of \$47,904. The value of farm production per man year was highest for any type of farm in Tables 6 and 8. Operators for these farms owned 19 percent of the land they farmed, crop-shared 40 percent, and cash-rented 42 percent. Of the total labor of 15.2 months, only 3.9 months were hired labor. The total months of labor used on these grain farms was the lowest for any type of farm.

A study of the cost to grow corn and soybeans on central Illinois farms is summarized in Table 7. These farms had a soil productivity index ranging from 86 to 100. The farms used 98.8 percent of their tillable land to grow corn and soybeans, with 52.0 percent of the acres in corn and 46.8 percent in soybeans. The table compares 2015 costs per acre with 2014 costs. In 2015, the total cost per acre averaged \$896 for corn and \$668 for soybeans. From 2014 to 2015, the total cost per acre decreased 5 percent for corn and 4 percent for soybeans.

Nonland costs of \$3.33 per bushel for corn and \$6.62 for soybeans in 2015 are the most relevant costs for continuing production in the short run, especially where land is free of debt. Total cost to produce a bushel increased for corn and decreased for soybeans from 2014 to 2015. Costs per bushel for corn increased due primarily to much lower yields. Total costs per bushel increased 41 cents for corn and decreased 77 cents for soybeans. If the 2015 yield for corn had been 182 bushels, the same as the average for the period from 2012 through 2015, the total cost per bushel would have been \$4.92. These costs do not include a charge for management.

The cost of fertility for soybeans was allocated on the basis of phosphorus, potassium, and lime removals, with the residual allocated to corn. The total unpaid labor charge was based on the labor available. The nonland interest rate was 4 percent of one-half the average of the beginning- and end-of-year inventory values for the crops on hand, plus one-half the cash operating expenses (excluding interest

paid), plus the depreciated value of machinery and buildings. The land cost is the weighted average of owned, crop-shared, and cash-rented land costs.

Hog farms. The operator's net farm income in 2015 for Illinois hog farms having 180 acres or more averaged a *negative* \$118,770 (Table 8). Net incomes were \$587,276 lower than net incomes in 2014 and \$321,842 lower than the average for the 5-year period from 2011 through 2015. The cash balance on these farms of \$70,393 was \$123,347 less than in 2014 and \$37,960 below the average for the 5-year period from 2011 through 2015. Inventories on these farms decreased \$205,392 in 2015, following a \$148,359 increase in 2014. The value of farm production of \$897,573 was \$779,163 less than in 2014 and \$84,034 lower than the average for the 5-year period from 2011 through 2015. Farm production per man year was \$325,025. Incomes on hog farms decreased in 2015 due to lower hog prices. Depreciation of \$84,644 was \$8,575 lower than in 2014.

Management returns were a *negative* \$227,489 in 2015 compared to \$340,312 in 2014. Management returns were \$567,801 less than in 2014 and \$312,188 below the average

Table 7. Average Cost per Tillable Acre to Grow Corn and Soybeans on Central Illinois Grain Farms with No Livestock

	Corn		Soybeans	
	2015	2014	2015	2014
Number of farms.....	672	679	672	679
Acres grown per farm.....	698	703	628	595
Yield per acre, bu.....	200	231	66	64
Variable nonland costs				
Soil fertility.....	\$166	\$171	\$ 56	\$ 58
Pesticides.....	66	67	40	41
Seed.....	118	120	76	77
Drying and storage.....	29	40	9	8
Machinery repairs, fuel, and hire.....	58	67	50	58
Total, variable costs.....	\$437	\$465	\$231	\$242
Other nonland costs				
Labor.....	\$ 49	\$ 49	\$ 46	\$ 47
Buildings.....	17	17	14	14
Machinery depreciation..	65	65	57	57
Nonland interest.....	50	52	45	47
Overhead.....	47	48	44	45
Total, other costs.....	\$228	\$231	\$206	\$210
Total, nonland costs.....	\$665	\$696	\$437	\$452
Land costs				
Total land costs ^a	\$231	\$245	\$231	\$245
Total, all costs.....	\$896	\$941	\$668	\$697
Nonland cost per bu.....	\$3.33	\$3.01	\$ 6.62	\$7.06
Total, all costs per bu.....	\$4.48	\$4.07	\$10.12	\$10.89

Average yield, past 4 yrs ...	182	166	57	56
Total, all costs per bu.....	\$4.92	\$5.67	\$11.72	\$12.45

^aWeighted average of owned, crop-shared, and cash-rented land costs.

for 2011 through 2015. Capital purchases were \$111,217, which was \$123,347 lower than in 2014 and \$37,960 lower than the average for 2011 through 2015. Farm production per one dollar of nonfeed costs was 78 cents. Purchased feed and livestock for this group totaled \$896,153, \$302,331 less than in 2014. The average interest paid on these farms was \$46,628. That was the highest for any type of farm in Table 8. Farm operators in this group owned 18 percent of the land they farmed, crop-shared 17 percent, and cash-rented 64 percent. Total labor was 37 months, 27 months of which was hired. Corn was planted on 65.4 percent of the acres and soybeans on 31.6 percent. The average corn yield was 196 bushels per acre and the average soybean yield 63 bushels per acre.

Beef farms. The operator's net farm income for Illinois beef farms having 180 acres or more averaged a *negative* \$122,824 in 2015 (Table 8). This figure was \$350,086 lower than the 2014 figure and \$212,960 lower than the average from 2011 through 2015. Lower beef prices con-

tributed to the lower earnings. Net farm income for these farms was the lowest of any type of livestock farm in the sort. Feed cost per hundredweight produced decreased 6 percent, while the average price received for market cattle increased 1 percent in 2015 compared to 2014. The price paid for feeder cattle went down about 1 percent from the year before. The value of farm production for this group of farms averaged \$261,642, or \$460,767 less than in 2014. Cash operating income averaged \$1,249,794, purchased feed and livestock totaled \$776,601, and net cash operating income averaged \$473,192.

Management returns of a *negative* \$245,554 in 2015 for these farms were the lowest for any type of livestock farm in the study. Management returns averaged a *negative* \$30,207 for the period 2011 through 2015. Capital purchases were \$92,949 in 2015, compared to \$144,815 in 2014 and \$105,315 in 2013. The 2011 through 2015 average was \$117,990. Depreciation of \$55,263 was \$9,151 below 2014. Cash operating expenses, excluding purchases of feed and

Table 8. Averages for Selected Total Farm Items on Illinois Hog, Beef, and Dairy Farms

	Hog farms			Beef farms			Dairy farms		
	2015	2014	2011-15 average	2015	2014	2011-15 average	2015	2014	2011-15 average
Number of farms	38	40	43	28	26	25	57	49	54
Total acres	999	1,096	1,053	562	704	662	572	590	593
Soil-productivity rating	79	81	80	55	72	70	66	70	69
Percent land owned.....	18	22	21	44	40	42	30	42	38
Percent land crop shared	17	16	20	23	16	17	4	4	4
Percent land cash rented.....	64	61	59	32	45	41	66	55	58
Cash operating income.....	\$1,988,755	\$2,702,565	\$2,168,314	\$1,249,794	\$1,278,952	\$1,440,535	\$907,361	\$1,209,208	\$1,062,090
Less purch. feed, livestock	<u>896,153</u>	<u>1,198,484</u>	<u>980,187</u>	<u>776,601</u>	<u>853,630</u>	<u>912,113</u>	<u>220,456</u>	<u>276,164</u>	<u>246,284</u>
Net cash oper. income.....	\$1,092,602	\$1,504,081	\$1,188,127	\$473,192	\$425,323	\$528,422	\$749,905	\$933,044	\$815,806
Accounts receivable change..	10,363	24,295	2,582	1,372	(6,182)	319	(4)	(821)	3,378
Inventory change.....	<u>(205,392)</u>	<u>148,359</u>	<u>28,847</u>	<u>(212,293)</u>	<u>303,269</u>	<u>37,773</u>	<u>(57,490)</u>	<u>119,815</u>	<u>22,478</u>
Value of farm prod	\$ 897,573	\$1,676,736	\$1,219,557	\$261,642	\$722,409	\$566,514	\$692,412	\$1,052,038	\$841,663
Total cash oper. expenses	\$ 910,992	\$1,142,231	\$943,327	\$322,804	\$429,941	\$419,791	\$596,526	\$689,615	\$621,331
Prepaid-unpaid change	(20,707)	(27,220)	(5,219)	6,399	793	(645)	19,803	(20,394)	(2,501)
Annual depreciation.....	<u>84,644</u>	<u>93,219</u>	<u>78,377</u>	<u>55,263</u>	<u>64,414</u>	<u>57,232</u>	<u>79,199</u>	<u>81,609</u>	<u>73,875</u>
Net farm income	(\$118,770)	\$468,506	\$203,072	(\$122,824)	\$227,262	\$90,136	(\$ 3,116)	\$301,208	\$148,958
Net farm inc. per operator.....	(\$80,298)	\$311,554	\$131,474	(\$90,329)	\$177,592	\$71,427	\$ 3,034	\$193,619	\$94,006
Unpaid labor charge	39,051	50,271	46,018	50,589	49,902	48,738	58,295	57,357	55,880
Returns to capital & mgmt.....	(157,822)	418,235	157,054	(173,413)	177,360	41,398	(61,411)	243,851	93,078
Interest charge on capital	<u>69,668</u>	<u>77,923</u>	<u>72,354</u>	<u>72,142</u>	<u>80,561</u>	<u>71,605</u>	<u>56,030</u>	<u>64,509</u>	<u>56,996</u>
Management returns	(\$227,489)	\$340,312	\$84,699	(\$245,554)	\$96,799	(\$30,207)	(\$117,441)	\$179,342	\$ 36,082
Total cash income ^a	\$1,092,602	\$1,504,081	\$1,188,127	\$473,192	\$425,323	\$528,422	\$749,905	\$933,044	\$815,806
Total cash expenditures ^a	<u>1,022,209</u>	<u>1,376,794</u>	<u>1,092,505</u>	<u>415,754</u>	<u>574,756</u>	<u>537,781</u>	<u>727,673</u>	<u>842,022</u>	<u>756,433</u>
Cash balance.....	\$ 70,393	\$ 127,286	\$ 95,623	\$57,439	(\$149,433)	(\$ 9,359)	\$ 22,232	\$ 91,022	\$ 59,373
Capital purchases.....	111,217	234,564	149,177	92,949	144,815	117,990	131,147	152,407	135,102

^aIncludes sales or purchases of capital items.

livestock, totaled \$322,804. The net cash balance for these farms was \$57,439.

Costs and returns to produce beef from 2012 through 2015, based on a detailed breakdown of individual costs from a selected sample of beef farms, are shown in Table 14. Total returns exceeded total costs only in 2014, but in the other years, total costs exceeded total returns. An analysis of feeder cattle enterprises is discussed in detail under the livestock section.

Farm operators in this group owned 44 percent of the land they farmed. They crop-shared 23 percent and cash-rented 32 percent. The amount of interest paid was \$28,687, the lowest of any livestock group in Table 14. They planted 57.7 percent of their tillable land to corn or corn silage. They also had 14.0 percent of their tillable land in hay and pasture. These farms used 17.2 months of total labor, with 4.2 of that hired labor. The average corn yield on these farms was 201 bushels per acre, and the average soybean yield was 62 bushels per acre. In 2014, corn and soybeans yields on these farms averaged 211 and 64 bushels per acre, respectively.

Farms where beef cattle are raised or fed continue to compete for resources in Illinois where nonmarketable resources—such as roughage, labor, and buildings—or very high levels of management are available. In recent years, this type of farm has survived primarily where large amounts of debt-free capital have been combined with very high levels of management. Higher crop returns have helped them endure the volatile, cyclical nature of the cattle enterprise.

Dairy farms. The operator's net farm income for Illinois dairy farms having 180 acres or more averaged a *negative* \$3,116 in 2015 (Table 8). This figure was \$304,324 below the 2014 figure and \$152,074 below the 5-year average from 2011 through 2015. The highest income was recorded in 2014. The farms averaged 36,312 hundredweight of milk produced.

The main factor for the decrease in earnings was lower milk prices. The value of farm production was \$692,412. This was \$359,626 lower than 2014 and \$149,251 lower than the 2011 through 2015 average. The value of inventory decreased by \$57,490, while cash operating income decreased by \$238,847, 19.8 percent less than in 2014. (A detailed breakdown of the cost of producing milk is given in Table 16.) Management returns of a *negative* \$117,441 were \$296,783 lower than the 2014 figure and \$153,523 lower than the 5-year average from 2011 through 2015. Capital purchases decreased to \$131,147 in 2015, compared to \$152,407 in 2014 and \$153,488 in 2013. The 2011 through 2015 average was \$135,102, and 2013 was the highest amount of capital purchases ever for these types of farms. Annual depreciation on these farms averaged \$79,199. These farms used 42.3 months of total labor, 27.4 months of which was hired labor. The total labor used was the highest for any type of livestock farm in the state. The average interest expense paid by these operators was \$31,461.

Farm operators in this group owned 30 percent of the land they farmed and cash-rented 66 percent. About 9 percent of the land they farmed was in hay ground; 49.1 percent was in corn and corn silage. Over 113 percent of the value of crop produced was fed to livestock. The average corn yield was 185 bushels per acre for these farms, which is 11 bushels per acre less than in 2014. The average price received for milk in 2015 was 28 percent lower than the average price received in 2014.

LIVESTOCK ENTERPRISES

The returns per \$100 of feed fed from various livestock enterprises and the price of corn during each of the past 15 years are given in Table 9. This table also shows 15-year and 5-year averages. The difference between the average return figure and a feed cost of \$100 represents the margin available for cash expenses other than feed, labor, depreciation on equipment, interest on investment, and profit.

The margin needed to cover nonfeed costs varies with the kind of livestock and depends on the proportion of total production costs represented by feed. The 15-year averages from 2001 through 2015 represent the approximate level of return at which farmers have been willing to maintain livestock production. The average may not represent a breakeven return on all farms because some farmers may discount market prices for some of the resources used in producing livestock. If farmers already have facilities for livestock, they need only to cover direct operating costs to continue production. However, when livestock production is a new or a long-term enterprise, farmers hope to cover all fixed and variable costs. Otherwise, they should not undertake the enterprise.

Patterns and fluctuations

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

In farrow-to-finish hog production, returns tend to follow a noticeably cyclical pattern (Table 9). They tend to exceed the 5-year average for 1 or 2 years and then drop below this average for 1 or 2 years. Returns per \$100 of feed fed of \$136 in 2015 were below the 5-year average of \$147. The 2015 return was below the 2001 through 2015 average. The 2004 and 2005 returns of \$216 were the highest for any year during the last 15 years.

The returns from feeder cattle vary greatly from year to year. The long-run averages shown in Table 9 indicate that the cattle-feeding business has not been paying average market rates for all resources used by the enterprise, although the 2003 through 2005 time period and 2014 resulted in some of the better returns on record. Table 9

shows the return of \$140 per \$100 of feed fed for the most recent 5-year period (2011 through 2015) to be above the previous 5-year period, but below the 15-year average of \$143. The 2015 return of \$90 per \$100 of feed fed was \$50 below the most recent 5-year average. Above-average skills are needed in buying, selling, and feeding to meet the competition from other uses for time and money on farms with feeder cattle. Identifying cyclical income movements over a 15-year period in the beef-cattle industry is difficult because this industry is more complex and adjusts more slowly than other livestock enterprises.

The average return above feed and purchased animal costs for dairy enterprises of \$2,167 per cow in 2015 was \$127 below the 5-year average of \$2,294 (Table 10). These returns indicate that the average dairy enterprise has not covered the total estimated cost of production of \$2,256 per cow from 2010 through 2014. The 2015 return per \$100 of feed fed of \$188 was above the past 5-year average of \$180.

For the beef-herd enterprise, the average returns above the cost of feed and purchased animals for the period from 2011 through 2015 showed great volatility. Historically, the beef-herd enterprises generate enough returns to cover cash costs but not total nonfeed costs (Table 10). The implication is that the beef enterprise competes most favorably on farms where the resources of labor, capital, and management are plentiful and have few alternate uses. This enterprise is most commonly found on farms with nontillable pasture that has limited alternative uses. In the beef-cow enterprise, returns

above the cost of feed per cow were \$262 during the past 5 years. The 2015 return of a *negative* \$34 did not cover feed costs or total nonfeed costs, estimated at \$273 per cow.

Raising livestock has become more competitive and specialized. Average profit margins are narrow. Fewer farmers are willing to stay in business, because returns in some enterprises barely cover direct operating costs. As an alternative, more producers are specializing in a certain phase of livestock production and entering contractual arrangements to guarantee a certain return. While these contracts may limit upside potential, they can also reduce risk during times of low prices. Expansion plans that require large investments for new facilities should be based on an estimated return high enough to cover all costs. Fluctuations in livestock returns can involve a risk in low-return years.

Hog enterprises

The information on farrow-to-finish enterprises in Table 11 is based on a sample of 26 enterprises farrowing 10 litters or more a year. Farms were omitted from the sample if the number of hogs purchased exceeded 10 percent of pigs weaned, which eliminated farms with combined farrowing and feeder-pig operations. (Information on feeder-pig finishing enterprises is given in Table 13.) The average size of farrow-to-finish enterprises on all recordkeeping farms in 2015 was 475 litters. Average pigs weaned per litter, 9.59, was above the 2014 figure of 9.24. The 2,531 pounds of pork produced per litter was 94 pounds above 2014. The 2015 records summarized here for the “all farms” group

Table 9. Returns per \$100 of Feed Fed to Different Classes of Livestock

	Farrow-to-finish hogs (\$)	Feeder pig finishing (\$)	Feeder cattle bought (\$)	Dairy cow herds (\$)	Beef cow herds (\$)	Native sheep raised (\$)	Yearly price of corn (\$)
2001.....	203	150	128	233	138	97	1.94
2002.....	151	121	128	198	130	154	2.19
2003.....	168	132	200	202	148	165	2.30
2004.....	216	158	165	222	178	161	2.49
2005.....	216	143	167	245	170	111	2.02
2006.....	183	121	124	192	137	117	2.41
2007.....	138	136	142	218	111	134	3.42
2008.....	115	131	102	172	86	106	4.70
2009.....	123	104	126	138	109	75	3.76
2010.....	156	127	163	168	135	139	3.86
2011.....	146	153	153	181	145	173	6.15
2012.....	120	127	117	146	125	79	6.74
2013.....	138	133	125	156	131	.. ^a	6.07
2014.....	196	187	215	228	260	122	4.14
2015.....	136	122	90	188	101	79	3.70
Averages							
2001–2015.....	160	136	143	192	140	.. ^a	3.73
2001–2006.....	191	141	158	220	153	138	2.19
2006–2010.....	143	124	131	178	116	114	3.63
2011–2015.....	147	144	140	180	152	.. ^a	5.36

^aData not available.

Table 10. Variations in Returns to Livestock Enterprise Units, 2011 Through 2015

	Hogs (per cwt)	Feeder-pig finishing (per cwt)	Feeder cattle (per cwt)	Dairy cattle (per cow)	Beef herd: calves sold (per cow) ^a
Return above cost of feed and purchased animals					
2011.....	\$20.18	\$18.88	\$36.77	\$2,205	\$189
2012.....	9.98	10.17	14.29	1,519	145
2013.....	18.33	13.09	21.12	1,846	169
2014.....	37.12	29.37	70.06	3,734	842
2015.....	<u>11.87</u>	<u>6.20</u>	<u>-5.75</u>	<u>2,167</u>	<u>-34</u>
Five-year average.....	\$19.50	\$15.54	\$27.30	\$2,294	\$262
Nonfeed costs, 2010 through 2014^b					
Direct cash.....	\$11.37	\$ 7.10	\$17.78	\$1,648	\$165
Other costs.....	<u>8.32</u>	<u>3.66</u>	<u>13.36</u>	<u>608</u>	<u>108</u>
Total.....	\$19.69	\$10.76	\$31.14	\$2,256	\$273

^aThe feed cost for beef herds includes up to \$60 of hay equivalent from salvage roughage.

^bEstimates of annual nonfeed costs are based on enterprise cost studies of operative units.

show that the return of \$11.87 above feed costs per 100 pounds of pork produced was \$25.25 below the 2014 return of \$37.12. The 2015 return was below the 5-year average.

The 5-year average return above feed costs per 100 pounds produced was \$19.50 (Table 10). Even the 5-year average can vary significantly because of wide fluctuations in returns from year to year. Detailed records show that an average farmer with existing facilities needed a return above feed costs of \$19.69 per 100 pounds to pay for all nonfeed costs in the 2010 through 2014 time period. The return above all costs during this 5-year period of a *negative* 19 cents (\$19.50 minus \$19.69) has led to very little expansion and increase in pork production. Even with lower pork production, raising hogs has turned back into a profitable industry, mainly due to higher prices for pork. Pork production decreased from 2013 to 2014, but increased 7.3 percent from 2014 to 2015. Fortunately, strong export demand has supported pork prices. Pork production is expected to increase about 2.0 percent in 2016 due to higher pork prices, mainly due to higher exports and lower feed costs.

The large producers paid less per hundredweight for concentrates and had a higher feed conversion. The average price received for hogs sold by large producers, or the net at the farm, was 46 cents less than the average net received by all producers.

A substantial profit margin is required to compensate for the risk and detailed management involved in hog production compared with other resource uses. Large-scale hog production in modern confinement facilities requires high capital investment. The future recovery of this investment is uncertain. The salvage value of confinement hog facilities is low. In addition, acquiring the managerial skills for the large-scale production of hogs in confinement may discourage any rapid expansion of large hog-producing units. Pork production in 2015 increased 7.3 percent due to the expectation of a continued outbreak or porcine epidemic diarrhea virus (PEDv) that did not happen, thus moving hog prices

lower. Pork production in 2016 is expected to increase slightly compared to 2015. Hog prices should move higher due to greater demand. Lower feed costs have decreased the cost of production, resulting in higher profit margins when combined with higher prices received.

The data on hog enterprises in Table 12 show a detailed breakdown of costs and returns from a group of specialized commercial hog farms for 2012, 2013, 2014, and 2015. The value of the feed fed to hogs was more than 40 percent of the crop returns produced on these farms. This intensity of livestock feeding indicates a commitment of major resources to the hog enterprise. The producers in this group probably exercise a higher level of management.

The cost data reported in Table 12 have been divided into two categories: cash costs and other costs. This classification of production costs is important when short-term management decisions are being made concerning the volume of production, particularly during periods of low prices.

As reported in Table 12, cash costs of production in 2015 were \$42.30 per 100 pounds of pork produced. Feed is included as a cash cost, although for some producers a share of the grain is raised on the farm. The readily available alternative cash market for grain makes raised feed the same as cash.

The other category of costs includes depreciation, labor, and an interest charge on all capital. Part of the labor and interest charge is a cash cost on most farms. The proportion of labor that is hired depends largely on the size of the farm.

Feed costs decreased 18 percent as one compared 2015 to 2014. Total nonfeed costs decreased \$2.13 per 100 pounds of pork produced, with maintenance and power costs and livestock expenses representing most of the decrease. Feed costs decreased as grain prices decreased. Total cost of production decreased from 2014 to 2015 by \$9.01 (15 percent) per 100 pounds of pork produced.

From 2012 through 2015, the return above all costs averaged a *negative* 72 cents per 100 pounds of pork produced.

Management practices, such as the choice of building systems, type of market used, and on- versus off-farm systems for feed processing affect the individual cost items reported in Table 12. But the return above all costs should accurately reflect the relative efficiency of the of hog enterprises.

Feeder cattle and feeder pig finishing enterprises

Data for 2015 on the feeder cattle and feeder pig finishing enterprises are presented in Tables 13 and 14. These enterprise summaries include weights and values on partly finished animals purchased in previous years and on animals purchased during the current year.

The average amount of pork produced per farm from feeder pig enterprises was 1,546,553 pounds in 2015 (Table 13). At 240 pounds of gain per head, this figure amounted to 6,444 head fed per farm in 2015. These feeder pig enterprises represent those that buy weaner pigs and finish them.

The return above the cost of feed and purchased animals from 2011 through 2015 averaged \$15.54 per 100 pounds of gain. This return was \$4.78 above the \$10.76 of all nonfeed costs for the period 2010 through 2014 (Table 10). The 2015 return of \$6.20 was \$23.17 below the 2014 return and \$9.34 below the 2011 through 2015 return. Lower price received was the main reason for the lower returns.

Given that a 475-pound unit of gain equals one head of feeder cattle, the average of 342,564 pounds of beef pro-

Table 11. Hog Enterprises, 2015 Averages per Farm

	All farms	Farrow-to-finish enterprises ^a
Number of farms.....	26	11
Pork produced, lbs.....	1,202,103	2,269,783
Pork prod. per litter, lbs.....	2,531	2,602
Total returns.....	\$542,840	\$1,039,762
Value of feed fed.....	\$400,186	\$732,925
Returns per \$100 feed fed.....	\$136	\$142
Number litters farrowed.....	475	872
Pigs farrowed per litter.....	11.37	11.66
Pigs weaned per litter.....	9.59	9.85
Litters per female year.....	2.04	2.21
Pigs weaned per female year...	19.30	21.68
Number pigs weaned.....	4,555	8,589
Death loss, % lbs produced.....	3.0	3.1
Wt per market hog sold, lbs.....	273	273
----- per cwt produced -----		
Price received—market.....	\$53.59	\$53.13
Total returns.....	45.16	45.81
Feed costs.....	<u>33.29</u>	<u>32.29</u>
Return above feed.....	\$11.87	\$13.52
Farm grains/complete feed, lbs	220	214
Commercial feed, lbs.....	<u>86</u>	<u>83</u>
Total concentrates, lbs.....	306	297
Cost per cwt supplement.....	\$21.90	\$21.85
Cost per cwt concentrates.....	\$10.90	\$10.86

^a350 or more litters per farm.

Table 12. Average Costs and Returns for Farrow-to-Finish Hog Enterprises, 2012 Through 2015

	2015	2014	2013	2012	2012–15 average
Number of farms.....	13	12	14	13	13
Tillable acres.....	398	553	823	765	635
Number of litters.....	583	494	422	660	540
Total returns.....	\$46.96	\$74.52	\$63.96	\$60.19	\$61.41
----- per cwt pork produced -----					
Cash costs					
Feed.....	\$31.71	\$38.59	\$49.71	\$49.74	\$42.44
Operating expenses					
Maintenance and power ^a	\$ 4.55	\$ 6.10	\$ 4.36	\$ 5.15	\$ 5.04
Livestock expenses.....	4.63	5.28	5.23	4.69	4.96
Insurance, taxes, and overhead.....	<u>1.40</u>	<u>1.18</u>	<u>1.11</u>	<u>1.04</u>	<u>1.18</u>
Total operating expenses.....	\$10.59	\$12.56	\$10.70	\$10.88	\$11.18
Total cash costs.....	\$42.30	\$51.15	\$60.41	\$60.62	\$53.62
Other costs					
Depreciation ^b	\$1.38	\$1.74	\$1.86	\$1.88	\$1.72
Labor.....	5.94	5.49	5.03	4.95	5.35
Interest charge on all capital.....	<u>1.34</u>	<u>1.59</u>	<u>1.11</u>	<u>1.72</u>	<u>1.44</u>
Total other costs.....	\$8.66	\$8.82	\$8.00	\$8.55	\$8.51
Total nonfeed costs.....	\$19.25	\$21.38	\$18.70	\$19.43	\$19.69
Total all costs.....	\$50.96	\$59.97	\$68.41	\$69.17	\$62.13
Return above all costs.....	(\$4.00)	\$14.55	(\$4.45)	(\$8.98)	(\$ 0.72)

^aIncludes utilities, machinery, equipment and building repairs, machine hire, and fuel.

^bIncludes machinery, equipment, and building depreciation.

duced per farm in 2015 (Table 13) equals 721 head of feeder cattle per farm. That figure is higher than the year before. The return per \$100 of feed for feeder cattle enterprises was \$90 in 2015, in comparison with a 5-year average of \$140 and a 15-year average of \$143 (Table 9).

The price paid for feeders was \$1.57 per 100 pounds lower in 2015 than it was in 2014; the price received for cattle sold in 2015 was \$1.59 higher per 100 pounds than the price received in 2014. The average weight of purchased animals was 698 pounds; the average weight of animals sold was 1,370 pounds. Feed costs were \$57.41 per 100 pounds produced in 2015; it was \$61.10 in 2014. Feed costs decreased in 2015 and were below the last 5-year average of \$71.61. Lower market cattle prices compared to inventory value resulted in much lower returns above feed in 2015.

Each 100 pounds of beef produced required 711 pounds of concentrates and 49 pounds of hay. The amount of corn silage used in 2015 averaged 170 pounds; other silage averaged 30 pounds, for a total of 200 pounds. Silage use by the feeder cattle enterprise had been rising slightly in the prior 4 years, while 2015 decreased; the 10-year average for the period 1996 through 2005 was 449 pounds per 100 pounds of beef produced, compared to 299 pounds for the period 2006 through 2015. The use of 200 pounds of silage per 100 pounds of beef produced in 2015 was the lowest amount fed on record. The high initial investment required for many silage feeding operations may denote more reliance on higher concentrate and dry roughage facilities.

This data does not show the wide variation in profits among cattle-feeding programs. The data on Illinois feeder cattle enterprises in Tables 9, 10, and 13 reflect the composite results of all qualities and ages of cattle fed. The data are heavily weighted, with good to choice calves and yearlings as the predominant cattle feeding system. Most farmers feed more than one drove of cattle each year to better utilize their fixed investments in mechanized feedlots.

The return above the cost of feed and purchased animals averaged \$27.30 per 100 pounds of beef produced from 2011 through 2015 (Table 10). During this period, returns ranged from a *negative* \$5.75 in 2015 to \$70.06 in 2014. The 5-year average returns above feed costs are below the estimated cost of \$31.14 per 100 pounds produced required to pay for all nonfeed costs for the average cattle feeder for the past 5 years. The returns above feed costs are lower than in 2014 because of the lower returns resulting from a decrease in inventory value in 2015.

The data in Table 14 show a detailed breakdown for the period from 2012 through 2015 on costs and returns to produce beef on beef-feeding farms. The farms included had no other livestock. All costs were accounted for, either in crops or in the beef-feeding enterprise. The figure for feed costs is based on the assumption that all the grain and roughage fed was produced on the farm and was marketable.

The data shows that these farms were finishing an average of 1,234 feeders each year from 2012 through 2015. The 4-year average total cash cost including feed and interest charged on cattle, was \$98.18 per 100 pounds of beef produced. The average total returns of \$99.02 for the same period was more than total cash costs by 84 cents per 100 pounds produced, or about \$5.67 per feeder.

Some feeders may be able to discount some of these cash costs for roughage fed and for interest on cattle if they had no market for the roughage or were able to use their own money to invest in cattle without paying interest. Total other costs of \$12.42 per 100 pounds of beef produced, or \$84 per feeder (\$12.42 multiplied by 6.75 hundredweight of gain per feeder), include depreciation, labor, and interest. Adding the other costs to cash costs results in total costs of \$110.60 per hundredweight over the 4-year period. This was \$11.58 per hundredweight more than the average total returns of \$99.02.

A number of cattle feeders in Illinois apparently will feed cattle as long as their return covers feed and cash costs even if it falls short of paying market rates for some nonmarketable roughage and fixed and overhead costs; however, this number is declining.

Farmers' values, goals, and attitudes have been important in maintaining production, but the dictates of the market, technological changes, and shifts in the basic factors of supply and demand continue to cause changes. The return

Table 13. Feeder Cattle and Feeder Pig Finishing Enterprises, 2015 Averages per Farm

	Feeder cattle	Feeder-pig finishing ^a
Number of farms.....	80	30
Total lbs produced	342,564	1,546,553
Total returns.....	\$176,952	\$540,981
Value of feed fed.....	\$196,654	\$445,030
Returns per \$100 of feed fed.....	\$90	\$122
Death loss, % lbs produced.....	2.7	2.0
Average weight purchased.....	698	13
Price paid per 100 lbs.....	\$206.79	\$284.07
Price received per 100 lbs.....	\$150.68	\$ 53.54
Average weight sold	1,370	276
	-- per cwt produced --	
Total returns.....	\$51.66	\$34.98
Feed costs	<u>57.41</u>	<u>28.78</u>
Return above feed.....	-\$5.75	\$ 6.20
Farm grains/complete feed, lbs	672	165
Supplement, lbs.....	<u>39</u>	<u>95</u>
Total concentrates, lbs.....	711	260
Hay, lbs.....	49	.. ^b
Corn silage, lbs.....	170	.. ^b
Other silage, lbs.....	30	.. ^b
Hay equivalent, lbs.....	120	.. ^b

^aPurchase weight of 20 lbs and less.

^bData not available.

reflected in these averages for the feeder-cattle enterprise suggests that to be profitable, farmers must produce the kind of beef consumers want at the lowest possible cost. Even though farms may have nonmarketable feeds, unemployed labor, or fixed capital investments in facilities, these data indicate returns are not consistently high enough to justify building new facilities.

Dairy enterprises

The average herd size on recordkeeping farms increased steadily at an average of 1.8 cows per year, from 42 in 1970 to 63 in 1982. Herd size remained steady, between 63 and 70 cows, up to 1994. From 1994 until 2004, herd size had been between 75 and 85 cows. From 2004 through 2009, herd size was around 100 cows. Since 2010, the herd size has been variable, but it averages around 130 cows. The 2015 average herd size is 147.4 cows. There continue to be fewer and fewer dairy herds in Illinois. A few dairy producers have decided to expand their herds and make a long-term commitment to the dairy industry.

The return per \$100 of feed fed to dairy cattle in 2015 was \$188. The average for the period from 2011 through 2015 was \$180 (Table 9). In 2015, milk prices per hundredweight decreased from \$24.88 to \$17.89. From 2014 to 2015, beef prices for market animals sold increased \$58.02 per hundred pounds, while feed costs decreased \$1.41 per milk equivalent. Milk production per cow in 2015 of 23,310 pounds was up 743 pounds from 2014 and the highest on record.

Dairy farmers have reduced the amounts of pasture and dry hay and increased the amounts of grain and silage fed over the past two decades. Pasture days per animal unit dropped from 145 in 1960, to 50 in 1970, to 4 in 2015. This shift indicates that significant pasture days are a thing of the past on nearly all dairy farms in this sample. However, some producers are beginning to experiment again with intensive rotational grazing as a means of lowering costs.

The herds in Table 15 were divided into groups based on size: the two groups had 40 to 79 cows and 150+ cows. The larger herds averaged 347 cows, and the smaller herds

Table 14. Average Costs and Returns for Beef-Feeding Enterprises, 2012 Through 2015

	2015	2014	2013	2012	2012-15 average
Number of farms.....	12	15	14	9	13
Average per farm					
Tillable acres.....	575	570	704	724	643
Hundredweight beef produced	5,929	5,843	5,241	6,441	5,864
Number head at 475-lb gain equivalents.....	1,248	1,230	1,103	1,356	1,234
Average weight purchased, lbs.....	650	635	659	553	624
Average weight sold, lbs.....	1,348	1,324	1,270	1,254	1,299
Price received per 100 lbs sold	\$149.47	\$147.19	\$122.87	\$116.58	\$134.03
Price paid per 100 lbs purchased.....	\$210.69	\$206.98	\$141.12	\$137.24	\$174.01
----- per cwt beef produced -----					
Cash costs					
Feed	\$58.25	\$61.32	\$91.53	\$93.39	\$76.12
Operating expenses					
Maintenance and power ^b	\$ 8.68	\$ 8.61	\$ 8.45	\$ 7.61	\$ 8.34
Livestock expense.....	7.88	6.20	6.93	5.32	6.58
Insurance, taxes, and overhead	1.23	0.85	0.94	1.13	1.04
Interest on cattle ^c	7.11	6.23	5.02	6.03	6.10
Total operating expenses.....	\$24.90	\$21.89	\$ 21.34	\$ 20.09	\$22.06
Total cash costs.....	\$83.15	\$83.21	\$112.87	\$113.48	\$98.18
Other costs					
Depreciation ^d	\$ 3.93	\$ 3.64	\$ 3.37	\$ 3.61	\$ 3.64
Labor	6.09	5.88	6.47	6.69	6.28
Interest on other capital.....	2.78	2.61	2.16	2.45	2.50
Total other costs	\$12.81	\$ 12.13	\$ 12.00	\$ 12.75	\$ 12.42
Total all costs.....	\$95.96	\$95.34	\$124.87	\$126.23	\$110.60
Total returns ^e	\$50.67	\$131.16	\$109.27	\$104.98	\$99.02
Return above all costs.....	(\$45.29)	\$ 35.82	(\$ 15.60)	(\$21.25)	(\$11.58)

^aAll grain fed was priced at the average market price for the year. Market values were used for roughage fed, while protein and minerals were charged at cost. All the feed fed is assumed to have been marketable.

^bIncludes utilities, machinery, equipment and building repairs, machine hire, and fuel.

^cInterest is a charge on the average value of beginning- and end-of-year inventories on hand. The rate was 4.5% for 2012 and 4.0% for 2013 to 2015.

^dIncludes machinery, equipment, and building depreciation.

^eSales less cost of purchased animals, plus or minus inventory value change. No credit has been calculated for reduced fertility cost when manure is applied to crops.

averaged 67 cows. The return above feed costs per cow was higher for the larger herds, at \$2,649, compared to a return of \$1,046 for the smaller herds. The larger herds averaged 24,933 pounds of milk produced per cow, compared to 20,830 pounds for the smaller herds. Feed cost per milk equivalent was lower for the larger herds, at \$8.69, compared to \$12.98 for the smaller herds.

The average return above feed costs per cow for all dairy herds was \$2,167 in 2015 (Table 15). This figure compares with the recent 5-year average of \$2,294 per cow (Table 10). For the years 2010 through 2014, the 5-year average return above feed costs required to pay market prices for all nonfeed costs is estimated to be about \$2,256 per cow. Although the number of dairy herds has decreased, their size and efficiency have increased, and they have continued to increase the milk supply. Normal depreciation and wear-and-tear will soon require the reinvestment of greater amounts of capital in some of these businesses.

The data in Table 16 on dairy enterprises show a detailed breakdown of milk production costs and returns for dairy farms by the number of cows in the herd from 2013 through 2015. The farms included had no other livestock. All costs were accounted for either in crops or in the dairy enterprise. The total costs for the dairy enterprise were reduced by the amount of income derived from an inventory increase in the pounds of beef produced or sold, which was valued at the average price received for all weights of dairy animals sold from 2011 through 2015. The residual costs, amounting to about 87 percent of the total enterprise costs, were then considered the net cost of producing milk.

The differences between the herds with 40 to 79 cows and those with 80 or more for the period from 2013 through 2015 is a combination of lower feed costs and lower other costs for the larger herds. For the 3-year period, the milk price for the larger herds is 14 cents per 100 pounds lower than that for the smaller herds, while feed costs per 100 pounds of milk sold for the larger herds were \$1.82 lower than for the smaller herds. Total nonfeed costs were 99 cents lower for the larger herds.

In 2015, feed costs per 100 pounds of milk produced decreased for small herds (\$2.03) and for large herds (\$1.97). The cost of feed averaged about 49 percent of total production costs in Illinois dairy enterprises. Compared with 2014, total nonfeed costs decreased 10 percent for both the small and the large herds. The total cost of producing 100 pounds of milk in 2015 was \$20.79 for the small herds and \$18.78 for the large herds. The average price received for milk in 2015 decreased for both groups of dairy enterprises. With lower milk prices, returns were not able to cover total production costs for either group in 2015. Returns were a *negative* \$4.00 per 100 pounds of milk produced for the small herds and a *negative* \$1.30 for the large herds. The returns above all costs per 100 pounds of milk produced had averaged \$2.66 more for the large

Table 15. Dairy Cattle Enterprises, 2015 Averages per Farm

	All farms	40-79 cows	150+ cows
Number of farms.....	65	14	15
Number of cows.....	147.4	67.1	347.1
Milk cows dry, %	11.9	12.9	11.6
Animal units in herd.....	280	137	654
Total returns.....	\$682,459	\$265,420	\$1,750,093
Value of feed fed.....	\$363,144	\$195,270	\$830,583
Return per \$100 of feed fed	\$188	\$136	\$211
Return above feed per cow .	\$2,167	\$1,046	\$2,649
Total milk produced, cwt	34,351	13,975	86,548
Lbs of milk per cow.....	23,310	20,830	24,933
Lbs of butterfat per cow.....	891	800	938
Total beef produced, lbs	97,373	41,439	234,901
Pounds of beef per cow.....	661	618	677
Death loss, % lbs produced.	13.5	11.9	12.7
Price received for:			
cwt milk.....	\$ 17.89	\$17.60	\$ 18.27
cwt beef	\$225.98	\$185.72	\$259.40
Per cwt milk equivalent ^a			
Feed cost.....	\$9.54	\$12.98	\$8.69
Grain/complete feed, lbs....	21	30	18
Protein and minerals, lbs...	18	23	17
Total concentrates, lbs.....	39	53	35
Hay and dry roughage, lbs	13	28	6
Corn silage, lbs.....	83	86	83
Other silage, lbs.....	51	72	50
Pasture days per animal unit	0	0	1
Hay equivalent per cow, tons	8.1	9.7	7.6
Concentrates per cow, lbs ...	10,034	11,916	9,634

^aMilk equivalent equals value of beef produced divided by average price received per cwt milk plus cwt of milk produced.

group than the small group from 2013 through 2015. Margin Protection Program for Dairy Producers (MPP-Dairy) payments from the Farm Service Agency and patronage returns related to the dairy enterprise were not included in returns. This would add about 5 cents per 100 pounds of milk produced to returns.

Beef-cow herds

The minimum size for a beef-cow herd included in Table 17 was 10 cows. Farms combining cow herds and purchased feeder cattle were not included. From 1956 through 1969, the average size of the herd on all farms ranged from 25 to 30 cows. From 1970 to 1973, the average grew to about 40 cows per herd and remained stable through 1989. Since 2001, the herd size has been about 50 to 60 cows. The herd size was 63 cows in 2015, 6 more than in 2014. Most Illinois farmers who maintain a beef-cow herd do so as a supplemental enterprise to market nonsalable feeds and labor.

The return per \$100 of feed fed to beef-cow herds where the calves are sold averaged \$101 in 2015. The returns for the 5-year period from 2011 through 2015 averaged \$152,

Table 16. Average Milk Production Costs and Returns by Size of Herd, 2013 through 2015

	40–79 cows in herd			80 or more cows in herd		
	2015	2014	2013	2015	2014	2013
Number of farms	7	9	9	29	27	30
Tillable acres	182	198	176	475	442	483
Number of cows.....	57.4	64.0	69.0	210.0	216.7	209.5
Milk per cow, lbs.....	20,299	19,434	18,662	24,092	23,826	26,631
	----- per 100 lbs of milk produced -----					
Price received.....	\$16.79	\$25.29	\$20.41	\$17.48	\$25.16	\$20.69
Cash costs						
Feed	\$10.70	\$12.73	\$14.81	\$9.09	\$11.06	\$13.06
Operating expenses						
Maintenance and power ^a	2.84	3.07	2.68	2.40	3.03	2.65
Livestock expense.....	2.52	3.13	3.14	2.58	2.91	2.70
Insurance, taxes, and overhead.....	0.09	0.19	0.18	0.24	0.26	0.23
Total operating expenses.....	\$ 5.46	\$ 6.39	\$ 6.00	\$ 5.32	\$ 6.20	\$ 5.58
Total cash costs.....	\$16.16	\$19.12	\$20.81	\$14.41	\$17.26	\$18.64
Other costs						
Depreciation ^b	\$ 0.96	\$ 0.85	\$ 1.10	\$ 0.96	\$ 0.98	\$ 1.03
Labor	2.90	3.11	3.93	2.58	2.72	2.63
Interest charge on all capital.....	0.77	0.83	0.85	0.83	0.87	0.76
Total other costs	\$ 4.63	\$ 4.79	\$ 5.88	\$ 4.37	\$ 4.57	\$ 4.42
Total nonfeed costs.....	\$10.09	\$11.18	\$11.88	\$ 9.69	\$10.77	\$10.00
Total all costs.....	<u>\$20.79</u>	<u>\$23.91</u>	<u>\$26.69</u>	<u>\$18.78</u>	<u>\$21.83</u>	<u>\$23.06</u>
Return above all costs.....	(\$4.00)	\$1.38	(\$6.28)	(\$ 1.30)	\$ 3.33	(\$ 2.37)

^aIncludes utilities, machinery, equipment and building repairs, machine hire, and fuel.

^bIncludes machinery, equipment, and building depreciation.

which is above the 15-year average of \$140 for the period from 2001 through 2015 (Table 9). Beef prices received in 2015 averaged \$186.18 per hundredweight, an increase of \$1.42 from prices in 2014. Feed costs per 100 pounds of beef produced decreased by \$3.39 to \$89.28 in 2015.

In addition to all farms, Table 17 gives an analysis of cow herds in which calves were sold at weaning time, comparing them with cow herds in which calves were finished to slaughter weights. Comparing the two groups, there are 55 cows in the calves-sold group and 79 cows in the calves-fed-out group. The value of feed fed for the calves-fed-out group was \$40,856 higher than for the calves-sold group, but the feed cost per hundredweight produced is \$25.26 less. More hay and dry roughages are fed to the calves-sold group, 496 pounds per hundredweight produced, than the calves-fed-out group, but the total silage fed is 87 pounds less per hundredweight produced.

Since 2011, the difference in returns above feed costs per cow for the average farmer to feed out calves rather than sell them at weaning has been about \$295 per cow. Additional returns are needed for the added costs of labor, buildings, and capital required to feed out the calves. In 2015, the return above feed costs per cow for feeding calves to market weight was \$151 more than selling them at weaning.

Table 17. Beef-Cow Enterprises, 2015 Averages per Farm

	All farms	Calves sold	Calves fed out
Number of farms.....	173	59	36
Number of cows in herd.....	63	55	79
Animal units in herd.....	106	75	149
Total lbs produced	47,310	25,968	86,977
Beef per cow, lbs.....	750	473	1,105
Total returns.....	\$42,467	\$24,845	\$76,775
Value of feed fed.....	\$42,240	\$26,738	\$67,594
Return per \$100 feed fed.....	\$101	\$93	\$114
Return above feed per cow	\$4	-\$34	\$117
Death loss, lbs.....	2,442	2,241	2,778
% lbs produced.....	5.2	8.6	3.2
Weight per animal sold, lbs	744	552	1,069
Price per cwt sold—market.....	\$186.18	\$214.16	\$160.06
	----- per cwt produced -----		
Feed costs.....	\$89.28	\$102.97	\$77.71
Grain/complete feed, lbs.....	172	130	209
Protein and minerals, lbs.....	65	93	53
Total concentrates, lbs.....	237	223	262
Hay and dry roughage, lbs	804	1,075	579
Corn silage, lbs.....	456	317	521
Other silage, lbs.....	173	210	93
Pasture days.....	28	46	19
Pasture days per animal unit...	126	160	109
Hay equivalent per cow, tons...	6.2	5.4	6.6

^aInsufficient data.

Sheep enterprises

Sheep production is a minor enterprise on Illinois record-keeping farms. The minimum size of enterprise in Table 18 is 3 animal units. One animal unit of sheep is defined as 750 pounds, liveweight. The return per \$100 of feed fed in 2015 was \$79 for native flocks. The average return for the 4-year period from 2009 through 2014, minus 2013, is \$113 per \$100 feed fed (Table 9). The pounds of wool and mutton produced per farm have remained fairly constant for the past 10 years. The price received for sheep increased from \$141.39 per hundredweight in 2014 to \$143.22 in 2015, while feed costs per hundredweight produced decreased by \$5.82 to \$100.26, or 5 percent. Most Illinois farmers who keep sheep do so as a supplemental enterprise in order to market nonsalable feeds and labor.

Table 18. Sheep Enterprises, 2015 Averages per Farm (Native Flocks)

Number of farms.....	9
Number of ewes in flock.....	69
Wool and mutton produced, lbs.....	10,186
Total returns.....	\$8,075
Value of feed fed.....	\$10,212
Return per \$100 of feed fed.....	\$79
Percent lamb crop.....	119
Death loss, lbs.....	489
Percent lbs produced.....	4.8
Weight per market animal sold, lbs.....	112
----- per cwt produced -----	
Price received—market.....	\$143.22
Feed costs.....	\$100.26
Concentrates, lbs.....	340
Hay, lbs.....	857
Pasture days.....	18
Hay equivalent, lbs.....	1,220

Appendix A

Costs, returns, financial summaries, investments, land use, and crop yields for different sizes and types of Illinois farms are reported in Tables 19 through 23a.

Table 19. 2015 Operator Average Returns, Costs, and Financial Summary by Size and by Management Returns for Northern and Central Illinois Grain Farms with Soil Ratings from 86 to 100

	180-799		800-1,199		1,200-1,999		> 1,999		Your farm		All farms		800-1,199	
	Range in size (total tillable acres)	Number of farms	Range in size (total tillable acres)	Number of farms	Range in size (total tillable acres)	Number of farms	Range in size (total tillable acres)	Number of farms	Range in size (total tillable acres)	Number of farms	Low 33%	High 33%	Range in size (total tillable acres)	Number of farms
Management returns	421	253	257	134	1,065	83	83	986	1,027					
Total acres in farm	533	1,013	1,555	3,053	1,211	1,027	986	1,027						
Acres of tillable land	515	985	1,516	2,993	1,180	998	960	1,027						
Operator tillable acres	410	780	1,189	2,487	947	783	756	947						
Soil rating on tillable land	91	91	92	90	91	91	91	91						
Percent land owned	23	17	12	11	15	11	24	24						
Percent land crop shared	40	41	43	33	39	43	41	41						
Percent land cash rented	37	42	45	55	46	46	35	35						
Months of hired labor	1.1	3.9	7.5	18.8	5.5	3.6	4.7	4.7						
Total months labor	9.7	14.4	19.6	34.7	16.3	13.8	15.5	15.5						
Dollar returns														
Crop returns	278,593	538,034	832,292	1,846,482	671,115	581,256	474,321	474,321						
Livestock returns above feed	47	186	-430	-70	-50	462	144	144						
Custom work	5,059	9,898	11,863	37,830	11,974	9,665	7,586	7,586						
Other farm receipts	5,372	10,704	17,610	53,749	15,679	12,898	9,692	9,692						
Value of farm production	289,071	558,822	861,336	1,937,992	698,718	604,280	491,744	491,744						
Dollar costs														
Crop expenses	108,642	206,126	321,491	646,955	250,895	194,113	214,595	214,595						
Power and equipment	57,868	106,382	156,911	324,783	126,877	92,195	112,274	112,274						
Building and fence	16,759	28,666	42,552	89,023	34,904	24,554	30,805	30,805						
Labor	29,993	43,804	58,444	110,716	50,296	42,098	47,700	47,700						
Insurance and miscellaneous	16,582	29,062	44,156	95,956	36,188	26,399	31,364	31,364						
Livestock services and supplies	270	363	454	1,055	435	389	187	187						
Interest on nonland capital	18,615	36,345	56,532	119,790	44,707	31,838	39,427	39,427						
Real estate taxes	6,445	8,405	10,657	20,524	9,699	6,321	10,469	10,469						
Cash rent	44,723	104,029	180,523	493,109	147,998	109,071	90,016	90,016						
Other land charges	51,270	77,124	101,997	173,488	85,031	59,393	97,034	97,034						
Total nonfeed costs	351,166	640,306	973,718	2,075,399	787,030	586,370	673,869	673,869						
Capital account adjustment	3,610	3,205	3,847	9,501	4,312	2,915	4,576	4,576						
Management returns	-58,485	-78,279	-108,535	-127,906	-84,000	20,825	-177,550	-177,550						
Farm production per \$1.00 of nonfeed costs	0.82	0.87	0.88	0.93	0.89	1.03	0.73	0.73						
Farm production per man	341,919	600,213	740,553	917,672	571,917	669,975	504,398	504,398						
Financial summary														
Cash operating income	321,738	608,861	958,593	2,097,126	767,011	613,927	575,710	575,710						
Inventory change	-42,983	-67,095	-119,027	-170,319	-83,083	-29,843	-100,071	-100,071						
Accts. receivable (net change)	10,668	18,001	24,188	21,874	17,082	21,139	17,537	17,537						
Less purchased feed	42	109	450	512	216	240	50	50						
Less purchased livestock	218	119	791	610	382	0	123	123						
Gross farm returns	289,163	559,539	862,512	1,947,560	700,413	604,983	493,003	493,003						
Cash operating expenses	234,810	453,739	737,955	1,624,177	583,047	431,958	449,010	449,010						
Prepaid expenses (- if increased)	5,520	11,598	3,338	28,809	9,368	9,095	20,872	20,872						
Accts. payable (+ if increased)	586	2,304	-1,590	-6,916	-475	6,014	2,250	2,250						
Total operating expenses	240,916	467,641	739,703	1,646,069	591,939	447,067	472,132	472,132						
Income before depreciation	48,247	91,898	122,808	301,490	108,474	157,916	20,871	20,871						
Less depreciation	37,101	75,324	116,156	235,163	90,179	59,138	86,004	86,004						
Capital account adjustment	3,610	3,205	3,847	9,501	4,312	2,915	4,576	4,576						
Net farm income	14,756	19,778	10,499	75,828	22,607	101,692	-60,557	-60,557						
Net farm income per operator	14,233	19,198	8,379	43,791	17,946	93,921	-52,868	-52,868						
Labor & mgt. income per operator	-25,026	-33,574	-54,854	-64,161	-39,179	56,035	-124,078	-124,078						

Note: Variations in totals due to rounding to the nearest dollar. Farms with soil ratings from 86 to 100 are those with nearly level, well-drained prairie soils.

Table 19a. 2015 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Management Returns for Northern and Central Illinois Grain Farms with Soil Ratings from 86 to 100

Range in size (total tillable acres)	180-799		800-1,199		1,200-1,999		> 1,999		All farms	
	421	253	257	134	134	134	134	134	1,065	83
Management returns	800-1,199		1,200-1,999		1,200-1,999		> 1,999		800-1,199	
Number of farms	421	253	257	134	134	134	134	134	1,065	83
Selected returns and costs										
per operator tillable acre										
Crop returns	679.04	690.08	700.19	742.59	742.59	742.59	742.59	742.59	708.60	627.71
Livestock returns above feed	0.11	0.24	-0.36	-0.03	-0.03	-0.03	-0.03	-0.03	-0.05	0.19
Custom work, other receipts	25.42	26.42	24.80	36.83	36.83	36.83	36.83	36.83	29.20	22.87
Value of farm production	704.58	716.75	724.63	779.39	779.39	779.39	779.39	779.39	737.74	650.77
Soil fertility	113.47	113.08	116.23	116.43	116.43	116.43	116.43	116.43	115.21	125.09
Pesticides	55.47	53.59	53.85	48.00	48.00	48.00	48.00	48.00	52.14	60.89
Seed and other crop expense	95.86	97.71	100.38	95.75	95.75	95.75	95.75	95.75	97.56	98.01
Crop total	264.80	264.38	270.47	260.18	260.18	260.18	260.18	260.18	264.91	283.99
Light vehicle and utilities	11.98	8.13	6.68	5.95	5.95	5.95	5.95	5.95	7.63	8.76
Machinery repairs, supplies	30.05	27.26	25.42	23.03	23.03	23.03	23.03	23.03	25.78	28.81
Machinery hire, lease	16.88	15.59	12.88	14.45	14.45	14.45	14.45	14.45	14.61	15.01
Fuel and oil	17.49	17.86	18.41	20.85	20.85	20.85	20.85	20.85	18.95	18.15
Machinery depreciation	64.65	67.61	68.61	66.34	66.34	66.34	66.34	66.34	66.99	77.85
Power and equipment total	141.05	136.45	132.01	130.62	130.62	130.62	130.62	130.62	133.96	148.58
Drying and storage	23.61	21.34	20.07	15.06	15.06	15.06	15.06	15.06	19.27	21.11
Building repair and rent	5.91	4.82	5.20	6.02	6.02	6.02	6.02	6.02	5.52	6.09
Building depreciation	11.32	10.61	10.54	14.72	14.72	14.72	14.72	14.72	12.07	13.57
Building total	40.85	36.77	35.80	35.80	35.80	35.80	35.80	35.80	36.85	40.77
Labor, unpaid	65.00	41.12	30.96	20.13	20.13	20.13	20.13	20.13	35.20	43.91
Labor, paid	8.10	15.06	18.21	24.40	24.40	24.40	24.40	24.40	17.91	19.21
Labor total	73.10	56.18	49.17	44.53	44.53	44.53	44.53	44.53	53.11	63.13
Insurance and miscellaneous	40.42	37.27	37.15	38.59	38.59	38.59	38.59	38.59	38.21	41.51
Livestock services and supplies	0.66	0.47	0.38	0.42	0.42	0.42	0.42	0.42	0.46	0.25
Interest on nonland capital	45.37	46.62	47.56	48.18	48.18	48.18	48.18	48.18	47.20	52.18
Other costs total	86.45	84.36	85.09	87.19	87.19	87.19	87.19	87.19	85.87	93.93
Land charge	249.68	243.13	246.64	276.33	276.33	276.33	276.33	276.33	256.28	261.39
Total nonfeed costs	855.93	821.26	819.17	834.65	834.65	834.65	834.65	834.65	830.99	891.79
Capital account adjustment	8.80	4.11	3.24	3.82	3.82	3.82	3.82	3.82	4.55	6.06
Management returns	-142.55	-100.40	-91.31	-51.44	-51.44	-51.44	-51.44	-51.44	-88.69	-234.97
Percent crop returns fed	0.01	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.00
Capital purchases	28,709	55,159	96,869	207,356	207,356	207,356	207,356	207,356	73,918	54,628
Interest paid	9,804	18,072	30,989	64,491	64,491	64,491	64,491	64,491	23,761	18,478
Percent tillable land in										
Corn and corn silage	51.8	53.3	54.3	54.5	54.5	54.5	54.5	54.5	53.7	51.2
Soybeans	46.6	45.2	44.9	43.3	43.3	43.3	43.3	43.3	44.8	47.0
Wheat	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3
Other small grains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CRP acres	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.6
All hay and pasture	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Crop yields, bushels per acre										
Corn	196	194	197	203	203	203	203	203	198	187
Soybeans	63	63	65	67	67	67	67	67	65	61
Wheat	68	77	65	79	79	79	79	79	72	80
Prices received										
Corn (old crop)	3.72	3.73	3.77	3.89	3.89	3.89	3.89	3.89	3.79	3.68
Corn (new crop)	3.71	3.78	3.75	3.87	3.87	3.87	3.87	3.87	3.79	3.73
Soybeans (old crop)	10.28	10.47	10.59	10.86	10.86	10.86	10.86	10.86	10.59	10.23
Soybeans (new crop)	8.97	9.21	9.00	9.17	9.17	9.17	9.17	9.17	9.09	9.16

Note: Variations in totals due to rounding to the nearest dollar. Farms with soil ratings from 86 to 100 are those with nearly level, well-drained prairie soils.

Table 20. 2015 Operator Average Returns, Costs, and Financial Summary by Size and by Management Returns for Northern and Central Illinois Grain Farms with Soil Ratings from 56 to 85

Range in size (total tillable acres)	180-799		800-1,199		1,200-1,999		> 1,999		Your farm		All farms		800-1,199	
	Number of farms	364	175	175	175	95	809	58	58	Low 33%	High 33%			
Management returns	498	1,571	2,922	1,118	992	884	968	775	79	26	13	39	48	1.8
Number of farms	473	1,516	2,839	1,078	968	728	775	79	26	13	39	48	1.8	13.0
Total acres in farm	399	1,276	2,482	913	76	78	79	20	20	20	20	20	20	20
Acres of tillable land	75	76	78	76	31	31	31	31	31	31	31	31	31	31
Operator tillable acres	26	18	18	18	51	57	57	57	57	57	57	57	57	57
Soil rating on tillable land	32	31	25	31	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
Percent land owned	41	45	51	45	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
Percent land crop shared	0.8	2.9	5.4	2.9	865,065	1,753,146	618,705	543,952	433,697	543,952	543,952	543,952	543,952	543,952
Percent land cash rented	9.5	14.2	18.1	14.2	140	128	202	82	306	306	306	306	306	306
Months of hired labor	261,998	498,457	865,065	618,705	202	202	202	202	202	202	202	202	202	202
Total months labor	140	573	1,280	618,705	202	202	202	202	202	202	202	202	202	202
Dollar returns	4,961	13,255	25,945	9,880	10,230	9,880	9,880	9,880	10,230	10,230	10,230	10,230	10,230	10,230
Crop returns	5,525	15,935	33,661	12,055	8,826	8,826	8,826	8,826	8,826	8,826	8,826	8,826	8,826	8,826
Livestock returns above feed	272,624	894,828	1,812,880	640,843	453,058	453,058	453,058	453,058	453,058	453,058	453,058	453,058	453,058	453,058
Custom work	105,693	335,762	671,357	242,579	204,755	204,755	204,755	204,755	204,755	204,755	204,755	204,755	204,755	204,755
Other farm receipts	60,994	177,318	351,609	130,122	113,491	113,491	113,491	113,491	113,491	113,491	113,491	113,491	113,491	113,491
Value of farm production	15,144	41,476	82,599	31,093	28,971	28,971	28,971	28,971	28,971	28,971	28,971	28,971	28,971	28,971
Dollar costs	31,401	44,042	110,785	49,442	48,241	48,241	48,241	48,241	48,241	48,241	48,241	48,241	48,241	48,241
Crop expenses	15,739	28,955	98,190	35,155	31,145	31,145	31,145	31,145	31,145	31,145	31,145	31,145	31,145	31,145
Power and equipment	269	882	897	535	454	454	454	454	454	454	454	454	454	454
Building and fence	17,308	34,270	115,557	41,323	36,866	36,866	36,866	36,866	36,866	36,866	36,866	36,866	36,866	36,866
Labor	5,104	10,793	23,348	8,853	8,401	8,401	8,401	8,401	8,401	8,401	8,401	8,401	8,401	8,401
Insurance and miscellaneous	41,397	179,084	406,313	125,933	79,405	79,405	79,405	79,405	79,405	79,405	79,405	79,405	79,405	79,405
Livestock services and supplies	40,296	71,475	167,619	74,959	85,624	85,624	85,624	85,624	85,624	85,624	85,624	85,624	85,624	85,624
Interest on nonland capital	333,345	1,010,176	2,028,275	739,993	637,353	637,353	637,353	637,353	637,353	637,353	637,353	637,353	637,353	637,353
Real estate taxes	1,860	3,566	8,802	3,471	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754
Cash rent	-58,861	-111,782	-206,592	-95,680	-179,542	-179,542	-179,542	-179,542	-179,542	-179,542	-179,542	-179,542	-179,542	-179,542
Other land charges	0.82	0.89	0.89	0.87	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Total nonfeed costs	305,740	726,026	825,443	507,000	634,400	634,400	634,400	634,400	634,400	634,400	634,400	634,400	634,400	634,400
Capital account adjustment	294,060	962,274	1,948,455	694,389	561,622	561,622	561,622	561,622	561,622	561,622	561,622	561,622	561,622	561,622
Management returns	-28,880	-78,897	-133,485	-61,452	-114,211	-114,211	-114,211	-114,211	-114,211	-114,211	-114,211	-114,211	-114,211	-114,211
Farm production per \$1.00	8,081	11,879	19,829	11,843	6,019	6,019	6,019	6,019	6,019	6,019	6,019	6,019	6,019	6,019
of nonfeed costs	103	524	3,581	651	379	379	379	379	379	379	379	379	379	379
Farm production per man	454	1,149	1,326	703	0	0	0	0	0	0	0	0	0	0
Financial summary	272,704	897,002	1,829,892	643,427	453,052	453,052	453,052	453,052	453,052	453,052	453,052	453,052	453,052	453,052
Cash operating income	226,197	748,405	1,587,619	545,237	425,798	425,798	425,798	425,798	425,798	425,798	425,798	425,798	425,798	425,798
Inventory change	3,152	14,903	4,578	5,924	15,670	15,670	15,670	15,670	15,670	15,670	15,670	15,670	15,670	15,670
Accts. receivable (net change)	865	2,178	13,157	2,050	6,102	6,102	6,102	6,102	6,102	6,102	6,102	6,102	6,102	6,102
Less purchased feed	230,214	761,131	1,605,354	553,211	447,570	447,570	447,570	447,570	447,570	447,570	447,570	447,570	447,570	447,570
Less purchased livestock	42,491	135,872	224,537	90,216	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482
Gross farm returns	35,510	70,286	234,400	84,945	81,882	81,882	81,882	81,882	81,882	81,882	81,882	81,882	81,882	81,882
Cash operating expenses	1,860	3,566	8,802	3,471	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754
Prepaid expenses (- if increased)	8,840	18,145	-1,061	8,742	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647
Accts. payable (+ if increased)	8,802	16,252	-1,055	8,097	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540
Total operating expenses	-24,411	-55,616	-102,219	-46,033	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150
Income before depreciation	42,491	135,872	224,537	90,216	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482
Less depreciation	35,510	70,286	234,400	84,945	81,882	81,882	81,882	81,882	81,882	81,882	81,882	81,882	81,882	81,882
Capital account adjustment	1,860	3,566	8,802	3,471	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754	4,754
Net farm income	8,840	18,145	-1,061	8,742	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647	-71,647
Net farm income per operator	8,802	16,252	-1,055	8,097	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540	-71,540
Labor & mgt. income per operator	-24,411	-55,616	-102,219	-46,033	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150	-134,150

Note: Variations in totals due to rounding to the nearest dollar. Farms with soil ratings from 56 to 85 are those with poorly drained, heavy-til, and timber soils.

Table 20a. 2015 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Management Returns for Northern and Central Illinois Grain Farms with Soil Ratings from 56 to 85

Range in size (total tillable acres)	180-799		800-1,199		1,200-1,999		> 1,999		All farms	
	364	175	175	175	95	95	809	Low 33%	High 33%	
Management returns								58	58	
Number of farms								58	58	
Selected returns and costs										
per operator tillable acre										
Crop returns	656.74	648.43	677.78	677.40	706.29	706.29	677.40	595.71	701.59	
Livestock returns above feed	0.35	0.00	0.45	0.22	0.05	0.05	0.22	0.42	-0.11	
Custom work, other receipts	26.28	23.47	22.87	24.02	24.01	24.01	24.02	26.17	20.35	
Value of farm production	683.37	671.91	701.10	701.64	730.36	730.36	701.64	622.30	721.84	
Soil fertility	115.41	111.23	111.04	114.25	118.29	118.29	114.25	127.69	99.66	
Pesticides	51.18	53.21	56.36	54.72	55.72	55.72	54.72	54.80	51.72	
Seed and other crop expense	98.35	97.50	95.66	96.78	96.45	96.45	96.78	98.76	96.24	
Crop total	264.94	261.94	263.07	265.59	270.47	270.47	265.59	281.24	247.63	
Light vehicle and utilities	13.74	9.58	7.64	9.03	7.14	7.14	9.03	11.68	8.26	
Machinery repairs, supplies	31.89	28.66	26.60	27.92	26.31	26.31	27.92	33.43	20.87	
Machinery hire, lease	22.14	16.39	16.83	18.36	18.60	18.60	18.36	11.67	19.35	
Fuel and oil	17.52	17.69	18.52	18.60	19.85	19.85	18.60	19.87	15.83	
Machinery depreciation	67.60	66.19	69.76	68.56	69.76	69.76	68.56	79.24	55.74	
Power and equipment total	152.89	138.51	138.93	142.47	141.65	141.65	142.47	155.89	120.05	
Drying and storage	20.19	18.17	14.39	15.97	13.62	13.62	15.97	19.39	16.02	
Building repair and rent	6.60	5.44	4.77	5.25	4.76	4.76	5.25	5.93	3.46	
Building depreciation	11.17	10.11	13.34	12.82	14.90	14.90	12.82	14.47	7.26	
Building total	37.96	33.72	32.50	34.04	33.28	33.28	34.04	39.79	26.75	
Labor, unpaid	73.73	46.29	32.65	40.12	32.97	32.97	40.12	48.10	44.14	
Labor, paid	4.98	11.01	13.63	14.02	21.66	21.66	14.02	18.17	6.89	
Labor total	78.71	57.29	46.28	54.13	44.63	44.63	54.13	66.26	51.02	
Insurance and miscellaneous	39.45	37.67	37.23	38.49	39.56	39.56	38.49	42.78	34.41	
Livestock services and supplies	0.67	0.71	0.69	0.59	0.36	0.36	0.59	0.62	0.35	
Interest on nonland capital	43.38	44.58	45.46	45.24	46.55	46.55	45.24	50.64	39.42	
Other costs total	83.51	82.95	83.39	84.32	86.47	86.47	84.32	94.04	74.18	
Land charge	217.57	227.30	227.31	229.64	240.63	240.63	229.64	238.22	216.56	
Total nonfeed costs	835.58	801.71	791.47	810.19	817.13	817.13	810.19	875.44	736.20	
Capital account adjustment	4.66	4.98	2.79	3.80	3.55	3.55	3.80	6.53	4.15	
Management returns	-147.54	-124.82	-87.58	-104.76	-83.23	-83.23	-104.76	-246.61	-10.21	
Percent crop returns fed	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.02	0.03	
Capital purchases	26,156	52,027	93,076	70,485	232,726	232,726	70,485	53,803	57,289	
Interest paid	10,467	16,443	36,395	25,619	80,731	80,731	25,619	20,693	12,443	
Percent tillable land in										
Corn and corn silage	55.2	52.8	54.3	55.1	57.4	57.4	55.1	51.6	53.4	
Soybeans	42.6	44.8	42.8	42.1	39.6	39.6	42.1	45.7	43.8	
Wheat	0.5	0.7	0.7	0.6	0.4	0.4	0.6	1.0	0.6	
Other small grains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CRP acres	0.7	0.4	0.4	0.6	0.9	0.9	0.6	0.5	0.4	
All hay and pasture	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.5	0.1	
Crop yields, bushels per acre										
Corn	188	183	190	189	192	192	189	175	192	
Soybeans	60	60	60	61	61	61	61	58	62	
Wheat	55	64	66	64	66	66	64	62	67	
Prices received										
Corn (old crop)	3.75	3.76	3.86	3.83	3.91	3.91	3.83	3.69	3.83	
Corn (new crop)	3.69	3.79	3.76	3.78	3.84	3.84	3.78	3.79	3.83	
Soybeans (old crop)	10.22	10.34	10.55	10.42	10.49	10.49	10.42	10.12	10.55	
Soybeans (new crop)	8.82	9.02	9.05	9.15	9.56	9.56	9.15	8.97	9.04	

Note: Variations in totals due to rounding to the nearest dollar. Farms with soil ratings from 56 to 85 are those with poorly drained, heavy-til, and timber soils.

Table 21. 2015 Operator Average Returns, Costs, and Financial Summary by Size and by Management Returns for Southern Illinois Grain Farms with Soil Ratings from 36 to 85

Range in size (total tillable acres)	180-799		800-1,199		1,200-1,999		> 1,999		All farms	
	Number of farms	87	68	80	66	Your farm	Low 33%	High 33%	22	22
Total acres in farm	534	1,037	1,641	3,408	301		1,022	1,047		
Acres of tillable land	493	984	1,579	3,246	1,572		955	1,002		
Operator tillable acres	432	827	1,335	2,871	1,296		780	811		
Soil rating on tillable land	59	59	58	58	59		59	59		
Percent land owned	37	26	20	17	21		31	22		
Percent land crop shared	34	42	41	29	35		48	48		
Percent land cash rented	29	32	39	55	44		21	30		
Months of hired labor	2.3	6.3	10.8	25.5	10.6		6.1	6.2		
Total months labor	12.2	18.8	23.6	45.1	23.9		18.2	17.8		
Dollar returns										
Crop returns	216,987	437,964	720,850	1,673,503	720,195		332,771	495,385		
Livestock returns above feed	272	3,309	5,270	12,959	5,068		-1,442	8,874		
Custom work	2,467	4,190	10,487	45,277	14,375		4,903	3,154		
Other farm receipts	4,713	10,027	22,866	64,783	23,910		6,236	14,598		
Value of farm production	224,440	455,490	759,472	1,796,522	763,547		342,468	522,012		
Dollar costs										
Crop expenses	98,568	192,488	320,784	696,845	310,030		173,537	187,089		
Power and equipment	72,583	128,886	193,841	440,018	198,098		131,585	105,789		
Building and fence	10,002	22,424	30,769	78,779	33,408		19,492	20,714		
Labor	40,369	56,817	75,665	163,380	80,438		53,516	53,447		
Insurance and miscellaneous	18,895	32,578	51,676	106,142	49,829		35,725	27,010		
Livestock services and supplies	676	1,503	1,232	5,114	1,984		1,441	1,616		
Interest on nonland capital	18,258	38,705	55,739	129,002	57,122		40,276	33,536		
Real estate taxes	3,187	5,833	7,017	13,823	7,135		5,441	6,189		
Cash rent	18,457	43,184	92,652	285,675	102,356		23,321	42,831		
Other land charges	46,856	85,685	113,274	174,767	101,327		99,173	80,929		
Total nonfeed costs	327,851	608,102	942,650	2,093,543	941,727		583,506	559,151		
Capital account adjustment	2,834	8,420	5,372	5,241	5,298		13,524	5,675		
Management returns	-100,577	-144,192	-177,806	-291,780	-172,881		-227,514	-31,463		
Farm production per \$1.00 of nonfeed costs	0.68	0.75	0.81	0.86	0.81		0.59	0.93		
Farm production per man	227,179	376,679	512,651	564,136	410,710		289,731	472,763		
Financial summary										
Cash operating income	284,083	550,638	893,928	2,088,461	902,031		496,908	556,251		
Inventory change	-54,584	-82,229	-110,989	-205,081	-108,820		-143,403	-25,886		
Accts. receivable (net change)	1,053	5,660	4,317	8,756	4,650		4,461	3,427		
Less purchased feed	3,615	9,107	24,997	49,433	20,585		9,121	2,406		
Less purchased livestock	2,631	4,580	3,254	15,445	6,046		1,340	9,666		
Gross farm returns	224,306	460,383	759,005	1,827,259	771,229		347,506	521,721		
Cash operating expenses	204,693	408,024	692,844	1,609,971	688,503		367,908	398,963		
Prepaid expenses (- if increased)	9,988	3,613	5,525	36,706	13,220		5,774	2,049		
Accts. payable (+ if increased)	-1,845	3,489	3,670	471	1,334		570	-2,556		
Total operating expenses	212,835	415,127	702,039	1,647,148	703,057		374,252	398,456		
Income before depreciation	11,470	45,256	56,966	180,112	68,172		-26,747	123,264		
Less depreciation	41,671	86,271	124,378	282,771	126,595		93,529	65,059		
Capital account adjustment	2,834	8,420	5,372	5,241	5,298		13,524	5,675		
Net farm income	-27,366	-32,596	-62,041	-97,418	-53,124		-106,752	63,880		
Net farm income per operator	-27,133	-31,284	-53,447	-77,959	-46,209		-101,484	63,880		
Labor & mgt. income per operator	-61,779	-85,640	-113,541	-154,165	-101,184		-170,404	13,742		

Note: Variations in totals due to rounding to the nearest dollar.

Table 21a. 2015 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Management Returns for Southern Illinois Grain Farms with Soil Ratings from 36 to 85

Range in size (total tillable acres)	180-799		800-1,199		1,200-1,999		> 1,999		All farms		
	87	68	80	66	66	66	66	66	301	22	
Management returns										Low 33%	High 33%
Number of farms										22	22
Selected returns and costs											
per operator tillable acre											
Crop returns	502.77	529.46	539.84	582.83					555.66	426.41	611.21
Livestock returns above feed	0.63	4.00	3.95	4.51					3.91	-1.85	10.95
Custom work, other receipts	16.64	17.19	24.98	38.33					29.54	14.27	21.90
Value of farm production	520.03	550.65	568.77	625.67					589.10	438.83	644.06
Soil fertility	95.93	101.52	104.86	111.88					106.93	88.20	101.98
Pesticides	53.43	50.05	52.71	52.36					52.23	52.45	52.33
Seed and other crop expense	79.03	81.13	82.67	78.44					80.04	81.71	76.52
Crop total	228.39	232.70	240.23	242.69					239.20	222.37	230.83
Light vehicle and utilities	13.84	10.49	8.11	9.09					9.48	10.98	10.11
Machinery repairs, supplies	38.88	31.05	30.36	31.23					31.70	31.93	29.62
Machinery hire, lease	15.12	13.71	14.89	17.56					16.04	15.02	12.53
Fuel and oil	22.28	21.32	21.75	22.66					22.18	21.32	18.85
Machinery depreciation	78.05	79.24	70.06	72.71					73.44	89.36	59.41
Power and equipment total	168.18	155.81	145.17	153.24					152.84	168.61	130.52
Drying and storage	6.74	8.77	7.53	3.86					5.85	7.93	9.18
Building repair and rent	7.52	5.92	5.16	7.14					6.46	3.04	7.04
Building depreciation	8.92	12.42	10.36	16.44					13.47	14.00	9.34
Building total	23.17	27.11	23.04	27.44					25.78	24.98	25.56
Labor, unpaid	78.36	49.74	31.38	23.42					34.68	50.64	44.87
Labor, paid	15.17	18.94	25.29	33.48					27.38	17.93	21.07
Labor total	93.54	68.69	56.67	56.90					62.06	68.57	65.94
Insurance and miscellaneous	43.78	39.38	38.70	36.97					38.45	45.78	33.33
Livestock services and supplies	1.57	1.82	0.92	1.78					1.53	1.85	1.99
Interest on nonland capital	42.30	46.79	41.74	44.93					44.07	51.61	41.38
Other costs total	87.65	87.99	81.37	83.67					84.05	99.23	76.70
Land charge	158.72	162.84	159.47	165.17					162.65	163.93	160.33
Total nonfeed costs	759.64	735.14	705.95	729.11					726.58	747.69	689.88
Capital account adjustment	6.57	10.18	4.02	1.83					4.09	17.33	7.00
Management returns	-233.04	-174.32	-133.16	-101.62					-133.38	-291.53	-38.82
Percent crop returns fed	2.95	2.36	1.59	0.85					1.99	3.15	1.65
Capital purchases	34,863	73,426	103,000	316,201					123,373	78,095	54,328
Interest paid	10,696	17,571	40,003	90,410					37,517	15,449	18,309
Percent tillable land in											
Corn and corn silage	39.6	42.1	43.7	45.6					44.0	39.4	43.7
Soybeans	47.1	44.7	46.8	45.1					45.7	44.8	43.9
Wheat	7.7	7.8	6.1	6.1					6.5	6.6	7.7
Other small grains	0.0	0.0	0.0	0.0					0.0	0.0	0.0
CRP acres	0.3	0.3	0.2	0.2					0.2	0.0	0.7
All hay and pasture	1.4	1.9	1.0	0.2					0.8	3.0	1.4
Crop yields, bushels per acre											
Corn	148	161	159	164					161	149	173
Soybeans	49	52	52	52					52	48	56
Wheat	66	67	70	75					71	66	68
Prices received											
Corn (old crop)	3.76	3.83	3.87	4.03					3.94	3.80	3.81
Corn (new crop)	3.68	3.82	3.70	3.97					3.84	3.66	3.74
Soybeans (old crop)	10.09	10.50	10.61	10.40					10.44	10.13	10.99
Soybeans (new crop)	8.92	9.01	9.03	9.23					9.11	8.95	9.12

Note: Variations in totals due to rounding to the nearest dollar.

Table 22. 2015 Operator Average Returns, Costs, and Financial Summary by Size and by Cwt of Pork Produced for Illinois Hog Farms

Range in size (total tillable acres)	60-799		> 799		Your farm		All farms		Cwt of pork produced	
	60-799	> 799	60-799	> 799	Your farm	All farms	< 6,000 cwt	8	> 6,000 cwt	7
Cwt of pork produced										
Number of farms	26	20				46				
Total acres in farm	412	1,416				849			211	882
Acres of tillable land	390	1,389				824			202	846
Operator tillable acres	348	1,273				750			164	825
Soil rating on tillable land	79	76				78			70	83
Percent land owned	35	13				19			27	10
Percent land crop shared	24	15				17			37	6
Percent land cash rented	41	72				63			36	84
Months of hired labor	10.9	36.8				22.1			2.9	25.0
Total months labor	21.6	45.3				31.9			12.0	37.8
Dollar returns										
Crop returns	228,081	921,569				529,597			98,137	567,955
Livestock returns above feed	109,698	287,810				187,138			21,881	174,421
Custom work	4,981	12,055				8,057			906	5,809
Other farm receipts	7,502	33,119				18,640			2,495	12,749
Value of farm production	350,261	1,254,553				743,432			123,418	760,935
Dollar costs										
Crop expenses	80,509	333,402				190,462			35,193	182,276
Power and equipment	91,838	271,293				169,862			32,390	149,853
Building and fence	40,797	182,927				102,592			8,337	82,258
Labor	70,818	169,183				113,585			33,891	135,519
Insurance and miscellaneous	20,519	58,162				36,886			7,637	43,859
Livestock services and supplies	37,451	102,764				65,848			10,469	84,599
Interest on nonland capital	31,168	102,278				62,085			11,448	52,596
Real estate taxes	10,181	11,786				10,879			3,692	10,733
Cash rent	34,458	274,778				138,945			11,915	173,740
Other land charges	55,450	72,391				62,816			38,533	29,302
Total nonfeed costs	473,188	1,578,964				953,961			193,505	944,735
Capital account adjustment	7,561	9,237				8,290			0	1,480
Management returns	-115,366	-315,174				-202,239			-70,087	-182,321
Farm production per \$1.00 of nonfeed costs	0.74	0.79				0.78			0.64	0.81
Farm production per man	191,092	398,097				281,094			124,367	204,984
Financial summary										
Cash operating income	775,038	2,850,360				1,677,360			219,354	1,293,799
Inventory change	-95,601	-286,375				-178,546			-35,394	-172,479
Accts. receivable (net change)	13,414	3,760				9,216			1,941	31,852
Less purchased feed	229,967	777,236				467,910			46,900	344,116
Less purchased livestock	112,622	515,536				287,802			15,582	48,122
Gross farm returns	350,261	1,274,993				752,318			123,418	760,935
Cash operating expenses	338,417	1,323,649				766,779			112,047	758,320
Prepaid expenses (- if increased)	4,431	29,654				15,398			3,190	5,691
Accts. payable (+ if increased)	1,155	3,136				2,017			747	25,137
Total operating expenses	344,004	1,356,439				784,193			115,984	789,149
Income before depreciation	6,257	-81,446				-31,875			7,434	-28,214
Less depreciation	47,476	123,624				80,584			20,008	67,183
Capital account adjustment	7,561	9,237				8,290			0	1,480
Net farm income	-33,658	-195,832				-104,169			-12,574	-93,917
Net farm income per operator	-18,985	-137,600				-70,556			-12,574	-79,795
Labor & mgt. income per operator	-55,062	-174,376				-106,938			-34,987	-116,460

Note: Variations in totals due to rounding to the nearest dollar.

Table 22a. 2015 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Cwt of Pork Produced for Illinois Hog Farms

Range in size (total tillable acres)	60-799		> 799		All farms		Cwt of pork produced	
	26	20	Your farm	46	< 6,000 cwt	8	> 6,000 cwt	7
Number of farms								
Selected returns and costs per operator tillable acre								
Crop returns	655.84	724.11		706.21	597.03	688.31		
Livestock returns above feed	315.43	226.14		249.55	133.11	211.38		
Custom work, other receipts	35.89	35.49		35.60	20.69	22.49		
Value of farm production	1007.17	985.74		991.36	750.83	922.19		
Soil fertility	90.77	101.55		98.72	90.78	88.64		
Pesticides	41.59	50.50		48.16	37.44	28.31		
Seed and other crop expense	99.14	109.92		107.09	85.88	103.95		
Crop total	231.50	261.96		253.98	214.10	220.90		
Light vehicle and utilities	45.06	22.19		28.18	44.27	31.46		
Machinery repairs, supplies	45.86	42.72		43.54	35.16	42.79		
Machinery hire, lease	51.72	46.37		47.77	14.83	22.36		
Fuel and oil	36.60	40.12		39.20	27.98	32.37		
Machinery depreciation	84.84	61.76		67.81	74.79	52.63		
Power and equipment total	264.08	213.16		226.51	197.05	181.61		
Drying and storage	9.71	14.69		13.38	17.71	15.38		
Building repair and rent	71.43	98.07		91.09	17.01	56.74		
Building depreciation	36.18	30.98		32.34	16.01	27.57		
Building total	117.31	143.73		136.81	50.72	99.69		
Labor, unpaid	103.19	24.58		45.18	156.24	58.25		
Labor, paid	100.44	108.36		106.28	49.94	105.98		
Labor total	203.63	132.93		151.46	206.18	164.24		
Insurance and miscellaneous	59.00	45.70		49.19	46.46	53.15		
Livestock services and supplies	107.69	80.74		87.81	63.69	102.53		
Interest on nonland capital	89.62	80.36		82.79	69.64	63.74		
Other costs total	256.32	206.81		219.78	179.80	219.42		
Land charge	287.80	282.04		283.55	329.37	259.08		
Total nonfeed costs	1360.64	1240.64		1272.10	1177.21	1144.94		
Capital account adjustment	21.74	7.26		11.05	0.00	1.79		
Management returns	-331.73	-247.64		-269.68	-426.38	-220.96		
Percent crop returns fed	136.77	91.27		116.99	113.56	155.36		
Capital purchases	59,095	144,724		96,325	38,404	107,212		
Interest paid	24,001	60,880		40,035	5,669	35,098		
Percent tillable land in								
Corn and corn silage	57.1	67.9		65.0	51.4	78.4		
Soybeans	38.0	29.5		31.8	34.7	17.4		
Wheat	2.9	2.0		2.2	4.8	2.2		
Other small grains	0.1	0.0		0.0	0.6	0.0		
CRP acres	0.0	0.0		0.0	0.0	0.0		
All hay and pasture	1.2	0.0		0.3	7.3	0.1		
Crop yields, bushels per acre								
Corn	176	201		195	196	180		
Soybeans	62	63		63	64	65		
Wheat	62	64		64	73	56		
Prices received								
Corn (old crop)	3.57	3.88		3.85	3.68	3.68		
Corn (new crop)	3.56	3.88		3.77	3.51	3.70		
Soybeans (old crop)	10.43	10.08		10.17	10.33	10.47		
Soybeans (new crop)	8.79	9.05		8.95	8.55	8.84		

Note: Variations in totals due to rounding to the nearest dollar.

Table 23. 2015 Operator Average Returns, Costs, and Financial Summary for Illinois Dairy and Beef Farms

Type of Farm	Dairy (by Number of Cows in Herd)			Beef (by Size)				
	10-79	> 79	Your farm	All farms	180-799	> 799	Your farm	All farms
Number of cows in herd				62	21	7		28
Range in size (total tillable acres)								
Number of farms	18	44		527	406	1,032		562
Total acres in farm	337	604		482	325	932		477
Acres of tillable land	297	558		476	310	778		427
Operator tillable acres	291	552		65	52	64		55
Soil rating on tillable land	68	64		30	50	39		44
Percent land owned	30	30		4	12	35		23
Percent land crop shared	8	3		66	38	26		32
Percent land cash rented	61	67		24.8	1.7	11.6		4.2
Months of hired labor	3.6	33.5		39.5	12.5	31.0		17.2
Total months labor	18.0	48.3						
Dollar returns								
Crop returns	180,760	373,340		317,430	190,083	520,504		272,688
Livestock returns above feed	45,794	393,204		292,343	-33,666	-3,450		-26,112
Custom work	4,294	6,433		5,812	3,367	2,651		3,188
Other farm receipts	2,344	14,528		10,991	5,393	22,143		9,580
Value of farm production	233,192	787,505		626,575	165,176	541,848		259,344
Dollar costs								
Crop expenses	54,148	129,845		107,869	74,770	201,029		106,335
Power and equipment	81,889	210,114		172,887	76,767	183,407		103,427
Building and fence	14,179	53,911		42,376	25,290	51,901		31,943
Labor	63,473	162,955		134,073	47,919	94,908		59,666
Insurance and miscellaneous	13,001	28,685		24,131	16,731	38,922		22,279
Livestock services and supplies	30,561	133,559		103,657	19,697	52,065		27,789
Interest on nonland capital	19,428	65,121		51,855	36,002	108,364		54,093
Real estate taxes	3,933	9,373		7,794	5,697	19,417		9,127
Cash rent	25,822	76,868		62,048	22,464	58,144		31,384
Other land charges	21,674	34,994		31,127	41,923	114,499		60,067
Total nonfeed costs	328,107	905,426		737,817	367,261	922,655		506,110
Capital account adjustment	1,233	544		744	1,840	-1,880		910
Management returns	-93,682	-117,377		-110,498	-200,245	-382,686		-245,855
Farm production per \$1.00 of nonfeed costs	0.71	0.87		0.85	0.45	0.59		0.51
Farm production per man	156,408	203,002		189,474	133,397	252,427		163,154
Financial summary								
Cash operating income	327,795	1,122,241		891,596	903,220	2,289,516		1,249,794
Inventory change	-39,635	-51,383		-47,972	-153,866	-390,095		-212,923
Accts. receivable (net change)	3,103	-1,421		-108	-1,897	11,180		1,372
Less purchased feed	54,175	239,174		185,464	87,592	177,340		110,029
Less purchased livestock	3,896	27,522		20,663	494,688	1,182,224		666,572
Gross farm returns	233,192	802,741		637,389	165,176	551,037		261,642
Cash operating expenses	213,574	684,736		547,947	226,901	610,513		322,804
Prepaid expenses (- if increased)	1,119	20,578		14,929	6,066	-26,266		-2,017
Accts. payable (+ if increased)	1,322	4,626		3,667	6,117	15,313		8,416
Total operating expenses	216,015	709,939		566,542	239,084	599,559		329,203
Income before depreciation	17,177	92,802		70,847	-73,908	-48,522		-67,561
Less depreciation	29,085	90,285		72,517	34,971	119,779		56,173
Capital account adjustment	1,233	544		744	1,840	-1,880		910
Net farm income	-10,675	3,061		-926	-107,038	-170,181		-122,824
Net farm income per operator	-10,457	2,491		-776	-84,712	-107,181		-90,329
Labor & mgt. income per operator	-37,738	-32,161		-33,780	-129,831	-186,959		-144,113

Note: Variations in totals due to rounding to the nearest dollar.

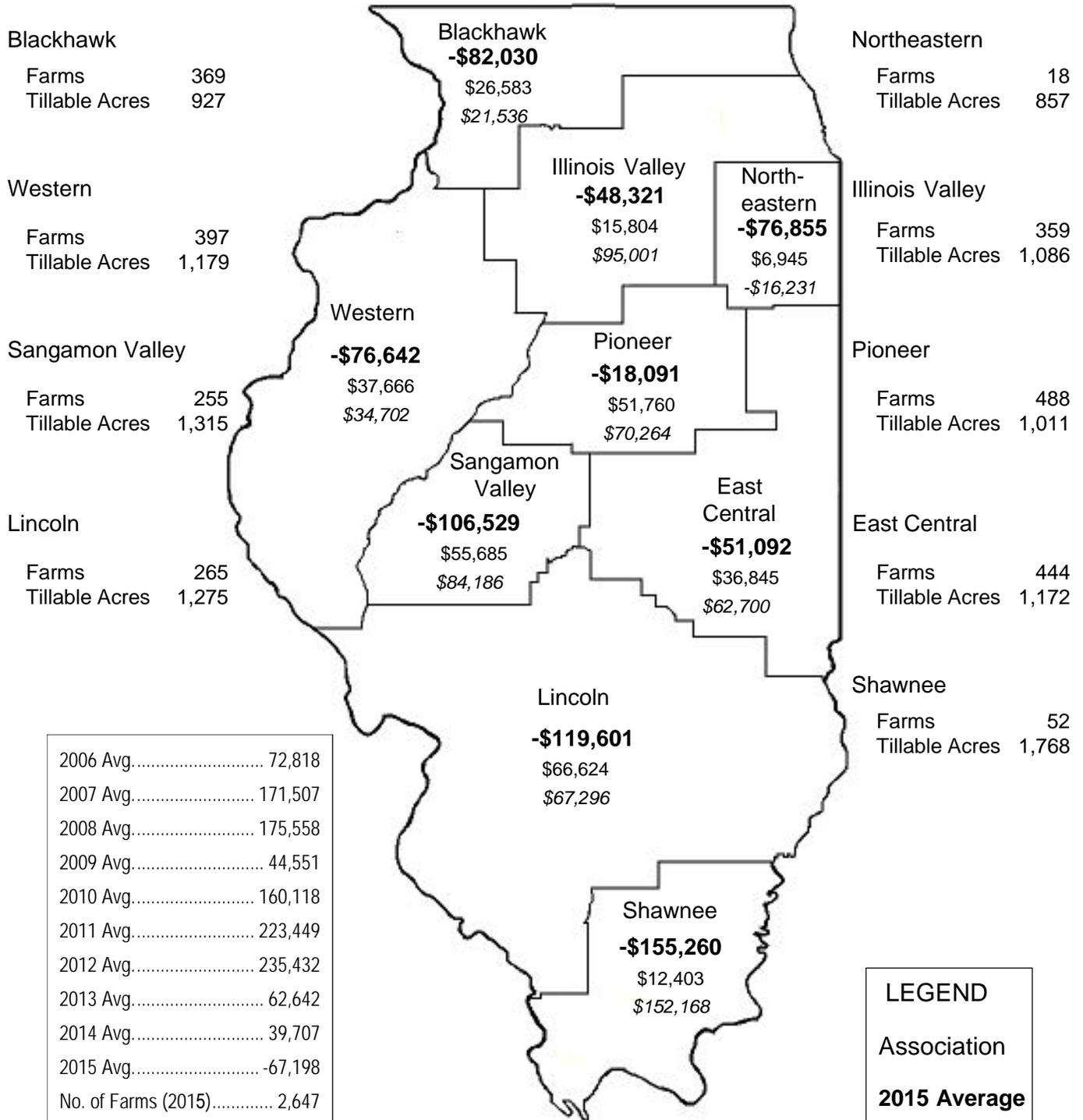
Table 23a. 2015 Operator Average Operating Costs, Land Use, Yields, and Prices Received for Illinois Dairy and Beef Farms

Type of Farm	Dairy (by Number of Cows in Herd)			Beef (by Size)				
	10-79	> 79	Your farm	All farms	180-799	> 799	Your farm	All farms
Number of cows in herd				62	21	7	0	28
Range in size (total acres)								
Number of farms	18	44						
Selected returns and costs per operator tillable acre								
Crop returns	621.64	676.01		666.37	612.79	669.40		638.56
Livestock returns above feed	157.49	711.97		613.71	-108.53	-4.44		-61.15
Custom work, other receipts	22.83	37.95		35.27	28.24	31.89		29.90
Value of farm production	801.96	1,425.94		1,315.35	532.50	696.85		607.31
Soil fertility	81.13	99.28		96.06	99.46	130.08		113.40
Pesticides	28.94	43.37		40.81	49.87	29.67		40.67
Seed and other crop expense	76.15	92.46		89.57	91.72	98.78		94.94
Crop total	186.22	235.11		226.45	241.05	258.53		249.01
Light vehicle and utilities	38.56	43.89		42.95	18.43	16.32		17.47
Machinery repairs, supplies	66.86	75.49		73.96	54.49	48.90		51.95
Machinery hire, lease	56.01	96.03		88.94	55.40	27.15		42.54
Fuel and oil	42.80	52.20		50.53	34.63	39.60		36.90
Machinery depreciation	77.40	112.84		106.56	84.53	103.90		93.35
Power and equipment total	281.62	380.45		362.94	247.48	235.87		242.20
Drying and storage	7.07	14.07		12.83	14.93	12.62		13.88
Building repair and rent	20.09	33.85		31.41	41.84	18.14		31.05
Building depreciation	21.59	49.69		44.71	24.76	35.99		29.88
Building total	48.76	97.62		88.96	81.53	66.75		74.80
Labor, unpaid	188.52	103.25		118.36	132.12	85.04		110.69
Labor, paid	29.77	191.82		163.10	22.37	37.02		29.04
Labor total	218.29	295.06		281.46	154.48	122.06		139.72
Insurance and miscellaneous	44.71	51.94		50.66	53.94	50.06		52.17
Livestock services and supplies	105.10	241.84		217.60	63.50	66.96		65.07
Interest on nonland capital	66.81	117.91		108.86	116.07	139.36		126.67
Other costs total	216.63	411.69		377.12	233.50	256.38		243.92
Land charge	176.86	219.52		211.96	225.94	247.00		235.53
Total nonfeed costs	1128.38	1639.45		1548.88	1183.99	1186.59		1185.17
Capital account adjustment	4.24	0.98		1.56	5.93	-2.42		2.13
Management returns	-322.18	-212.53		-231.97	-645.55	-492.16		-575.73
Percent crop returns fed	91.04	124.13		114.52	82.09	53.62		74.98
Capital purchases	30,132	164,133		125,229	60,195	191,213		92,949
Interest paid	11,741	34,328		27,770	23,620	43,889		28,687
Percent tillable land in								
Corn and corn silage	40.8	50.2		48.5	54.4	61.2		57.7
Soybeans	27.2	24.0		24.5	18.1	27.5		22.7
Wheat	4.4	4.4		4.4	3.5	1.3		2.5
Other small grains	1.6	0.5		0.7	0.7	0.0		0.4
CRP acres	0.0	0.1		0.0	0.4	0.0		0.2
All hay and pasture	14.9	8.4		9.5	21.7	5.9		14.0
Crop yields, bushels per acre								
Corn	173	188		186	206	195		201
Soybeans	58	60		59	62	62		62
Wheat	55	72		69	71	66		70
Prices received								
Corn (old crop)	3.61	3.69		3.68	3.74	3.69		3.72
Corn (new crop)	3.62	3.56		3.57	3.70	4.08		3.82
Soybeans (old crop)	9.79	10.61		10.50	9.98	9.95		9.96
Soybeans (new crop)	8.84	8.78		8.79	9.00	8.94		8.98

Note: Variations in totals due to rounding to the nearest dollar.

Illinois FBFM Association

Operators' Share of Labor and Management Income per Farm---2013, 2014, and 2015 (Sum of All Operators/Farm)



2006 Avg.....	72,818
2007 Avg.....	171,507
2008 Avg.....	175,558
2009 Avg.....	44,551
2010 Avg.....	160,118
2011 Avg.....	223,449
2012 Avg.....	235,432
2013 Avg.....	62,642
2014 Avg.....	39,707
2015 Avg.....	-67,198
No. of Farms (2015).....	2,647
Tillable Acres (2015).....	1,131
(Sum of All Operators/Farm)	

LEGEND

Association

2015 Average

2014 Average

2013 Average

Selected FBFM Factors—2006 to 2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of Farms	2,640	2,748	2,572	2,624	2,588	2,674	2,725	2,597	2,670	2,647
Total Acres	1,058	1,070	1,101	1,077	1,092	1,141	1,149	1,137	1,150	1,177
Tillable Acres	1,005	1,019	1,049	1,031	1,046	1,083	1,094	1,084	1,106	1,131
Corn Yield	173	189	194	182	164	167	120	192	214	190
Soybean Yield	52	50	51	50	55	54	48	55	61	61
Wheat Yield	69	58	67	61	59	65	71	72	72	69
% Tillable Land in Corn/Corn Silage	52	60	56	55	56	56	56	54	55	53
Total Cash Operating Income	\$389,786	\$482,852	\$638,147	\$620,268	\$626,808	\$785,655	\$913,419	\$877,043	\$832,015	\$787,707
Crop and Livestock Inventory Change	67,785	119,507	46,071	(18,431)	80,633	88,535	(18,046)	31,961	3,159	(82,926)
Misc. Income and Change in Acct. Rec.	(14,757)	2	9,394	(7,877)	(789)	345	82,933	(72,350)	(1,642)	11,860
Less: Purchased Feed and PIK Certs.	(13,913)	(18,802)	(21,639)	(16,607)	(19,576)	(21,768)	(28,431)	(27,527)	(21,746)	(20,702)
Purchased Livestock	(14,295)	(15,694)	(14,064)	(11,318)	(15,040)	(15,323)	(18,978)	(20,211)	(21,749)	(24,230)
Gross Farm Returns	\$414,606	\$567,865	\$657,909	\$566,035	\$672,035	\$837,444	\$930,897	\$788,916	\$790,037	\$671,709
Total Operating Expense	\$288,076	\$333,564	\$414,021	\$442,905	\$422,960	\$509,278	\$567,637	\$585,631	\$600,975	\$588,017
Income before Depreciation	126,530	234,301	243,888	123,130	249,075	328,165	363,259	203,285	189,063	83,690
Less Depreciation (Plus Capital Acct. Adj.)	23,227	25,289	31,998	38,918	44,444	54,553	65,231	75,621	81,773	86,661
Net Farm Income	\$103,303	\$209,012	\$211,890	\$84,212	\$204,631	\$273,612	\$298,028	\$127,664	\$107,290	(\$2,971)
Net Farm Income as % of GFR	24.9	36.8	32.2	14.9	30.4	32.7	32.0	16.2	13.6	-0.4
Operator's Labor and Mgmt. Income	\$72,818	\$171,507	\$175,558	\$44,551	\$160,118	\$223,449	\$235,432	\$62,642	\$39,707	(\$67,198)
Interest Expense	\$22,373	\$25,598	\$23,924	\$21,025	\$22,128	\$23,571	\$23,548	\$22,384	\$24,115	\$27,378
Interest Expense as % of GFR	5.4	4.5	3.6	3.7	3.3	2.8	2.5	2.8	3.3	4.1
Gross Farm Returns/Tillable Acre	\$413	\$557	\$627	\$549	\$642	\$773	\$851	\$728	\$714	\$594
Total Operating Expense/Tillable Acre	\$287	\$327	\$395	\$430	\$404	\$470	\$519	\$540	\$543	\$520
Depreciation/Tillable Acre	\$23	\$25	\$31	\$38	\$42	\$50	\$60	\$70	\$74	\$77
Net farm Income/Tillable Acre	\$103	\$205	\$202	\$82	\$196	\$253	\$272	\$118	\$97	(\$3)
Total Investment	\$221,028	\$310,853	\$392,252	\$394,206	\$443,684	\$535,169	\$573,041	\$564,615	\$587,147	\$549,288
Crops and Feed	29,190	31,374	30,520	25,873	30,440	33,867	38,171	40,949	44,893	49,404
Livestock (Market & Breeding Stock)	104,476	122,725	158,305	187,560	233,750	280,123	334,760	379,876	407,686	411,399
Machinery (Book Value)	34,476	37,501	45,191	49,940	62,722	80,350	100,194	113,056	128,366	138,854
Buildings (Book Value)	729,032	821,007	942,781	929,995	1,034,673	1,310,434	1,632,977	1,958,418	2,138,558	2,155,298
Land										
Total	\$1,118,202	\$1,323,460	\$1,569,049	\$1,587,574	\$1,805,269	\$2,239,943	\$2,679,143	\$3,056,914	\$3,306,650	\$3,304,243

Financial Characteristics of Illinois FBFM Grain Farms

	2015	2014	2013	2012	4-Year Average	My Farm
Number of Farms	2,484	2,532	2,440	2,442	2,475	
Liquidity						
Working Capital	\$237,508	\$295,956	\$336,712	\$403,684	\$318,465	
Current Ratio						
Upper Quartile	NA	5.79	6.51	7.20	6.50	
Median	2.09	2.32	2.59	3.08	2.52	
Solvency						
Net Worth (Market)	\$2,954,958	\$2,973,330	\$2,880,432	\$2,775,824	\$2,896,136	
Debt/Equity Ratio (%)						
Upper Quartile	NA	8.5	8.5	8.4	8.5	
Median	24.8	23.5	22.5	21.9	23.2	
Debt/Total Asset Ratio (%)						
Upper Quartile	NA	7.8	7.8	7.7	7.8	
Median	19.9	19.0	18.4	18.0	18.8	
Profitability						
Net Farm Income	-\$538	\$79,348	\$105,027	\$257,538	\$110,344	
Return on Farm Assets (%)						
Upper Quartile	NA	3.9	5.5	14.1	7.8	
Median	-0.7	1.6	2.6	8.5	3.0	
Return on Farm Equity (%)						
Upper Quartile	NA	4.2	6.5	18.5	9.7	
Median	-1.7	1.2	2.6	10.3	3.1	
Repayment Capacity						
Debt/Farm Operating Income	*	7.78	5.40	2.10	3.82	
Financial Efficiency (as a % of Gross Farm Returns)						
Interest Expense Ratio						
Upper Quartile	NA	0.6	0.5	0.5	0.5	
Median	2.9	2.3	2.0	1.8	2.3	
Operating Expense Ratio						
Upper Quartile	NA	61.9	60.0	46.9	56.3	
Median	80.8	71.7	68.3	55.5	69.1	
Depreciation Expense Ratio						
Upper Quartile	NA	7.6	6.9	5.0	6.5	
Median	13.3	11.0	10.0	7.3	10.4	
Farm Operating Income Ratio						
Upper Quartile	NA	24.5	27.9	43.9	32.1	
Median	1.7	14.2	18.1	34.6	17.2	
Asset Turnover Ratio						
Upper Quartile	NA	0.35	0.37	0.46	0.39	
Median	0.18	0.22	0.24	0.31	0.24	

NA = not available yet.

* Undefined due to negative farm operating income.



*Illinois Farm Business
Farm Management Association*

FBFM is a cooperative educational-service program designed to assist farmers with management decision making. It is available to all farm operators in Illinois. There are nine local not-for-profit associations organized to provide services throughout the state. The FBFM program provides:

- Financial and production business analysis reports.
- Experienced Farm Analysis Specialist to help interpret analysis reports and counsel on management problems.
- Computer-assisted record-processing options—on-farm or service center.
- Assistance with business and family records.
- Assistance with income tax management.

To find out more about FBFM, contact the Illinois FBFM Association state office or one of the local associations listed below.

Jeffery Johnson
Blackhawk FBFM
115 S. Walnut Avenue
Freeport, IL 61032
815-369-2243

Jim Cullison
East Central FBFM
900 S. Washington St., Ste. B
Tuscola, IL 61953
217-253-5227

Scott Newport
Illinois Valley FBFM
4201 N. Columbus St.
Ottawa, IL 61350
815-433-1635

Tom Nolte
Lincoln FBFM
707 IL Rt. 127 S, PO Box 37
Greenville, IL 62246
618-664-2419

Mike Heiser
Pioneer FBFM
300 East Locust St.
Fairbury, IL 61739
815-692-3906

Kent Leesman
Sangamon Valley FBFM
1042 N. Grand Ave. West
Springfield, IL 62702
217-523-0639

Doug Hileman
Shawnee FBFM
710 Balcom Rd.
Anna, IL 62906
618-833-3790

Roberta Boarman
Western FBFM
101 East Main, Box 489
Toulon, IL 61483
309-286-2811

State office: Illinois FBFM Association, 1301 W. Gregory Dr., Urbana, IL 61801
Dwight Raab—217-333-5511 Brad Zwilling—217-333-8346 Brandy Krapf—217-265-5629
Email: dwight.raab@fbfm.org

Visit our Web site at
<http://www.fbfm.org>

For U of I farm management information see
<http://www.farmdoc.illinois.edu>

*Cooperating with University of Illinois Extension and the University of Illinois
Department of Agricultural and Consumer Economics*