

90th ANNUAL

SUMMARY OF
ILLINOIS
FARM BUSINESS
RECORDS
2014

Commercial Farms
Production Costs
Income
Investments



UNIVERSITY OF ILLINOIS
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SOURCE OF DATA

This report is based on data obtained from farm business records on 5,657 Illinois farms. It is the 90th annual summary of such records obtained from farmers cooperating with the 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 and 2000, 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 2014, 8 associations in 102 counties were being served by 60 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 2014 indicate that over 95 percent of the 5,657 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 2014 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 2014 was 1,150 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. Beginning in 1995, the cost of production information presented in Tables 12, 14, and 16 excludes those enterprises with an operator-landlord live-stock lease, because landlord cost data are not available. 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 cows), 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, \$4.14; oats, \$3.63; and wheat, \$5.45. 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 2014 at \$3,850 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 2014. 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 \$24,115.

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 2014, using a base earning value of 1979 = 100, was 367.

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 2014

Illinois agriculture is based largely on crop production, especially corn and soybeans. In 2014, Illinois ranked first in the nation in soybean production and second in corn production. The total value of corn produced on Illinois farms was 17 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. Back-to-normal growing conditions in the first part of 2014 led to a more ideal start to planting, with 5 percent of the corn crop being planted by April 21. As of April 28, 32 percent of the corn crop was planted, which was equal to the historical 5-year average of 33 percent and well above the 2013 average of 1 percent. Eighty-four percent of the corn was reported as planted by May 19, compared with 66 percent the year before. Soybeans were reported 92 percent planted by June 9, compared to 60 percent in 2013 and 78 percent for the 5-year average. A more normal growing season led to regular crop development. Moderate temperatures, adequate rainfall, and a large crop allowed corn and soybean harvest to run below the five-year average.

Crop yields. Given the season’s normal yearly temperature and precipitation, corn yields were much higher in 2014 than in 2013. Moderate temperatures during pollination increased yields in all parts of the state. The average corn yield for Illinois farms reported by the Illinois Crop Reporting Service was 200 bushels per acre, 22 bushels above the previous year’s yield. This is the highest yield on record. The average for 2010 through 2014 is 159 bushels per acre. Farmers participating in the Illinois FBFM program

averaged 214 bushels of corn per acre in 2014, 22 bushels above the year before.

Soybean yields for all Illinois farms were reported at 56 bushels per acre in 2014. This was 7 bushels more than 2013 as well as 7 bushels more than the 5-year average and the highest on record. FBFM recordkeeping farms averaged 61 bushels of soybeans per acre in 2014, 6 bushels above their 5-year average. Crop yields on the 5,657 recordkeeping farms covered in this report averaged 7 to 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 \$1.05 cents to \$1.30 per bushel below 2013 prices (Table 1). Old-crop corn prices received in 2014 averaged \$2.22 to \$2.40 below those received in 2013. New-crop prices received were lower for soybeans and corn compared to the year before. The price received for new-crop corn averaged 85 to 95 cents lower than the year before, and new-crop soybeans averaged \$2.15 to \$2.58 lower. Wheat sold for 92 cents to \$1.31 less per bushel during the year. Prices received for old-crop corn sold in 2014 were above their inventory prices, resulting in a positive marketing margin and higher crop returns for corn. Old-crop soybeans also sold for more than their inventory price, resulting in a positive marketing margin. The year-end, new-crop inventory price for corn was 35 cents lower than the year before; for soybeans it was \$2.50 lower. Both corn and soybean prices have been high enough that neither crop was eligible for loan deficiency payments.

Crop production. Corn production totaled 2.35 billion bushels in 2014, 250 million bushels more than the previous year. The final yield was 200 bushels per acre, which was 22 bushels above the previous year's yield. The yield for the 2014 soybean crop was 56 bushels per acre, 7 bushels above the 2013 yield of 49 bushels per acre. Production totaled 548 million bushels, 19 percent above the previous year.

The 2014 yield for sorghum for grain was 106 bushels per acre, 12 bushels above the yield in 2013. Sorghum production, at 2.23 million bushels, was up 18 percent from the previous year. The yield for the 2014 winter wheat crop was 67 bushels per acre, which is equal to the previous year. Total production was 44.9 million bushels, 20 percent below the 2013 production of 56.3 million bushels. The oats yield, at 80 bushels per acre, was 11 bushels above 2013. Production of all hay in 2014 was 1.76 million tons, 13 percent below 2013. Alfalfa hay production was down 12 percent, to 1.08 million tons. All other hay production decreased to 675,000 tons. The alfalfa yield increased from 3.6 to 4 tons per acre, as well as all other hay yields increasing from 2.5 to 2.7 tons per acre.

Livestock production

Two major determinants in farm income are the price farmers receive for livestock and livestock products and

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

	2014		2013	
	Northern & central	South-ern	Northern & central	South-ern
Grain prices per bushel				
Sold				
Corn, old crop	\$ 4.50	\$ 4.68	\$ 6.90	\$ 6.90
Corn, new crop	3.83	3.68	4.68	4.63
Soybeans, old crop	13.37	13.56	14.67	14.61
Soybeans, new crop	10.70	10.33	12.85	12.91
Wheat	5.39	5.84	6.70	6.76
Livestock prices per cwt				
Hogs, all weights	\$ 78.07		\$ 66.74	
Fed cattle, all weights	149.09		123.45	
Feeder cattle, all weights, prices paid	208.36		145.53	
Dairy cattle, all weights	109.64		77.74	
Milk per cwt	24.88		20.71	

the value of feed fed in producing livestock. Gross returns to all livestock enterprises were higher in 2014 compared to 2013. With higher gross returns and lower feed costs, returns above feed cost were higher for all livestock enterprises. In 2014, the average prices received by farm record-keepers in the Illinois FBFM Association were 17 percent higher for hogs, 21 percent higher for fed cattle, and 20 percent higher for milk than they were in 2013 (Table 1). The prices paid for all weights of feeder cattle purchases averaged 43 percent above the 2013 price for feeder cattle, and feeder pigs weighing below 20 pounds averaged 1 percent below the 2013 price. Higher returns and lower feed costs resulted in returns above feed and purchased animals for feeder cattle enterprises to increase from \$21.12 per hundredweight produced to \$70.06 (Table 10). This is well above the 5-year average of \$35.64. Mainly due to the higher pig prices and lower feed costs, returns for farrow-to-finish hog producers increased returns above feed costs to \$37.12 per hundredweight produced in 2014. This was also above the 5-year average. Higher milk prices and higher beef prices caused dairy returns above feed cost per cow to increase from \$1,846 in 2013 to \$3,734 in 2014. This is 73 percent above the 5-year average. Returns for beef cow herds with calves sold increased to \$842, which is almost a 400 percent increase as well as being above the 5-year average.

Labor and management income

The average operator's share of labor and management income for the 5-year period from 2010 through 2014 on all northern Illinois grain farms (located north of a line from Kankakee to Moline) was \$143,768 (Table 2). Operators on about 1,500 grain farms in central Illinois had 5-year average earnings of \$127,618. 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 last couple of years have led to larger earnings from crops.

The grain farms in northern Illinois averaged 1,052 tillable acres per farm, compared with an average of 1,125 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 2010 through 2014, grain farm operators in southern Illinois averaged \$112,324 for labor and management. This average decreased by \$2,623 compared with the average for the 5-year period from 2009 through 2013.

When the average earnings on Illinois grain farms for the 5-year period from 2010 through 2014 are compared with the earnings from 2009 through 2013, earnings decreased in all areas of the state. The average for the 5-year period from 2010 through 2014 decreased 4 percent in northern Illinois, 4 percent in central Illinois, and 2 percent in southern Illinois as compared to the 5-year period 2009 through 2013. The 2014 return to operator's labor and management was lower in all parts of the state than the 2013 earnings, and all areas were below the 2010–2014 5-year average. The year dropped from the 5-year average, 2009, averaged about \$23,000 higher earnings than in 2014.

When average earnings on Illinois livestock farms for the 5-year period from 2010 through 2014 are compared with the earnings from 2009 through 2013, earnings increased for all enterprises. The average for the 5-year period from 2010 through 2014 increased 61 percent for hog farms, 131 percent for beef farms, and 116 percent for dairy farms as compared to the 5-year period 2009 through 2013.

In 2014, the labor and management income for all areas of Illinois averaged \$39,707 per farm. This figure is \$22,935 below the 2013 state average. Returns to labor and management for 2014 averaged \$104,563 below the average for the 5-year period 2010 through 2014. Lower crop prices were the main reasons for the lower incomes, even with higher yields.

Corn yields were well above the yields recorded the year before. The average corn yield on the 2,670 farms in 2014 was 214 bushels per acre, 22 bushels above the 2013 yield. The average soybean yield in 2014 was 61 bushels per acre, 6 bushels higher than the 55 reported in 2013. 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 harvesting in the southeastern portion of the state. The average corn yield and the average soybean yield were the highest on record.

Year-end inventory price for the 2014 corn crop of \$3.75 per bushel was 35 cents per bushel lower than a year earlier. Soybeans were inventoried at \$10.50 per bushel, \$2.50 lower than December 31, 2013. The average sales price received for the 2013 corn crop sold in 2014 was above the inventory price, resulting in a positive marketing margin, the same as the 2013 soybean crop sold in 2014. Crop returns

Table 2. Operator's 5-Year Average Share of Labor and Management Income by Size and Type of Farm, 2010 Through 2014

	Number of acres per farm ^a			
	Under 800	800 to 1,199	1,200+	All
Northern Illinois				
Tillable acres	477	993	2,126	1,052
Labor and management earnings by type of farm				
Grain.....	\$68,531	\$145,918	\$277,149	\$143,768
Central Illinois				
Tillable acres	519	872	1,931	1,125
Labor and management earnings by type of farm				
Grain ^b	\$71,709	\$134,933	\$228,296	\$149,495
Grain ^c	58,818	106,695	161,688	97,578
All.....	66,206	123,314	202,560	127,618
Southern Illinois				
Tillable acres	497	985	2,146	1,357
Labor and management earnings by type of farm				
Grain.....	\$43,506	\$94,913	\$168,678	\$112,324
Illinois livestock				
Labor and management earnings by type of farm				
Hog.....	.. ^d	.. ^d	.. ^d	\$128,551
Beef.....	.. ^d	.. ^d	.. ^d	47,856
Dairy.....	.. ^d	.. ^d	.. ^d	62,590

^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.

averaged \$794 per tillable acre, \$46 per acre lower than the 2013 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 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 2010 to 2013.

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 \$30,000 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 2,617 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 2,617 farms was \$293,067, down 11 percent from \$329,910 a year earlier. Grain farms had the greatest working capital, averaging \$300,805, while

dairy farms had the least, averaging \$124,975. 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 2.34, down from 2.62 a year ago. Grain farms recorded the highest (most healthy) current ratio, and dairy farms the lowest. The 2014 current ratio was the lowest since 2009.

Solvency is a measure of the farm’s overall financial strength and risk-taking ability. The average net worth of the 2,617 farms at the end of 2014 was \$2,966,419, up from \$2,851,045 the year before. Average farm and nonfarm incomes in 2014 were above family living requirements, thus enabling net worth increases. Increasing land values have also boosted net worths for those operators who own land. Grain farms had the highest net worth, followed by hog 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 18.7. The debt-to-farm asset percentage ranged from 18.4 for grain farms to 28.1 for dairy farms. The average debt-to-farm asset level of 18.2 from 2012 was at its lowest level for at least 15 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 2,617 farms was 1.6 percent, down from 2.5 percent a year earlier. Hog farms recorded the highest returns, averaging 7.6 percent, while grain farms

Table 3. Financial Characteristics of Illinois Farms for 2014 by Type of Farm

	All farms	Grain farms	Hog farms	Dairy farms	Beef farms
Number of farms.....	2,617	2,495	35	51	36
Liquidity					
Working capital.....	\$293,067	\$300,805	\$250,806	\$124,975	\$232,979
Current ratio	2.34	2.36	2.01	1.98	2.20
Solvency					
Net worth (market)	\$2,966,419	\$2,997,441	\$2,624,003	\$2,052,861	\$2,443,593
Debt-farm equity (%)	23.0	22.6	33.4	39.2	26.7
Debt-farm asset (%)	18.7	18.4	27.7	28.1	21.1
Profitability					
Farm operating income	\$81,336	\$75,266	\$266,873	\$200,752	\$152,445
Return on farm assets (%)	1.6	1.5	7.6	6.3	4.3
Return on farm equity (%)	1.3	1.2	9.4	7.1	4.2
Financial efficiency					
Interest expense ratio (%)	2.3	2.2	2.5	3.4	4.1
Operating expense ratio (%)	71.0	71.6	59.4	56.7	55.1
Depreciation expense ratio (%) ..	10.8	11.0	6.4	7.6	9.6
Farm operating income ratio (%) ..	14.1	13.6	31.2	31.1	28.4
Asset turnover ratio	0.22	0.22	0.31	0.29	0.20

recorded the lowest, averaging 1.5 percent. Return on farm equity in 2014 ranged from 9.4 percent for hog farms to 1.2 percent for grain farms. The average was 1.3 percent, down from 2.3 percent in 2013.

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 2.3 percent for the 2,617 farms, ranging from 2.2 percent for grain farms to 4.1 percent for beef farms. The 2.3 percent was up from 2 percent in 2013. The 2012 figure of 1.9 percent is the lowest since at least 1995. The farm operating income ratio ranged from a high of 31.2 percent for hog farms to 13.6 percent for grain farms. The average for all farms in 2014 was 14.1 percent, down from 17.1 percent in 2013. The 2010 through 2014 5-year average farm operating income ratio is 26.4 percent. The 2014 farm operating income ratio is below the 5-year average.

Family living expenditures

Total cash living expenditures for a sample of 1,350 Illinois sole-proprietor, farm-operator families in 2014 averaged \$81,711 (Table 4). This figure is 1.2 percent higher than the 2013 average. Capital purchases for family living expenses of \$7,225 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 8.1 percent of the total cash outlay for all family living expenditures in 2014.

The average farmer in this sample paid \$21,266 in interest in 2014 on operating, machinery, and long-term real estate debts. This interest expense was 4 percent of total operating expense (including interest paid) and 3 percent of total farm receipts. The average amount of interest paid in 2014 was \$736 more than the amount paid in 2013. Here are the most significant financial facts about 2014:

- Net farm income plus net nonfarm income was \$7,824 more 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 \$101,529 more than family living

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, 2014 ^a	
	2014	2013	2012	2011	High-third	Low-third
Number of farms.....	1,350	1,307	1,300	1,273	161	161
Age of operator.....	56	55	56	55	51	49
Number in family.....	2.7	2.7	2.8	2.9	4.0	3.7
Net farm income	\$95,828	\$105,902	\$262,917	\$242,735	\$134,846	\$90,518
Source of dollars						
Net nonfarm income	\$ 39,676	\$ 38,019	\$ 36,778	\$ 35,454	\$ 52,326	\$ 27,077
Money borrowed.....	439,315	418,038	428,234	398,860	780,565	345,456
Farm receipts.....	<u>715,621</u>	<u>736,101</u>	<u>777,953</u>	<u>669,116</u>	<u>1,087,525</u>	<u>631,367</u>
Total sources	\$1,194,612	\$1,192,158	\$1,242,965	\$1,103,430	\$1,920,416	\$1,003,900
Use of dollars						
Interest paid.....	\$ 21,266	\$ 20,530	\$ 22,425	\$ 22,749	\$ 33,100	\$ 16,095
Cash operating expenses.....	519,618	497,855	491,725	451,756	808,407	471,045
Capital farm purchases.....	89,020	130,006	119,816	104,621	129,695	92,490
Payments on principal	390,179	365,513	396,479	370,759	673,265	297,485
Income and Social Security taxes	38,801	40,328	26,718	19,726	47,256	30,309
Net new savings and investments.....	46,792	48,796	100,790	54,161	81,743	36,326
Contributions	3,698	3,874	3,823	3,066	6,166	1,618
Medical expenses.....	11,213	10,417	10,100	9,322	15,458	7,714
Life insurance	4,626	4,492	4,036	3,702	6,583	2,501
Expendables.....	<u>62,174</u>	<u>61,933</u>	<u>58,709</u>	<u>55,839</u>	<u>108,686</u>	<u>41,327</u>
Total living expenses	(\$ 81,711)	(\$ 80,716)	(\$ 76,668)	(\$ 71,929)	(\$ 136,893)	(\$ 53,160)
Living—capital purchases.....	<u>7,225</u>	<u>8,414</u>	<u>8,344</u>	<u>7,729</u>	<u>10,057</u>	<u>6,990</u>
Total uses	\$1,194,612	\$1,192,158	\$1,242,965	\$1,103,430	\$1,920,416	\$1,003,900

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

- expense and taxes for the period 2010 through 2014. The 2012 figure of \$187,966 is the largest positive margin ever.
- Net nonfarm income averaged \$39,676 and was the highest amount since this study began. This was \$1,657 more than the 2013 figure of \$38,019.
 - Capital purchases were \$89,020, compared to \$130,006 in 2013, or 31.5 percent less. They were \$16,484 lower than the average for 2010 through 2014 and were at their highest level ever in 2013.
 - The amount of money borrowed exceeded principal payments for the 26th year in a row. Money borrowed exceeded principal payments by \$49,136. For the 2010 through 2014 time period, money borrowed has exceeded principal payments by an average of \$39,238.
 - Of the total living expenses—excluding family capital purchases—charitable contributions accounted for 4 percent, life insurance 6 percent, medical expenses 14 percent, and family living expendables the remaining 76 percent.
 - Income and Social Security taxes paid decreased by \$1,527, and the total amount of taxes paid, \$38,801, was \$9,673 above the 5-year average for the period 2010 through 2014.
 - Medical expenses averaged \$11,213, the first time the average has exceeded \$11,000. Expenses were 7.6 percent higher than the year before.

The 2014 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 \$136,893, compared with \$53,160 for the low-third group. The high-third group had gross farm receipts of \$1,087,525, compared to \$631,367 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 \$34,170 more remaining than the high-third group. The high-third group had a balance remaining of a *negative* \$7,034 compared to \$27,136 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 1,350 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 \$65,400 and \$69,500, or 15 to 20 percent below the average total living expenses of these 1,350 Illinois farms. When the \$39,676 net nonfarm income for 2014 is used for living expenses, the remaining \$49,260 must be generated from the farm business to pay the \$88,936 used for total living expenses, including family living capital purchases. The figure of \$49,260 amounts to 6.9 percent of total farm receipts.

Income changes on Illinois farms

The average operator’s net farm income for all farms in 2014 was \$107,290; it was \$127,664 in 2013 (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 3.0 percent in 2014, 2.8 percent in 2013, 2.5 percent in 2012, 2.8 percent in 2011, and 3.3 percent in 2010. 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

Table 5. Percent of Illinois Farms and Operator Net Farm Income by Interest Paid as a Percent of Gross Farm Returns, 2010 Through 2014

	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							
2010	30	47	18	4	1	1	100
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
Net farm income							
2010	227,690	223,370	172,298	95,174	55,317	6,334	204,631
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	108,968	115,281	93,162	(64,720)	127,664
2014	128,273	109,973	122,465	80,675	195,283	(23,508)	107,290

^aLess than 1 percent.

and 8. The sample consisted of grain farms having between 800 and 1,199 acres, or an average of 985 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, 43 months on hog farms, 19 months on beef farms, and 44 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 figures for 2014 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. 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 \$83,295 in 2014 (Table 6). This income was \$27,340 below that of 2013 and \$96,866 below the 5-year average income for 2010 through 2014. The 2012 net farm income of \$268,291 was the highest in the last 30 years. The value of farm production averaged \$639,396, which was \$16,336 below 2013 and \$23,957 below the 2010 through 2014 average. The value of farm production was the highest since this study began. The value of farm production included a \$4,446 decrease in inventory values compared to 2013, when the inventory value increased by \$11,390. Net cash operating income (adjusted gross) was \$647,428, \$14,293 higher than the 5-year average. Total cash operating expenses were \$434 higher than the year before, while depreciation of \$71,981 was 5 percent higher than the year before and 30 percent higher than the 2010 through 2014

average. Total cash operating expenses for 2014 were the highest on record.

Incomes were lower on these farms in 2014 compared to 2013. Lower prices, higher drying and storing costs, and higher land costs were the main factors for the lower incomes. The average soybean yield on these farms in 2014 was 60 bushels per acre, compared to 54 the year before. The average corn yield was 214 bushels per acre, compared to 192 the previous year. Corn was inventoried 35 cents lower at the end of 2014 compared to the beginning; soybeans were inventoried \$2.50 lower. The higher quantities in ending inventory caused the value of inventories to decrease only \$4,466 at the end of the year compared to the beginning. Crop returns averaged \$776 per tillable acre in 2014 compared to \$820 in 2013. Crop expenses per acre decreased 4.9 percent. This was the first year for the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) Program. The producer had to make a one-time election

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

	2014	2013	2010-14 average
Number of farms	559	566	602
Total acres	1,027	1,037	1,013
Soil-productivity rating	82	82	80
Percent land owned.....	19	18	17
Percent land crop-shared....	40	44	42
Percent land cash-rented	41	38	38
Cash operating income.....	\$664,235	\$711,372	\$645,950
Less purch. feed, livestock ..	<u>16,807</u>	<u>12,641</u>	<u>12,816</u>
Net cash operating income..	\$647,428	\$698,730	\$633,135
Accounts receivable chg.....	(3,566)	(54,388)	2,108
Inventory change	<u>(4,466)</u>	<u>11,390</u>	<u>28,110</u>
Value of farm prod	\$639,396	\$655,732	\$663,353
Total cash op. expenses.....	\$474,700	\$474,266	\$433,207
Prepaid-unpaid change	9,421	2,061	(5,560)
Annual depreciation.....	<u>71,981</u>	<u>68,769</u>	<u>55,545</u>
Net farm income	\$83,295	\$110,635	\$180,161
Net farm inc. per operator....	\$78,249	\$105,711	\$171,444
Unpaid labor charge	43,794	42,754	39,203
Returns to capital & mgmt ...	39,501	67,881	140,958
Interest charge on capital	<u>61,402</u>	<u>58,467</u>	<u>51,126</u>
Management returns	\$(21,901)	\$ 9,414	\$ 89,832
Total cash income ^a	\$647,428	\$698,730	\$633,135
Total cash expenditures ^a	<u>564,549</u>	<u>611,493</u>	<u>541,163</u>
Cash balance.....	\$ 85,880	\$ 87,238	\$ 91,972
Capital purchases.....	86,849	137,226	107,956

^aIncludes sales or purchases of capital items.

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 a few counties in Illinois that will see a county ARC payment. As in the old program, producers can also receive loan deficiency payments (LDPs) or take marketing loan gains when market prices are below 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 2014 was 96.4 percent, up from 95.4 percent in 2013. Corn acres decreased slightly from 53 percent of tillable acres in 2013 to 52.7 percent in 2014, while soybean acres increased from 42.4 to 43.7 percent.

The average prices received in 2014 for new-crop corn and soybeans of \$3.76 and \$10.65, respectively, were much lower for corn and soybeans than in the previous year. The average prices received for old-crop corn and soybeans, \$4.46 and \$13.45, respectively, were also lower than the year before for soybeans and corn. Capital purchases of \$86,849 in 2014 were \$50,377 less than in 2013 and \$21,107 below the 2010 through 2014 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 \$83,295, management returns were a *negative* \$21,901 in 2014, compared to \$9,414 in 2013 and the 2010 through 2014 average of \$89,832. The value of farm production per man year was \$656,528. The amount of interest paid of \$18,344 was the lowest 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 41 percent. Of the total labor of 15.0 months, only 3.7 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 98.5 percent of their tillable land to grow corn and soybeans, with 53.3 percent of the acres in corn and 45.2 percent in soybeans. The table compares 2014 costs per acre with 2013 costs. In 2014, the total cost per acre averaged \$1,002 for corn and \$758 for soybeans. From 2013 to 2014, the total cost per acre increased 4 percent for corn and 6 percent for soybeans.

Nonland costs of \$3.01 per bushel for corn and \$7.06 for soybeans in 2014 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 decreased for corn and soybeans from 2013 to 2014. Costs per bushel for corn decreased due primarily to much higher yields. Total costs per bushel decreased 56 cents for corn and 49 cents for

soybeans. If the 2014 yield for corn had been 166 bushels, the same as the average for the period from 2011 through 2014, the total cost per bushel would have been \$6.04. 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 adjusted net rent was the average net rent received by crop-share landlords as reported on recordkeeping farms for the period 2010 through 2013.

Hog farms. The operator's net farm income in 2014 for Illinois hog farms having 180 acres or more averaged \$468,506 (Table 8). Net incomes were \$351,717 higher than net incomes in 2013 and \$192,651 higher than the average for the 5-year period from 2010 through 2014. The cash balance on these farms of \$127,286 was \$33,144 more

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

	Corn		Soybeans	
	2014	2013	2014	2013
Number of farms.....	679	641	679	641
Acres grown per farm	703	698	595	580
Yield per acre, bu	231	197	64	58
Variable nonland costs				
Soil fertility	\$171	\$193	\$ 58	\$ 65
Pesticides	67	66	41	40
Seed	120	114	77	73
Drying and storage	40	32	8	5
Machinery repairs, fuel, and hire.....	67	63	58	55
Total, variable costs.....	\$465	\$468	\$242	\$238
Other nonland costs				
Labor	\$ 49	\$ 48	\$ 47	\$ 45
Buildings	17	16	14	14
Machinery depreciation .	65	63	57	55
Nonland interest	52	51	47	46
Overhead.....	48	50	45	47
Total, other costs	\$231	\$228	\$210	\$207
Total, nonland costs.....	\$696	\$696	\$452	\$445
Land costs				
Taxes	\$ 45	\$ 40	\$ 45	\$ 40
Adjusted net rent.....	230	220	230	220
Total, land costs.....	\$306	\$270	\$306	\$270
Total, all costs	\$1,002	\$966	\$758	\$715
Nonland cost per bu	\$3.01	\$3.53	\$ 7.06	\$7.67
Total, all costs per bu.....	\$4.34	\$4.90	\$11.84	\$12.33

Average yield, past 4 yrs ...	166	163	56	55
Total, all costs per bu.....	\$6.04	\$5.93	\$13.54	\$13.00

than in 2013 and \$31,985 above the average for the 5-year period from 2010 through 2014. Inventories on these farms increased \$148,359 in 2014, following a \$66,471 increase in 2013. The value of farm production of \$1,676,736 was \$606,782 more than in 2013 and \$431,574 higher than the average for the 5-year period from 2010 through 2014. Farm production per man year was \$522,318. Incomes on hog farms increased in 2014 due to lower feed cost and higher hog prices. Depreciation of \$93,219 was \$15,281 higher than in 2013.

Management returns were \$340,312 in 2014 compared to a *negative* \$16,093 in 2013. Management returns were \$356,405 more than in 2013 and \$176,722 above the average for 2010 through 2014. Capital purchases were \$234,564, which was \$106,303 higher than in 2013 and \$94,271 higher than the average for 2010 through 2014. Farm production per one dollar of nonfeed costs of \$1.23 was the highest for any type of farm in Illinois. Purchased feed and livestock for this group totaled \$1,198,484,

\$272,471 more than in 2013. The average interest paid on these farms was \$51,042. That was the highest of the live-stock farms in this size range. Farm operators in this group owned 22 percent of the land they farmed, crop-shared 16 percent, and cash-rented 61 percent. Total labor was 43 months, 30 months of which was hired. Corn was planted on 68 percent of the acres and soybeans on 27.8 percent. The average corn yield was 215 bushels per acre and the average soybean yield 62 bushels per acre.

Beef farms. The operator's net farm income for Illinois beef farms having 180 acres or more averaged \$227,262 in 2014 (Table 8). This figure was \$172,045 higher than the 2013 figure and \$77,080 higher than the average from 2010 through 2014. Higher beef prices contributed to the higher 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 29 percent, while the average price received for market cattle increased 21 percent in 2014 compared to 2013. The price paid for feeder

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

	Hog farms			Beef farms			Dairy farms		
	2014	2013	2010-14 average	2014	2013	2010-14 average	2014	2013	2010-14 average
Number of farms	40	47	46	26	30	23	49	56	53
Total acres	1,096	1,046	1,047	704	700	685	590	616	582
Soil-productivity rating	81	79	80	72	75	74	70	70	69
Percent land owned.....	22	24	22	40	40	41	42	38	41
Percent land crop shared	16	18	21	16	18	16	4	3	4
Percent land cash rented.....	61	57	57	45	42	43	55	59	55
Cash operating income.....	\$2,702,565	\$2,015,377	\$2,110,583	\$1,278,952	\$1,737,974	\$1,428,176	\$1,209,208	\$1,107,839	\$997,268
Less purch. feed, livestock	<u>1,198,484</u>	<u>926,013</u>	<u>958,624</u>	<u>835,630</u>	<u>1,135,013</u>	<u>898,150</u>	<u>276,164</u>	<u>277,881</u>	<u>229,246</u>
Net cash oper. income.....	\$1,504,081	\$1,089,365	\$1,151,959	\$425,323	\$602,961	\$530,026	\$933,044	\$829,958	\$768,022
Accounts receivable change..	24,295	(85,882)	(29)	(6,182)	(52,008)	(78)	(821)	(33,722)	3,197
Inventory change.....	<u>148,359</u>	<u>66,471</u>	<u>93,232</u>	<u>303,269</u>	<u>23,496</u>	<u>105,805</u>	<u>119,815</u>	<u>13,471</u>	<u>42,428</u>
Value of farm prod	\$1,676,736	\$1,069,954	\$1,245,162	\$722,409	\$574,449	\$635,753	\$1,052,038	\$809,707	\$813,647
Total cash oper. expenses	\$1,142,231	\$866,962	\$916,336	\$429,941	\$459,461	\$438,576	\$689,615	\$653,006	\$581,841
Prepaid-unpaid change	(27,220)	8,265	(17,214)	793	(1,352)	(6,830)	(20,394)	2,514	(8,566)
Annual depreciation.....	<u>93,219</u>	<u>77,938</u>	<u>70,156</u>	<u>64,414</u>	<u>61,123</u>	<u>58,826</u>	<u>81,609</u>	<u>82,188</u>	<u>66,146</u>
Net farm income	\$468,506	\$116,789	\$275,855	\$227,262	\$55,217	\$150,182	\$301,208	\$71,998	\$174,226
Net farm inc. per operator.....	\$311,554	\$75,445	\$178,184	\$177,592	\$47,112	\$119,506	\$193,619	\$53,434	\$111,551
Unpaid labor charge	50,271	51,008	46,261	49,902	48,375	47,408	57,357	53,973	54,061
Returns to capital & mgmt.....	418,235	65,781	229,594	177,360	6,842	102,773	243,851	18,025	120,165
Interest charge on capital	<u>77,923</u>	<u>81,874</u>	<u>66,004</u>	<u>80,561</u>	<u>75,570</u>	<u>66,905</u>	<u>64,509</u>	<u>56,249</u>	<u>53,702</u>
Management returns	\$340,312	(\$16,093)	\$163,590	\$96,799	(\$68,728)	\$ 35,868	\$179,342	(\$38,223)	\$ 66,463
Total cash income ^a	\$1,504,081	\$1,089,365	\$1,151,959	\$425,323	\$602,961	\$530,026	\$933,044	\$829,958	\$768,022
Total cash expenditures ^a	<u>1,376,794</u>	<u>995,223</u>	<u>1,056,658</u>	<u>574,756</u>	<u>564,777</u>	<u>555,350</u>	<u>842,022</u>	<u>806,495</u>	<u>704,891</u>
Cash balance.....	\$ 127,286	\$ 94,142	\$ 95,301	(\$149,433)	\$ 38,184	(\$ 25,325)	\$ 91,022	\$ 23,463	\$ 63,131
Capital purchases.....	234,564	128,261	140,293	144,815	105,315	116,774	152,407	153,488	123,050

^aIncludes sales or purchases of capital items.

cattle went up about 43 percent from the year before. The value of farm production for this group of farms averaged \$722,409, or \$147,960 more than in 2013. Cash operating income averaged \$1,278,952, purchased feed and livestock totaled \$835,630, and net cash operating income averaged \$425,323.

Management returns of \$96,799 in 2014 for these farms were the lowest for any type of livestock farm in the study. Management returns averaged \$35,868 for the period 2010 through 2014. Capital purchases were \$144,815 in 2014, compared to \$105,315 in 2013 and \$133,251 in 2012. The 2010 through 2014 average was \$116,774. Depreciation of \$64,414 was \$3,291 above 2013. Cash operating expenses, excluding purchases of feed and livestock, totaled \$429,941. The net cash balance for these farms was a *negative* \$149,433.

Costs and returns to produce beef from 2011 through 2014, 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 in 2014 and 2011, 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 40 percent of the land they farmed. They crop-shared 16 percent and cash-rented 45 percent. The amount of interest paid was \$27,159. They planted 57.8 percent of their tillable land to corn or corn silage. They also had 12.1 percent of their tillable land in hay and pasture. These farms used 18.8 months of total labor, with 5.8 of that hired labor. The average corn yield on these farms was 211 bushels per acre, and the average soybean yield was 64 bushels per acre. In 2013, corn and soybeans yields on these farms averaged 184 and 58 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 \$301,208 in 2014 (Table 8). This figure was \$229,210 above the 2013 figure and \$126,982 above the 5-year average from 2010 through 2014. The highest income was recorded in 2014. The farms averaged 36,855 hundredweight of milk produced.

Higher milk prices and lower feed costs were the main factors for the increase in earnings. The value of farm production was \$1,052,038. This was \$242,331 higher than 2013 and \$238,391 higher than the 2010 through 2014 average. The value of inventory increased by \$119,815, while

cash operating income increased by \$101,369, 9.2 percent more than in 2013. (A detailed breakdown of the cost of producing milk is given in Table 16.) Management returns of \$179,342 were \$217,565 higher than the 2013 figure and \$112,879 higher than the 5-year average from 2010 through 2014. Capital purchases decreased to \$152,407 in 2014, compared to \$153,488 in 2013 and \$131,093 in 2012. The 2010 through 2014 average was \$123,050, and 2013 was the highest amount of capital purchases ever for these types of farms. Annual depreciation on these farms averaged \$81,609. These farms used 43.7 months of total labor, 28.8 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 \$31,739.

Farm operators in this group owned 42 percent of the land they farmed and cash-rented 55 percent. About 12 percent of the land they farmed was in hay ground; 48.8 percent was in corn and corn silage. Over 128 percent of the value of crop produced was fed to livestock. The average corn yield was 196 bushels per acre for these farms, which is 12 bushels per acre more than in 2013. The average price received for milk in 2014 was 20 percent higher than the average price received in 2013.

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 2000 through 2014 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 \$196 in 2014 were above the 5-year average of \$151. The 2014 return was above the 2000 through 2014 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 \$155 per \$100 of feed fed for the most recent 5-year period (2010 through 2014) to be above the previous 5-year period and the 15-year average of \$147. The 2014 return of \$215 per \$100 of feed fed was \$60 above 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 \$3,734 per cow in 2014 was

\$1,572 above the 5-year average of \$2,162 (Table 10). These returns indicate that the average dairy enterprise has covered the total estimated cost of production of \$2,152 per cow from 2009 through 2013. The 2014 return per \$100 of feed fed of \$228 was above the past 5-year average of \$176.

For the beef-herd enterprise, the average returns above the cost of feed and purchased animals for the period from 2010 through 2014 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 \$292 during the past 5 years. The 2014 return of \$842 covered feed costs as well as total nonfeed costs, estimated at \$259 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

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

	Farrow-to-finish hogs (\$)	Feeder pig finishing (\$)	Feeder pig production (\$)	Feeder cattle bought (\$)	Dairy cow herds (\$)	Beef cow herds (\$)	Native sheep raised (\$)	Yearly price of corn (\$)
2000.....	212	166	327	147	197	141	140	1.89
2001.....	203	150	331	128	233	138	97	1.94
2002.....	151	121	433	128	198	130	154	2.19
2003.....	168	132	314	200	202	148	165	2.30
2004.....	216	158	287	165	222	178	161	2.49
2005.....	216	143	347	167	245	170	111	2.02
2006.....	183	121	349	124	192	137	117	2.41
2007.....	138	136	249	142	218	111	134	3.42
2008.....	115	131	149	102	172	86	106	4.70
2009.....	123	104	... ^a	126	138	109	75	3.76
2010.....	156	127	... ^a	163	168	135	139	3.86
2011.....	146	153	... ^a	153	181	145	173	6.15
2012.....	120	127	... ^a	117	146	125	79	6.74
2013.....	138	133	... ^a	125	156	131	... ^a	6.07
2014.....	196	187	... ^a	215	228	249	122	4.14
Averages								
2000–2014.....	165	139	... ^a	147	193	142	... ^a	3.61
2000–2004.....	190	145	338	154	210	147	143	2.16
2005–2009.....	155	127	274	132	193	123	109	3.26
2010–2014.....	151	145	... ^a	155	176	157	... ^a	5.39

^aData not available.

Table 10. Variations in Returns to Livestock Enterprise Units, 2010 Through 2014

	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					
2010.....	19.71	15.36	35.94	1,506	115
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.....	<u>37.12</u>	<u>29.37</u>	<u>70.06</u>	<u>3,734</u>	<u>842</u>
Five-year average.....	\$21.06	\$17.37	\$35.64	\$2,162	\$292
Nonfeed costs, 2009 through 2013^b					
Direct cash.....	\$10.74	\$ 6.63	\$16.30	\$1,546	\$160
Other costs.....	<u>8.22</u>	<u>3.65</u>	<u>12.50</u>	<u>606</u>	<u>99</u>
Total.....	\$18.96	\$10.28	\$28.80	\$2,152	\$259

^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.

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 28 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 2014 was 327 litters. Average pigs weaned per litter, 9.24, was below the 2013 figure of 9.87. The 2,437 pounds of pork produced per litter was 124 pounds lower than in 2013. The 2014 records summarized here for the “all farms” group show that the return of \$37.12 above feed costs per 100 pounds of pork produced was \$18.80 above the 2013 return of \$18.32. The 2014 return was above the 5-year average.

The 5-year average return above feed costs per 100 pounds produced was \$21.06 (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 \$18.96 per 100 pounds to pay for all nonfeed costs in the 2009 through 2013 time period. The return above all costs during this 5-year period of \$2.10 (\$21.06 minus \$18.96) 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 has decreased the last two years. Fortunately, strong export demand has supported pork prices. Depending on adjustments in pork production levels due to the outbreak of porcine epidemic diarrhea virus (PEDv), the pork industry may continue to be profitable in 2015. Pork

production was down 0.3 percent in 2013 and down 1.5 percent in 2014. It is expected to increase about 7.6 percent in 2015 due to higher pork prices, mainly due to higher exports and lower feed costs.

The farrow-to-finish enterprise records for 2014 reported in Table 11 were also sorted by the number of litters produced. The group farrowing 350 or more litters averaged 630 litters. Compared with the average feed cost for all farrow-to-finish enterprises, feed cost per 100 pounds of pork produced was \$1.42 lower for the 350-or-more litter group.

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 \$1.18 more 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 2014 decreased 1.5 percent due to the continued outbreak of PEDv. Pork production in 2015 is expected to increase compared to 2014. Hog prices have moved higher due to greater demand over the last couple of years. 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 2011, 2012, 2013, and 2014. 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 re-

sources 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 2014 were \$51.15 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 22 percent as one compared 2014 to 2013. Total nonfeed costs increased \$2.68 per 100 pounds of pork produced, with maintenance and power costs representing most of the increase. Feed costs decreased as grain prices decreased. Total cost of production decreased from 2013 to 2014 by \$8.44 (12 percent) per 100 pounds of pork produced.

From 2011 through 2014, the return above all costs averaged \$1.45 per 100 pounds of pork produced. Management practices, such as the choice of building systems, type of

Table 11. Hog Enterprises, 2014 Averages per Farm

	All farms	Farrow-to-finish enterprises ^a
Number of farms.....	28	10
Pork produced, lbs.....	795,888	1,569,885
Pork prod. per litter, lbs.....	2,437	2,494
Total returns.....	\$604,068	\$1,210,324
Value of feed fed.....	\$308,627	\$586,487
Returns per \$100 feed fed.....	\$196	\$206
Number litters farrowed.....	327	630
Pigs farrowed per litter.....	10.77	11.05
Pigs weaned per litter.....	9.24	9.46
Litters per female year.....	1.85	1.89
Pigs weaned per female year...	16.89	18.28
Number pigs weaned.....	3,021	5,960
Death loss, % lbs produced.....	3.4	3.8
Wt per market hog sold, lbs.....	268	268
----- per cwt produced -----		
Price received—market.....	\$78.72	\$79.90
Total returns.....	75.90	77.10
Feed costs.....	<u>38.78</u>	<u>37.36</u>
Return above feed.....	\$37.12	\$39.74
Farm grains/complete feed, lbs	236	236
Commercial feed, lbs.....	<u>81</u>	<u>72</u>
Total concentrates, lbs.....	317	308
Cost per cwt supplement.....	\$26.29	\$27.70
Cost per cwt concentrates.....	\$12.21	\$12.13

^a350 or more litters per farm.

Table 12. Average Costs and Returns for Farrow-to-Finish Hog Enterprises, 2011 Through 2014

	2014	2013	2012	2011	2011–14 average
Number of farms.....	12	14	13	9	12
Tillable acres.....	553	823	765	734	719
Number of litters.....	494	422	660	736	578
Total returns.....	\$74.52	\$63.96	\$60.19	\$65.35	\$66.01
----- per cwt pork produced -----					
Cash costs					
Feed.....	\$38.59	\$49.71	\$49.74	\$41.68	\$44.93
Operating expenses					
Maintenance and power ^a	\$ 6.10	\$ 4.36	\$ 5.15	\$ 5.45	\$ 5.27
Livestock expenses.....	5.28	5.23	4.69	4.22	4.86
Insurance, taxes, and overhead.....	<u>1.18</u>	<u>1.11</u>	<u>1.04</u>	<u>1.39</u>	<u>1.18</u>
Total operating expenses.....	\$12.56	\$10.70	\$10.88	\$11.06	\$11.30
Total cash costs.....	\$51.15	\$60.41	\$60.62	\$52.74	\$56.23
Other costs					
Depreciation ^b	\$1.74	\$1.86	\$1.88	\$1.76	\$1.81
Labor.....	5.49	5.03	4.95	4.43	4.98
Interest charge on all capital.....	<u>1.59</u>	<u>1.11</u>	<u>1.72</u>	<u>1.75</u>	<u>1.54</u>
Total other costs.....	\$8.82	\$8.00	\$8.55	\$7.94	\$8.33
Total nonfeed costs.....	\$21.38	\$18.70	\$19.43	\$19.00	\$19.63
Total all costs.....	\$59.97	\$68.41	\$69.17	\$60.68	\$64.56
Return above all costs.....	\$14.55	(\$4.45)	(\$8.98)	\$ 4.67	\$ 1.45

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

^bIncludes machinery, equipment, and building depreciation.

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 2014 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 1,569,721 pounds in 2014 (Table 13). At 240 pounds of gain per head, this figure amounted to 6,541 head fed per farm in 2014. These feeder pig enterprises represent those that buy weaner pigs and finish them.

The return above the cost of feed and purchased animals from 2010 through 2014 averaged \$17.37 per 100 pounds of gain. This return was \$7.09 above the \$10.28 of all nonfeed costs for the period 2009 through 2013 (Table 10). The 2014 return of \$29.37 was \$16.28 above the 2013 return and \$12.00 above the 2010 through 2014 return. Higher price received was the main reason for the higher returns.

Given that a 475-pound unit of gain equals one head of feeder cattle, the average of 215,971 pounds of beef produced per farm in 2014 (Table 13) equals 455 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 \$215 in 2014, in comparison with a 5-year average of \$155 and a 15-year average of \$147 (Table 9).

The price paid for feeders was \$62.83 per 100 pounds higher in 2014 than it was in 2013; the price received for cattle sold in 2014 was \$25.64 higher per 100 pounds than the price received in 2013. The average weight of purchased animals was 651 pounds; the average weight of animals sold was 1,320 pounds. Feed cost was \$61.10 per 100 pounds produced in 2014; it was \$86.10 in 2013. Feed costs decreased in 2014 and were below the last 5-year average. Higher market cattle prices combined with lower feed costs resulted in much higher returns above feed in 2014.

Each 100 pounds of beef produced required 644 pounds of concentrates and 81 pounds of hay. The amount of corn silage used in 2014 averaged 244 pounds; other silage averaged 56 pounds, for a total of 300 pounds. Silage use by the feeder cattle enterprise has been rising slightly in the past 4 years; the 10-year average for the period 1995 through 2004 was 462 pounds per 100 pounds of beef produced, compared to 316 pounds for the period 2005 through 2014. The use of 300 pounds of silage per 100 pounds of beef produced in 2014 was the highest amount fed since 2008. 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 \$35.64 per 100 pounds of beef produced from 2010 through 2014 (Table 10). During this period, returns ranged from \$14.29 in 2012 to \$70.06 in 2014. The returns above feed costs are above the estimated cost of \$28.80 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 higher than in 2011 because of the higher price received for cattle and lower feed costs in 2014.

The data in Table 14 show a detailed breakdown for the period from 2011 through 2014 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 show that these farms were finishing an average of 1,145 feeders each year from 2011 through 2014. The 4-year average total cash cost including feed and interest

Table 13. Feeder Cattle and Feeder Pig Finishing Enterprises, 2014 Averages per Farm

	Feeder cattle	Feeder-pig finishing ^a
Number of farms.....	80	34
Total lbs produced	215,971	1,569,721
Total returns.....	\$283,258	\$987,906
Value of feed fed.....	\$131,949	\$526,931
Returns per \$100 of feed fed.....	\$215	\$187
Death loss, % lbs produced.....	2.6	1.7
Average weight purchased.....	651	14
Price paid per 100 lbs.....	\$208.36	\$304.48
Price received per 100 lbs.....	\$149.09	\$ 77.26
Average weight sold	1,320	274
-- per cwt produced --		
Total returns.....	\$131.16	\$62.94
Feed costs	<u>61.10</u>	<u>33.57</u>
Return above feed.....	\$70.06	\$29.37
Farm grains/complete feed, lbs	611	197
Supplement, lbs.....	<u>33</u>	<u>80</u>
Total concentrates, lbs.....	644	277
Hay, lbs.....	81	.. . ^b
Corn silage, lbs.....	244	.. . ^b
Other silage, lbs.....	56	.. . ^b
Hay equivalent, lbs	180	.. . ^b

^aPurchase weight of 20 lbs and less.
^bData not available.

charged on cattle, was \$101.28 per 100 pounds of beef produced. The average total returns of \$112.63 for the same period was more than total cash costs by \$11.35 per 100 pounds produced, or about \$77.07 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 \$11.57 per 100 pounds of beef produced, or \$79 per feeder (\$11.57 multiplied by 6.79 hundredweight of gain per feeder), include depreciation, labor, and interest. Adding the other costs to cash costs results in total costs of \$112.84 per hundredweight over the 4-year period. This was 21 cents per hundredweight more than the average total returns of \$112.63.

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 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.

Table 14. Average Costs and Returns for Beef-Feeding Enterprises, 2011 Through 2014

	2014	2013	2012	2011	2011-14 average
Number of farms.....	15	14	9	9	12
Average per farm					
Tillable acres.....	570	704	724	438	609
Hundredweight beef produced	5,843	5,241	6,441	4,233	5,440
Number head at 475-lb gain equivalents.....	1,230	1,103	1,356	891	1,145
Average weight purchased, lbs.....	635	659	553	497	586
Average weight sold, lbs.....	1,324	1,270	1,254	1,212	1,265
Price received per 100 lbs sold	\$147.19	\$122.87	\$116.58	\$108.46	\$123.78
Price paid per 100 lbs purchased.....	\$206.98	\$141.12	\$137.24	\$108.60	\$148.49
----- per cwt beef produced -----					
Cash costs					
Feed	\$61.32	\$91.53	\$93.39	\$75.62	\$80.47
Operating expenses					
Maintenance and power ^b	\$ 8.61	\$ 8.45	\$ 7.61	\$ 8.17	\$ 8.21
Livestock expense.....	6.20	6.93	5.32	5.97	6.11
Insurance, taxes, and overhead	0.85	0.94	1.13	1.16	1.02
Interest on cattle ^c	6.23	5.02	6.03	4.62	5.48
Total operating expenses.....	\$21.89	\$ 21.34	\$ 20.09	\$19.92	\$20.81
Total cash costs.....	\$83.21	\$112.87	\$113.48	\$95.54	\$101.28
Other costs					
Depreciation ^d	\$ 3.64	\$ 3.37	\$ 3.61	\$ 2.33	\$ 3.24
Labor	5.88	6.47	6.69	5.25	6.07
Interest on other capital.....	2.61	2.16	2.45	1.81	2.26
Total other costs	\$ 12.13	\$ 12.00	\$ 12.75	\$ 9.39	\$ 11.57
Total all costs.....	\$95.34	\$124.87	\$126.23	\$104.93	\$112.84
Total returns ^e	\$131.16	\$109.27	\$104.98	\$105.11	\$112.63
Return above all costs.....	\$ 35.82	(\$ 15.60)	(\$21.25)	\$ 0.19	(\$ 0.21)

^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 2011 and 2012, and 4.0% for 2013 and 2014.

^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.

The 2014 average herd size is 143.5 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 2014 was \$228. The average for the period from 2010 through 2014 was \$176 (Table 9). In 2014, milk prices per hundredweight increased from \$20.71 to \$24.88. From 2013 to 2014, beef prices for market animals sold increased \$54.01 per hundred pounds, while feed costs decreased \$2.52 per milk equivalent. Milk production per cow in 2014 of 22,567 pounds was up 422 pounds from 2013 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 3 in 2014. 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 “high efficiency” groups had 40 to 79 cows and 80 to 149 cows. Efficiency is measured by the return above cost of feed per cow, and the top one-third in efficiency makes up these two groups. The larger herds averaged 104 cows, and the smaller herds averaged 65 cows. The return above feed costs per cow was higher for the larger herds, at \$3,354, compared to a return of \$3,309 for the smaller herds. The larger herds averaged 20,123 pounds of milk produced per cow, compared to 21,212 pounds for the smaller herds. Feed cost per milk equivalent was lower for the larger herds, at \$11.03, compared to \$12.11 for the smaller herds.

The average return above feed costs per cow for all dairy herds was \$3,734 in 2014 (Table 15). This figure compares with the recent 5-year average of \$2,162 per cow (Table 10). For the years 2009 through 2013, the 5-year average return above feed costs required to pay market prices for all nonfeed costs is estimated to be about \$2,152 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 2012 through 2014. 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 2010 through 2014. The residual costs, amounting

Table 15. Dairy Cattle Enterprises, 2014 Averages per Farm

	All farms	High efficiency	
		40–79 cows	80–149 cows
Number of farms.....	65	12	29
Number of cows.....	143.5	64.7	103.7
Milk cows dry, %.....	15.1	12.2	13.5
Animal units in herd.....	267	119	187
Total returns.....	\$955,623	\$420,698	\$631,144
Value of feed fed.....	\$419,923	\$206,635	\$283,239
Return per \$100 of feed fed	\$228	\$204	\$223
Return above feed per cow .	\$3,734	\$3,309	\$3,354
Total milk produced, cwt	32,380	13,724	20,873
Lbs of milk per cow.....	22,567	21,212	20,123
Lbs of butterfat per cow.....	875	814	796
Total beef produced, lbs	94,458	43,818	69,832
Pounds of beef per cow.....	658	677	673
Death loss, % lbs produced.	13.1	19.4	12.9
Price received for:			
cwt milk.....	\$ 24.88	\$24.65	\$ 24.48
cwt beef	\$167.96	\$174.82	\$138.06
Per cwt milk equivalent ^a			
Feed cost.....	\$10.95	\$12.11	\$11.03
Grain/complete feed, lbs....	22	22	25
Protein and minerals, lbs...	19	18	17
Total concentrates, lbs.....	41	40	42
Hay and dry roughage, lbs	16	28	17
Corn silage, lbs.....	76	76	77
Other silage, lbs.....	46	49	45
Pasture days per animal unit	3	0	6
Hay equivalent per cow, tons	8.1	9.6	7.7
Concentrates per cow, lbs ...	10,958	10,494	10,370

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

to about 89 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 2012 through 2014 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 50 cents per 100 pounds higher than that for the smaller herds, while feed costs per 100 pounds of milk sold for the larger herds were \$2.82 lower than for the smaller herds. Total nonfeed costs were 88 cents lower for the larger herds.

In 2014, feed costs per 100 pounds of milk produced decreased for small herds (\$2.08) and decreased for large herds (\$2.00). The cost of feed averaged about 51 percent of total production costs in Illinois dairy enterprises. Compared with 2013, total nonfeed costs decreased 6 percent for the small herds, whereas the large herds increased by 8 percent. The total cost of producing 100 pounds of milk in 2014 was \$23.91 for the small herds and \$21.83 for the large herds. The average price received for milk in 2014 increased for both groups of dairy enterprises. With higher milk prices and lower feed costs, returns were able to cover

Table 16. Average Milk Production Costs and Returns by Size of Herd, 2012 through 2014

	40–79 cows in herd			80 or more cows in herd		
	2014	2013	2012	2014	2013	2012
Number of farms	9	9	12	27	30	24
Tillable acres	198	176	212	442	483	472
Number of cows.....	64.0	69.0	63.8	216.7	209.5	232.0
Milk per cow, lbs.....	19,434	18,662	18,391	23,826	26,631	24,094
	----- per 100 lbs of milk produced -----					
Price received.....	\$25.29	\$20.41	\$19.02	\$25.16	\$20.69	\$19.47
Cash costs						
Feed	\$12.73	\$14.81	\$16.85	\$11.06	\$13.06	\$12.35
Operating expenses						
Maintenance and power ^a	3.07	2.68	2.28	3.03	2.65	2.46
Livestock expense	3.13	3.14	2.58	2.91	2.70	2.65
Insurance, taxes, and overhead	<u>0.19</u>	<u>0.18</u>	<u>0.24</u>	<u>0.26</u>	<u>0.23</u>	<u>0.34</u>
Total operating expenses.....	\$ 6.39	\$ 6.00	\$ 5.10	\$ 6.20	\$ 5.58	\$ 5.45
Total cash costs.....	\$19.12	\$20.81	\$21.95	\$17.26	\$18.64	\$17.80
Other costs						
Depreciation ^b	\$ 0.85	\$ 1.10	\$ 0.97	\$ 0.98	\$ 1.03	\$ 0.84
Labor	3.11	3.93	3.60	2.72	2.63	2.64
Interest charge on all capital.....	<u>0.83</u>	<u>0.85</u>	<u>0.72</u>	<u>0.87</u>	<u>0.76</u>	<u>0.87</u>
Total other costs	\$ 4.79	\$ 5.88	\$ 5.29	\$ 4.57	\$ 4.42	\$ 4.35
Total nonfeed costs.....	\$11.18	\$11.88	\$10.39	\$10.77	\$10.00	\$ 9.80
Total all costs	<u>\$23.91</u>	<u>\$26.69</u>	<u>\$27.24</u>	<u>\$21.83</u>	<u>\$23.06</u>	<u>\$22.15</u>
Return above all costs.....	\$ 1.38	(\$6.28)	(\$8.22)	\$ 3.33	(\$ 2.37)	(\$ 2.68)

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

^bIncludes machinery, equipment, and building depreciation.

total production costs for both groups in 2014. Returns were \$1.38 per 100 pounds of milk produced for the small herds and \$3.33 for the large herds. The returns above all costs per 100 pounds of milk produced had averaged \$4.20 more for the large group than the small group from 2012 through 2014. Dairy assistance payments from the Farm Service Agency and patronage returns related to the dairy enterprise were not included in returns. This would add about 8 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. 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. 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 57 cows in 2014, 3 less than in 2013. 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 \$249 in 2014. The returns for

Table 17. Beef-Cow Enterprises, 2014 Averages per Farm

	All farms	Calves sold	Calves fed out
Number of farms.....	166	58	47
Number of cows in herd.....	57	55	53
Animal units in herd.....	92	80	99
Total lbs produced	42,172	24,838	58,241
Beef per cow, lbs	746	455	1,110
Total returns.....	\$101,512	\$76,692	\$116,407
Value of feed fed.....	\$39,079	\$30,738	\$44,541
Return per \$100 feed fed.....	\$260	\$249	\$261
Return above feed per cow	\$1,105	\$842	\$1,358
Death loss, lbs	2,433	2,406	2,139
% lbs produced.....	5.8	9.7	3.7
Weight per animal sold, lbs	726	543	986
Price per cwt sold—market.....	\$184.76	\$207.78	\$161.36
	----- per cwt produced -----		
Feed costs.....	\$92.67	\$123.75	\$76.48
Grain/complete feed, lbs.....	158	226	166
Protein and minerals, lbs.....	<u>61</u>	<u>67</u>	<u>61</u>
Total concentrates, lbs.....	219	293	227
Hay and dry roughage, lbs	773	1,238	568
Corn silage, lbs.....	354	423	336
Other silage, lbs.....	122	146	128
Pasture days.....	29	47	23
Pasture days per animal unit...	132	147	133
Hay equivalent per cow, tons...	5.9	5.6	6.8

^aInsufficient data.

the 5-year period from 2010 through 2014 averaged \$157, which is above the 15-year average of \$142 for the period from 2000 through 2014 (Table 9). Beef prices received in 2014 averaged \$184.76 per hundredweight, an increase of \$43.09 from prices in 2013. Feed costs per 100 pounds of beef produced decreased by \$8.34 to \$92.67 in 2014.

Since 2010, 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 \$315 per cow. Additional returns are needed for the added costs of labor, buildings, and capital required to feed out the calves. In 2014, the return above feed costs per cow for feeding calves to market weight was \$516 more than selling them at weaning.

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 2014 was \$122 for native flocks. The average return for the 4-year period from 2008 through 2013 and 2014 is \$128 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 \$140.29 per hundredweight in 2012 to \$141.39 in 2014, while feed costs per hundredweight produced decreased by \$2.01 to \$106.08, or 2 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, 2014 Averages per Farm (Native Flocks)

Number of farms.....	8
Number of ewes in flock.....	64
Wool and mutton produced, lbs.....	8,612
Total returns.....	\$11,150
Value of feed fed.....	\$9,135
Return per \$100 of feed fed.....	\$122
Percent lamb crop.....	110
Death loss, lbs.....	608
Percent lbs produced.....	7.1
Weight per market animal sold, lbs.....	127
----- per cwt produced -----	
Price received—market.....	\$141.39
Feed costs.....	\$106.08
Concentrates, lbs.....	246
Hay, lbs.....	755
Pasture days.....	25
Hay equivalent, lbs.....	1,280

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. 2014 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		All farms		800-1,199	
	Range in size (total tillable acres)	Number of farms	180-799	800-1,199	1,200-1,999	> 1,999	Your farm	All farms	Low 33%	High 33%	800-1,199	High 33%
Management returns		447	247	259	132			1,085			1,017	82
Total acres in farm		541	1,018	1,540	3,070			1,196			1,017	1,025
Acres of tillable land		522	986	1,506	3,007			1,165			988	993
Operator tillable acres		414	771	1,185	2,507			934			819	715
Soil rating on tillable land		91	91	91	91			91			91	91
Percent land owned		24	16	12	11			18			24	8
Percent land crop shared		40	43	42	37			41			34	55
Percent land cash rented		36	41	45	52			41			42	37
Months of hired labor		1.1	3.7	6.8	20.5			5.4			4.8	2.1
Total months labor		9.9	14.2	18.6	36.4			16.2			15.6	12.4
Dollar returns												
Crop returns		328,597	624,566	983,710	2,199,690			779,991			635,408	603,820
Livestock returns above feed		209	133	817	823			412			-15	171
Custom work		4,534	8,542	13,127	46,209			12,568			9,292	7,896
Other farm receipts		5,205	10,149	14,971	42,165			13,158			9,663	11,603
Value of farm production		338,545	643,390	1,012,626	2,288,887			806,129			654,348	623,490
Dollar costs												
Crop expenses		109,811	212,998	329,446	699,209			257,436			247,036	181,531
Power and equipment		61,935	113,654	168,193	377,155			137,423			135,303	90,782
Building and fence		20,000	34,963	49,672	103,007			40,588			43,728	26,921
Labor		30,236	41,987	56,953	118,280			50,000			48,334	33,245
Insurance and miscellaneous		16,219	28,972	44,714	105,498			36,786			34,489	25,436
Livestock services and supplies		228	295	450	1,390			438			288	157
Interest on nonland capital		19,400	38,415	58,412	130,295			46,533			44,783	32,038
Real estate taxes		5,690	7,384	9,200	20,554			8,722			10,747	4,519
Cash rent		47,768	103,540	198,398	531,537			155,276			111,376	86,639
Other land charges		52,270	81,088	105,299	168,957			85,685			97,339	68,851
Total nonfeed costs		363,558	663,296	1,020,737	2,255,883			818,887			773,422	550,120
Capital account adjustment		-2,456	7,678	2,668	24,301			6,353			5,955	12,433
Management returns		-22,556	-12,227	-5,444	57,306			-6,404			-113,120	85,803
Farm production per \$1.00 of nonfeed costs		0.93	0.97	0.99	1.01			0.98			0.85	1.13
Farm production per man		403,791	701,919	888,114	1,116,549			673,986			636,036	789,371
Financial summary												
Cash operating income		351,753	671,302	1,038,314	2,381,619			835,339			709,161	627,799
Inventory change		-10,187	-24,273	-19,603	-97,941			-26,317			-46,844	-4,002
Accts. receivable (net change)		-2,768	-3,074	-4,479	29,124			634			-7,385	-258
Less purchased feed		48	540	819	1,327			500			591	48
Less purchased livestock		108	26	498	577			240			0	0
Gross farm returns		338,641	643,389	1,012,914	2,310,900			808,915			654,342	623,490
Cash operating expenses		250,179	479,835	785,627	1,881,173			628,702			545,344	406,810
Prepaid expenses (- if increased)		2,777	6,158	1,402	-28,261			-558			11,981	7,159
Accts. payable (+ if increased)		563	1,006	-426	-16,057			-1,595			1,807	-2,109
Total operating expenses		253,519	486,998	786,603	1,836,855			626,550			559,132	411,860
Income before depreciation		85,122	156,390	226,311	474,045			182,365			95,210	211,630
Less depreciation		36,035	75,272	111,938	237,333			87,576			92,248	59,120
Capital account adjustment		2,456	7,678	2,668	24,301			6,353			5,955	12,433
Net farm income		51,543	88,796	117,040	261,013			101,142			8,917	164,943
Net farm income per operator		50,460	83,231	107,449	171,617			86,264			8,340	156,881
Labor & mgt. income per operator		10,729	25,960	37,818	67,546			27,575			-71,047	120,140

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. 2014 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	
	447	247	259	132	132	132	132	1,085	Low 33%	High 33%
Management returns									82	82
Number of farms										
Selected returns and costs per operator tillable acre										
Crop returns	793.89	810.04	830.34	877.58				835.30	775.85	844.72
Livestock returns above feed	0.51	0.17	0.69	0.33				0.44	-0.02	0.24
Custom work, other receipts	23.53	24.24	23.72	35.26				27.55	23.14	27.28
Value of farm production	817.92	834.45	854.75	913.17				863.29	798.97	872.24
Soil fertility	111.27	121.06	121.50	124.94				120.67	133.90	111.65
Pesticides	56.20	54.20	55.23	51.46				53.99	62.45	46.65
Seed and other crop expense	97.83	100.99	101.35	102.55				101.03	105.29	95.66
Crop total	265.30	276.25	278.08	278.96				275.69	301.64	253.95
Light vehicle and utilities	12.61	9.31	7.56	6.32				8.41	9.12	8.98
Machinery repairs, supplies	32.98	29.52	28.35	27.54				29.15	31.94	27.18
Machinery hire, lease	17.67	14.50	12.72	17.19				15.42	17.24	13.74
Fuel and oil	25.08	25.71	26.82	32.24				28.06	26.25	23.71
Machinery depreciation	61.30	68.37	66.52	67.17				66.13	80.65	53.39
Power and equipment total	149.63	147.40	141.97	150.47				147.17	165.21	127.00
Drying and storage	30.67	28.27	26.13	20.50				25.52	30.21	26.01
Building repair and rent	6.58	7.26	6.22	6.26				6.49	9.88	5.10
Building depreciation	11.06	9.82	9.58	14.33				11.45	13.31	6.55
Building total	48.32	45.35	41.93	41.10				43.47	53.39	37.66
Labor, unpaid	64.68	40.45	30.13	19.90				35.04	41.98	38.41
Labor, paid	8.37	14.01	17.95	27.28				18.51	17.04	8.10
Labor total	73.05	54.46	48.07	47.19				53.55	59.02	46.51
Insurance and miscellaneous	39.18	37.58	37.74	42.09				39.39	42.11	35.58
Livestock services and supplies	0.55	0.38	0.38	0.55				0.47	0.35	0.22
Interest on nonland capital	46.87	49.82	49.31	51.98				49.83	54.68	44.82
Other costs total	86.61	87.78	87.43	94.63				89.69	97.14	80.62
Land charge	255.44	249.03	264.11	287.67				267.37	267.97	223.85
Total nonfeed costs	878.35	860.27	861.60	900.00				876.95	944.36	769.60
Capital account adjustment	5.93	9.96	2.25	9.70				6.80	7.27	17.39
Management returns	-54.50	-15.86	-4.60	22.86				-6.86	-138.12	120.04
Percent crop returns fed	0.01	0.01	0.02	0.01				0.01	0.00	0.01
Capital purchases	39,461	82,885	111,706	328,880				101,802	90,897	87,613
Interest paid	8,969	15,969	28,277	66,860				22,214	21,732	12,996
Percent tillable land in										
Corn and corn silage	53.0	54.0	55.5	59.3				56.0	54.8	53.4
Soybeans	45.7	44.7	42.9	38.4				42.4	44.2	45.2
Wheat	0.2	0.2	0.2	0.0				0.1	0.4	0.0
Other small grains	0.0	0.0	0.0	0.0				0.0	0.0	0.0
CRP acres	0.2	0.1	0.2	0.1				0.1	0.1	0.1
All hay and pasture	0.2	0.1	0.2	0.0				0.1	0.1	0.0
Crop yields, bushels per acre										
Corn	222	222	225	222				223	223	224
Soybeans	63	64	65	65				64	62	66
Wheat	76	80	74	38				71	80	0
Prices received										
Corn (old crop)	4.40	4.43	4.48	4.71				4.54	4.37	4.46
Corn (new crop)	3.75	3.79	3.74	4.01				3.86	3.69	3.89
Soybeans (old crop)	13.44	13.51	13.39	13.44				13.44	13.47	13.60
Soybeans (new crop)	10.67	10.80	10.88	10.71				10.78	10.81	11.05

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. 2014 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

	180-799		800-1,199		1,200-1,999		> 1,999		Your farm		All farms		800-1,199	
	Number of farms	365	171	168	94	798	Low 33%	High 33%						
Range in size (total tillable acres)														
Management returns														
Total acres in farm	512	1,014	1,602	2,993	1,141	1,141	986	1,041						
Acres of tillable land	489	976	1,546	2,899	1,100	1,100	950	997						
Operator tillable acres	410	786	1,299	2,532	928	928	803	753						
Soil rating on tillable land	78	78	79	78	78	78	78	79						
Percent land owned	30	19	18	18	24	24	19	16						
Percent land crop shared	30	38	32	27	32	32	30	48						
Percent land cash rented	39	43	49	55	44	44	50	36						
Months of hired labor	1.0	2.4	4.9	17.8	4.1	4.1	3.0	1.1						
Total months labor	10.1	14.0	18.0	34.3	15.4	15.4	14.9	12.6						
Dollar returns														
Crop returns	310,997	603,915	1,033,368	2,089,515	735,342	735,342	598,251	593,700						
Livestock returns above feed	92	185	943	-52	274	274	-31	230						
Custom work	4,257	7,336	12,922	33,264	10,158	10,158	8,906	7,436						
Other farm receipts	5,374	7,848	15,228	24,367	10,216	10,216	6,534	8,761						
Value of farm production	320,720	619,284	1,062,460	2,147,093	755,990	755,990	613,660	610,127						
Dollar costs														
Crop expenses	112,930	211,330	362,712	696,728	255,370	255,370	234,436	180,935						
Power and equipment	68,277	116,790	191,499	372,164	140,410	140,410	137,013	92,026						
Building and fence	19,623	33,719	53,756	101,768	39,506	39,506	41,909	26,503						
Labor	32,171	43,474	58,499	111,939	49,532	49,532	48,253	36,019						
Insurance and miscellaneous	16,672	30,111	48,707	102,976	36,462	36,462	31,937	27,233						
Livestock services and supplies	304	384	387	1,304	457	457	488	210						
Interest on nonland capital	18,988	37,365	61,389	117,556	43,466	43,466	42,285	31,496						
Real estate taxes	5,019	6,448	9,885	19,481	8,053	8,053	7,180	5,354						
Cash rent	41,504	93,656	190,207	439,345	130,849	130,849	114,649	74,939						
Other land charges	44,875	73,436	103,006	175,658	78,639	78,639	76,808	71,618						
Total nonfeed costs	360,364	646,713	1,080,047	2,138,919	782,741	782,741	734,959	546,333						
Capital account adjustment	3,207	1,981	2,967	9,104	3,588	3,588	2,861	1,886						
Management returns	-36,438	-25,448	-14,620	17,278	-23,162	-23,162	-118,437	65,680						
Farm production per \$1.00														
of nonfeed costs	0.89	0.96	0.98	1.00	0.97	0.97	0.83	1.12						
Farm production per man	362,985	658,496	899,801	958,859	609,513	609,513	602,164	741,886						
Financial summary														
Cash operating income	334,219	630,471	1,088,517	2,145,029	769,805	769,805	655,196	584,046						
Inventory change	-11,633	-4,920	-17,417	23,288	-7,299	-7,299	-34,716	32,711						
Accts. receivable (net change)	-1,605	-4,853	-6,050	4,034	-2,573	-2,573	-5,445	-6,439						
Less purchased feed	79	336	301	3,260	555	555	181	160						
Less purchased livestock	170	624	369	736	376	376	1,194	84						
Gross farm returns	320,733	619,738	1,064,380	2,168,354	759,003	759,003	613,660	610,074						
Cash operating expenses	245,901	461,542	808,929	1,707,872	582,854	582,854	519,286	390,686						
Prepaid expenses (- if increased)	3,699	7,934	11,192	17,131	7,766	7,766	21,178	-1,297						
Accts. payable (+ if increased)	1,369	79	1,430	1,430	1,578	1,578	-165	-1,489						
Total operating expenses	250,969	469,554	823,762	1,726,434	592,198	592,198	540,299	387,900						
Income before depreciation	69,764	150,184	240,618	441,920	166,805	166,805	73,361	222,175						
Less depreciation	37,098	74,041	121,833	218,883	84,267	84,267	84,794	61,129						
Capital account adjustment	3,207	1,981	2,967	9,104	3,588	3,588	2,861	1,886						
Net farm income	35,873	78,123	121,752	232,141	86,126	86,126	-8,572	162,932						
Net farm income per operator	35,810	73,628	108,259	165,814	74,480	74,480	-9,800	157,704						
Labor & mgt. income per operator	-831	17,510	28,347	55,248	15,848	15,848	-71,947	106,637						

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. 2014 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	
	365	171	168	94	798	Low 33%	High 33%	56	56	
Management returns										
Number of farms										
Selected returns and costs per operator tillable acre										
Crop returns	758.01	767.93	795.22	825.28	792.40	745.27	788.56			
Livestock returns above feed	0.22	0.24	0.73	-0.02	0.30	-0.04	0.31			
Custom work, other receipts	23.48	19.31	21.66	22.76	21.95	19.23	21.51			
Value of farm production	781.71	787.47	817.60	848.02	814.65	764.46	810.38			
Soil fertility	122.05	117.57	121.57	122.28	121.17	129.59	102.93			
Pesticides	53.13	53.96	59.71	57.21	56.53	61.22	43.94			
Seed and other crop expense	100.07	97.18	97.84	95.69	97.48	101.24	93.45			
Crop total	275.25	268.72	279.12	275.18	275.18	292.05	240.32			
Light vehicle and utilities	15.39	9.65	7.50	7.37	9.45	10.96	8.21			
Machinery repairs, supplies	34.91	28.66	27.69	27.35	29.21	34.34	22.38			
Machinery hire, lease	21.58	16.73	16.96	17.39	17.99	16.99	15.54			
Fuel and oil	25.05	25.31	26.34	30.11	27.10	30.13	20.97			
Machinery depreciation	69.48	68.16	68.88	64.78	67.55	78.27	55.13			
Power and equipment total	166.42	148.51	147.37	146.99	151.30	170.68	122.23			
Drying and storage	28.30	26.84	22.34	21.85	24.21	31.55	22.80			
Building repair and rent	9.09	5.49	5.96	5.28	6.29	6.83	4.71			
Building depreciation	10.44	10.55	13.06	13.06	12.08	13.83	7.69			
Building total	47.83	42.88	41.37	40.19	42.57	52.21	35.20			
Labor, unpaid	72.57	46.00	32.31	21.99	39.62	47.49	44.76			
Labor, paid	5.84	9.28	12.70	22.22	13.75	12.62	3.08			
Labor total	78.41	55.28	45.02	44.21	53.38	60.11	47.84			
Insurance and miscellaneous	40.64	38.29	37.48	40.67	39.29	39.79	36.17			
Livestock services and supplies	0.74	0.49	0.30	0.52	0.49	0.61	0.28			
Interest on nonland capital	46.28	47.51	47.24	46.43	46.84	52.68	41.83			
Other costs total	87.66	86.29	85.02	87.62	86.62	93.07	78.28			
Land charge	222.77	220.67	233.24	250.60	234.42	247.45	201.77			
Total nonfeed costs	878.34	822.35	831.14	844.79	843.47	915.57	725.65			
Capital account adjustment	7.82	2.52	2.28	3.60	3.87	3.56	2.51			
Management returns	-88.81	-32.36	-11.25	6.82	-24.96	-147.54	87.24			
Percent crop returns fed	0.02	0.02	0.02	0.02	0.02	0.02	0.03			
Capital purchases	38,904	83,785	133,096	253,141	93,587	73,861	87,033			
Interest paid	10,421	16,693	34,280	77,002	24,631	21,467	10,952			
Percent tillable land in										
Corn and corn silage	55.9	53.0	55.7	59.0	56.2	55.8	48.2			
Soybeans	42.2	44.4	41.0	37.3	40.7	42.2	48.5			
Wheat	0.4	0.7	0.7	1.0	0.7	0.4	0.8			
Other small grains	0.1	0.0	0.0	0.0	0.0	0.0	0.0			
CRP acres	0.4	0.3	0.4	0.6	0.5	0.3	0.3			
All hay and pasture	0.2	0.3	0.1	0.1	0.2	0.0	0.1			
Crop yields, bushels per acre										
Corn	208	208	208	213	210	206	207			
Soybeans	59	59	60	61	60	59	60			
Wheat	70	72	66	80	74	61	72			
Prices received										
Corn (old crop)	4.40	4.48	4.51	4.60	4.51	4.38	4.64			
Corn (new crop)	3.73	3.80	3.82	3.99	3.87	3.62	3.92			
Soybeans (old crop)	13.30	13.31	13.36	13.34	13.33	13.14	13.47			
Soybeans (new crop)	10.40	10.69	10.63	10.82	10.66	10.20	11.06			

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. 2014 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

	180-799		800-1,199		1,200-1,999		> 1,999		Your farm		All farms		800-1,199		High 33%	
	Range in size (total tillable acres)	Number of farms	61	71	52	52	275	Low 33%	High 33%	20	20	20	20	20	20	20
Management returns																
Total acres in farm	530	1,043	1,675	3,000	1,406	1,015										
Acres of tillable land	488	992	1,603	2,902	1,344	975										
Operator tillable acres	433	846	1,338	2,485	1,146	832										
Soil rating on tillable land	58	60	58	58	59	59										
Percent land owned	38	27	21	21	28	19										
Percent land crop shared	29	37	42	36	36	39										
Percent land cash rented	32	36	37	43	36	42										
Months of hired labor	2.0	6.3	9.7	19.5	8.2	5.9										
Total months labor	11.6	18.7	22.7	39.5	21.3	17.4										
Dollar returns																
Crop returns	295,845	590,074	917,037	1,807,284	807,290	596,565										
Livestock returns above feed	6,534	8,285	13,097	8,573	9,003	17,076										
Custom work	1,720	4,964	13,923	32,028	11,321	2,481										
Other farm receipts	6,328	16,074	16,330	51,335	19,583	7,032										
Value of farm production	310,427	619,397	960,387	1,899,220	847,196	623,154										
Dollar costs																
Crop expenses	103,614	210,498	327,538	620,483	282,871	188,052										
Power and equipment	72,257	147,883	208,235	386,016	183,468	129,167										
Building and fence	12,827	24,624	34,146	84,897	34,576	18,930										
Labor	39,749	58,626	73,005	146,582	72,724	54,493										
Insurance and miscellaneous	17,468	32,404	52,480	92,160	43,944	26,393										
Livestock services and supplies	749	2,123	1,166	1,058	1,220	966										
Interest on nonland capital	18,916	40,751	60,064	112,189	52,020	36,043										
Real estate taxes	3,111	5,297	8,483	14,074	7,056	3,580										
Cash rent	19,757	52,554	88,222	224,646	83,451	46,292										
Other land charges	46,206	85,594	121,766	185,651	100,819	63,843										
Total nonfeed costs	334,654	660,354	975,105	1,867,756	862,149	567,759										
Capital account adjustment	3,789	4,242	7,753	5,251	5,189	2,250										
Management returns	-20,438	-36,714	-6,965	36,715	-9,763	57,645										
Farm production per \$1.00 of nonfeed costs	0.93	0.94	0.98	1.02	0.98	1.10										
Farm production per man	321,859	500,907	668,997	745,150	531,240	527,407										
Financial summary																
Cash operating income	301,799	629,278	966,901	1,881,650	844,892	589,942										
Inventory change	12,349	12,725	15,879	83,799	26,855	48,032										
Accts. receivable (net change)	-135	-965	1,683	-1,645	-135	172										
Less purchased feed	2,478	15,032	18,127	59,004	19,992	11,120										
Less purchased livestock	1,308	6,992	6,577	3,776	4,396	4,291										
Gross farm returns	310,227	619,014	959,759	1,901,023	847,224	622,735										
Cash operating expenses	216,680	445,038	708,135	1,366,236	611,589	398,612										
Prepaid expenses (- if increased)	3,304	16,803	8,700	38,762	14,396	7,427										
Accts. payable (+ if increased)	-879	528	654	10,319	1,946	-1,268										
Total operating expenses	219,105	462,370	717,489	1,415,316	627,932	404,770										
Income before depreciation	91,122	156,644	242,270	485,707	219,292	217,964										
Less depreciation	40,366	87,860	128,265	238,648	111,088	76,484										
Capital account adjustment	3,789	4,242	7,753	5,251	5,189	2,250										
Net farm income	54,545	73,027	121,758	252,309	113,393	143,730										
Net farm income per operator	54,358	67,527	108,939	153,293	90,079	140,307										
Labor & mgt. income per operator	17,023	7,983	38,013	55,184	27,653	99,626										

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

Table 21a. 2014 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	
	91	61	71	52	52	20	20	20	20	20
Management returns										
Number of farms										
Selected returns and costs per operator tillable acre										
Crop returns	683.82	697.77	685.62	727.29					704.47	663.59
Livestock returns above feed	15.10	9.80	9.79	3.45					7.86	1.74
Custom work, other receipts	18.60	24.88	22.62	33.55					26.97	25.34
Value of farm production	717.52	732.45	718.03	764.29					739.29	690.67
Soil fertility	100.99	104.33	103.02	112.45					106.85	109.79
Pesticides	54.15	53.28	57.38	50.74					53.58	67.36
Seed and other crop expense	84.36	91.31	84.48	86.50					86.41	104.50
Crop total	239.49	248.92	244.88	249.70					246.84	281.65
Light vehicle and utilities	14.88	11.45	9.52	8.38					10.04	11.23
Machinery repairs, supplies	34.76	37.15	30.24	29.48					31.62	43.14
Machinery hire, lease	13.78	14.12	10.98	14.78					13.40	12.90
Fuel and oil	28.06	31.97	32.23	33.73					32.28	36.04
Machinery depreciation	75.54	80.19	72.72	68.98					72.72	88.03
Power and equipment total	167.01	174.87	155.69	155.34					160.10	191.34
Drying and storage	12.22	11.34	11.19	11.13					11.32	8.44
Building repair and rent	7.79	5.63	5.17	6.37					6.06	7.18
Building depreciation	9.64	12.15	9.17	16.66					12.79	12.12
Building total	29.65	29.12	25.53	34.16					30.17	22.77
Labor, unpaid	75.47	48.90	31.47	26.74					37.88	42.85
Labor, paid	16.41	20.43	23.11	32.25					25.58	25.23
Labor total	91.88	69.33	54.58	58.99					63.46	68.08
Insurance and miscellaneous	40.38	38.32	39.24	37.09					38.35	40.90
Livestock services and supplies	1.73	2.51	0.87	0.43					1.06	1.49
Interest on nonland capital	43.72	48.19	44.91	45.15					45.39	51.30
Other costs total	85.83	89.02	85.02	82.66					84.81	93.69
Land charge	159.66	169.63	163.34	170.78					166.96	196.36
Total nonfeed costs	773.52	780.88	729.03	751.63					752.34	858.86
Capital account adjustment	8.76	5.02	5.80	2.11					4.53	6.35
Management returns	-47.24	-43.42	-5.21	14.78					-8.52	-161.85
Percent crop returns fed	2.31	1.91	1.26	0.68					1.64	1.33
Capital purchases	45,579	106,290	171,898	315,162					142,635	103,095
Interest paid	9,122	21,458	35,174	65,120					29,173	19,607
Percent tillable land in										
Corn and corn silage	44.6	44.2	45.2	46.8					45.6	43.0
Soybeans	44.8	42.2	44.4	41.5					42.9	43.0
Wheat	7.5	10.3	8.9	8.8					8.9	12.2
Other small grains	0.0	0.0	0.0	0.0					0.0	0.0
CRP acres	0.4	0.1	0.1	0.2					0.2	0.0
All hay and pasture	2.0	1.2	1.1	0.3					0.9	1.2
Crop yields, bushels per acre										
Corn	187	193	191	196					193	186
Soybeans	55	54	54	54					54	54
Wheat	74	69	72	74					72	63
Prices received										
Corn (old crop)	4.47	4.60	4.54	4.77					4.64	4.79
Corn (new crop)	3.57	3.59	3.63	3.77					3.68	3.38
Soybeans (old crop)	13.56	13.74	13.49	13.59					13.58	13.65
Soybeans (new crop)	10.22	10.22	10.46	10.08					10.23	10.07

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

Table 22. 2014 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		Your farm		All farms		Cwt of pork produced	
	27	20	> 799	Your farm	All farms	< 6,000 cwt	10	> 6,000 cwt
Number of farms	447	1,637	20		47	7	7	7
Total acres in farm	418	1,566			953	348	1,065	1,065
Acres of tillable land	384	1,477			906	320	1,035	1,035
Operator tillable acres	80	81			849	291	964	964
Soil rating on tillable land	35	15			26	36	11	11
Percent land owned	20	10			16	18	17	17
Percent land crop shared	45	75			58	46	72	72
Months of hired labor	14.5	40.9			25.7	6.6	23.5	23.5
Total months labor	26.1	55.1			38.4	17.6	40.2	40.2
Dollar returns								
Crop returns	299,548	1,200,408			682,892	206,357	732,167	732,167
Livestock returns above feed	404,410	1,170,920			730,584	131,896	618,366	618,366
Custom work	3,718	5,742			4,579	2,908	3,719	3,719
Other farm receipts	8,785	62,313			31,563	10,036	8,109	8,109
Value of farm production	716,460	2,439,382			1,449,618	351,197	1,362,361	1,362,361
Dollar costs								
Crop expenses	90,585	435,638			237,416	65,321	235,580	235,580
Power and equipment	125,187	352,792			222,040	66,860	211,724	211,724
Building and fence	63,012	240,084			138,361	16,539	103,656	103,656
Labor	88,729	183,152			128,909	64,080	138,394	138,394
Insurance and miscellaneous	22,567	73,135			44,085	40,122	40,122	40,122
Livestock services and supplies	50,024	142,085			89,199	13,426	88,336	88,336
Interest on nonland capital	38,758	127,374			76,467	17,222	66,283	66,283
Real estate taxes	10,511	15,508			12,637	4,156	8,294	8,294
Cash rent	39,308	306,416			152,971	27,822	185,895	185,895
Other land charges	46,114	72,604			57,387	25,552	43,007	43,007
Total nonfeed costs	574,796	1,948,788			1,159,473	311,479	1,121,292	1,121,292
Capital account adjustment	198	3,620			1,655	126	4,312	4,312
Management returns	141,863	494,215			291,800	39,844	245,381	245,381
Farm production per \$1.00 of nonfeed costs	1.25	1.25			1.25	1.13	1.21	1.21
Farm production per man	332,720	650,607			467,991	228,106	438,649	438,649
Financial summary								
Cash operating income	1,156,305	3,946,268			2,343,523	442,980	1,713,837	1,713,837
Inventory change	58,989	226,262			130,169	3,120	128,854	128,854
Accs. receivable (net change)	-333	47,653			20,087	1,431	23,216	23,216
Less purchased feed	372,361	1,144,285			700,839	86,966	408,409	408,409
Less purchased livestock	126,139	625,822			338,770	9,368	95,138	95,138
Gross farm returns	716,460	2,450,076			1,454,169	351,197	1,362,361	1,362,361
Cash operating expenses	442,674	1,720,629			986,485	240,387	921,921	921,921
Prepaid expenses (- if increased)	-7,575	-45,301			-23,629	-15,307	7,394	7,394
Accs. payable (+ if increased)	-1,067	2,912			626	-814	-940	-940
Total operating expenses	434,032	1,678,240			963,482	224,266	928,375	928,375
Income before depreciation	282,429	771,836			490,687	126,932	433,986	433,986
Less depreciation	52,651	123,353			82,737	24,467	73,460	73,460
Capital account adjustment	198	3,620			1,655	126	4,312	4,312
Net farm income	229,977	652,103			409,605	102,591	364,838	364,838
Net farm income per operator	168,598	416,067			273,904	102,591	309,992	309,992
Labor & mgt. income per operator	130,370	360,141			228,144	81,809	262,898	262,898

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

Table 22a. 2014 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		Your farm		All farms		Cwt of pork produced	
	27	20	20	47	10	7	< 6,000 cwt	10	> 6,000 cwt	7
Number of farms										
Selected returns and costs per operator tillable acre										
Crop returns	779.10	812.90		804.11				710.35	759.28	
Livestock returns above feed	1051.83	792.93		860.26				454.03	641.27	
Custom work, other receipts	32.52	46.09		42.56				44.56	12.27	
Value of farm production	1863.45	1651.91		1706.93				1208.94	1412.82	
Soil fertility	80.43	131.81		118.45				77.17	97.53	
Pesticides	53.85	57.84		56.80				53.78	39.01	
Seed and other crop expense	101.32	105.36		104.31				93.91	107.77	
Crop total	235.60	295.01		279.56				224.86	244.30	
Light vehicle and utilities	48.09	25.24		31.18				45.97	22.99	
Machinery repairs, supplies	76.61	53.20		59.29				63.97	63.24	
Machinery hire, lease	51.92	51.06		51.29				21.63	35.72	
Fuel and oil	59.81	52.40		54.33				34.04	48.80	
Machinery depreciation	89.16	57.00		65.36				64.54	48.81	
Power and equipment total	325.60	238.91		261.45				230.15	219.57	
Drying and storage	21.17	24.29		23.48				13.41	35.89	
Building repair and rent	101.51	114.88		111.40				29.94	48.26	
Building depreciation	41.20	23.41		28.04				13.58	23.35	
Building total	163.89	162.58		162.92				56.93	107.50	
Labor, unpaid	108.06	35.21		54.16				131.94	62.73	
Labor, paid	122.71	88.81		97.63				88.64	80.79	
Labor total	230.78	124.03		151.79				220.58	143.52	
Insurance and miscellaneous	58.69	49.53		51.91				36.15	41.61	
Livestock services and supplies	130.11	96.22		105.03				46.22	91.61	
Interest on nonland capital	100.81	86.26		90.04				59.29	68.74	
Other costs total	289.61	232.00		246.98				141.65	201.95	
Land charge	249.51	267.17		262.58				198.04	245.98	
Total nonfeed costs	1494.99	1319.69		1365.28				1072.22	1162.82	
Capital account adjustment	0.52	2.45		1.95				0.43	4.47	
Management returns	368.97	334.68		343.59				137.16	254.47	
Percent crop returns fed	136.85	114.62		127.39				95.51	107.76	
Capital purchases	134,075	294,929		202,524				34,014	142,140	
Interest paid	25,882	69,323		44,368				11,886	29,167	
Percent tillable land in										
Corn and corn silage	60.7	70.1		67.6				57.5	73.3	
Soybeans	33.4	25.9		27.9				35.9	23.6	
Wheat	2.9	2.3		2.4				3.0	1.8	
Other small grains	0.1	0.0		0.0				0.2	0.0	
CRP acres	0.6	0.2		0.3				0.0	0.0	
All hay and pasture	1.3	0.1		0.4				2.9	1.0	
Crop yields, bushels per acre										
Corn	221	213		215				215	207	
Soybeans	65	61		62				63	59	
Wheat	69	74		73				68	50	
Prices received										
Corn (old crop)	4.29	4.50		4.46				4.25	4.41	
Corn (new crop)	3.65	3.59		3.62				3.21	3.57	
Soybeans (old crop)	13.13	13.63		13.51				14.52	14.44	
Soybeans (new crop)	9.97	10.90		10.53				10.13	11.10	

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

Table 23. 2014 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	Your farm	All farms	180-799	Your farm	All farms
Number of cows in herd	17	40	57	19	7	26
Range in size (total tillable acres)						
Number of farms	17	40	57	19	7	26
Total acres in farm	290	611	515	560	1,095	704
Acres of tillable land	236	541	450	464	988	605
Operator tillable acres	230	537	445	443	837	549
Soil rating on tillable land	71	70	70	69	78	72
Percent land owned	56	43	47	44	29	40
Percent land crop shared	5	3	3	9	32	16
Percent land cash rented	40	54	50	47	39	45
Months of hired labor	4.5	34.1	25.2	3.1	13.2	5.8
Total months labor	16.5	49.4	39.6	15.0	28.9	18.8
Dollar returns						
Crop returns	171,276	417,021	343,728	304,968	701,332	411,682
Livestock returns above feed	158,982	720,271	552,869	213,213	524,965	297,146
Custom work	1,674	3,718	3,108	4,776	3,818	4,518
Other farm receipts	8,850	10,935	10,313	6,693	15,155	8,971
Value of farm production	340,781	1,151,945	910,019	529,650	1,245,270	722,317
Dollar costs						
Crop expenses	50,061	123,178	101,371	110,572	205,153	136,036
Power and equipment	76,884	237,965	189,923	112,728	224,481	142,816
Building and fence	17,824	60,096	47,489	34,675	58,450	41,076
Labor	55,490	171,198	136,688	57,830	91,886	66,999
Insurance and miscellaneous	10,667	31,424	25,233	22,503	36,839	26,363
Livestock services and supplies	35,882	139,751	108,772	16,389	53,672	26,427
Interest on nonland capital	19,053	65,703	51,790	44,973	105,297	61,214
Real estate taxes	4,377	9,133	7,715	5,919	10,710	7,209
Cash rent	17,950	69,593	54,190	43,878	93,534	57,247
Other land charges	25,860	39,955	35,751	47,391	99,526	61,428
Total nonfeed costs	314,050	947,995	758,923	496,861	979,548	626,815
Capital account adjustment	1,011	1,303	1,216	1,176	938	1,112
Management returns	27,743	205,253	152,311	33,965	266,660	96,614
Farm production per \$1.00 of nonfeed costs	1.09	1.22	1.20	1.07	1.27	1.15
Farm production per man	247,347	311,897	292,645	425,233	650,499	485,882
Financial summary						
Cash operating income	376,634	1,353,053	1,061,840	957,485	2,151,506	1,278,952
Inventory change	39,666	132,244	104,633	206,622	565,596	303,269
Accts. receivable (net change)	3,370	206	1,149	-2,937	-14,991	-6,182
Less purchased feed	69,678	301,373	232,271	96,563	277,332	145,232
Less purchased livestock	9,277	15,222	13,449	534,831	1,179,509	708,398
Gross farm returns	340,716	1,168,908	921,903	529,777	1,245,270	722,410
Cash operating expenses	216,541	768,290	603,733	340,176	673,589	429,941
Prepaid expenses (- if increased)	-3,869	-23,652	-17,752	-682	-1,105	-796
Accts. payable (+ if increased)	-975	-437	-588	-1,084	8,842	1,589
Total operating expenses	211,697	744,200	585,384	338,410	681,325	430,733
Income before depreciation	129,019	424,707	336,520	191,367	563,945	291,676
Less depreciation	25,784	91,622	71,986	44,782	121,832	65,526
Capital account adjustment	1,011	1,303	1,216	1,176	938	1,112
Net farm income	104,246	334,389	265,750	147,760	443,051	227,262
Net farm income per operator	104,246	202,592	173,261	137,826	285,531	177,592
Labor & mgt. income per operator	70,093	154,677	129,450	71,353	213,685	109,673

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

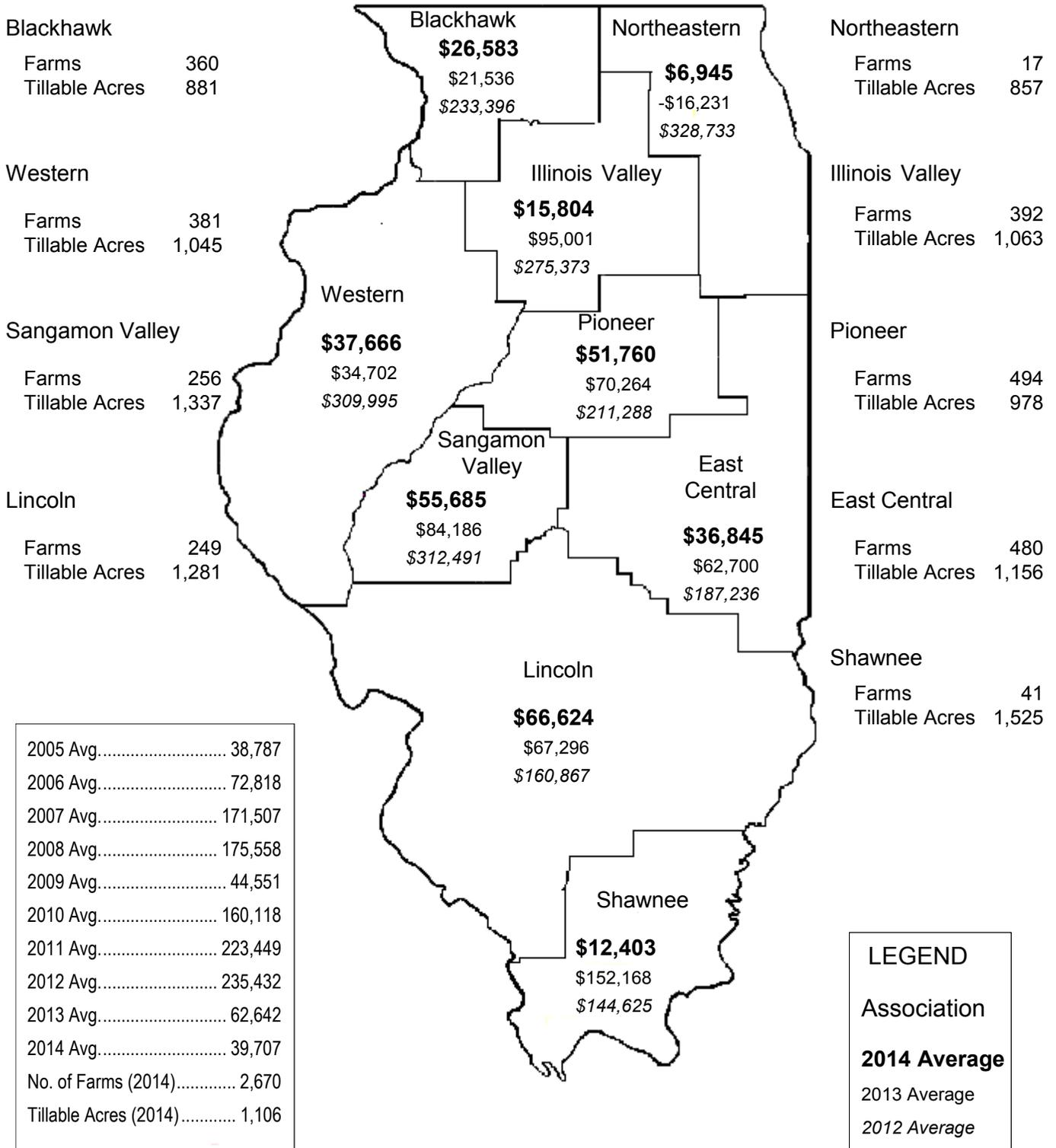
Table 23a. 2014 Operator Average Operating Costs, Land Use, Yields, and Prices Received for Illinois Dairy and Beef Farms

Type of Farm	Dairy (by Number of Cows in Herd)			Beef (by Size)			
	10-79	> 79	All farms	180-799	> 799	Your farm	All farms
Number of cows in herd	17	40	57	19	7	0	26
Range in size (total acres)							
Number of farms	17	40	57	19	7	0	26
Selected returns and costs							
per operator tillable acre							
Crop returns	743.54	776.76	771.63	687.76	837.63		749.25
Livestock returns above feed	690.16	1,341.60	1,241.13	480.84	626.98		540.80
Custom work, other receipts	45.68	27.29	30.13	25.86	22.66		24.55
Value of farm production	1,479.39	2,145.65	2,042.89	1,194.46	1,487.27		1,314.59
Soil fertility	108.16	92.88	95.24	106.16	108.47		107.12
Pesticides	36.25	49.74	47.66	52.06	45.53		49.38
Seed and other crop expense	72.91	86.81	84.67	91.12	91.02		91.08
Crop total	217.32	229.43	227.57	249.36	245.02		247.58
Light vehicle and utilities	41.15	47.48	46.51	16.82	21.32		18.67
Machinery repairs, supplies	88.20	98.91	97.26	67.93	51.13		61.04
Machinery hire, lease	63.31	102.71	96.63	41.86	21.75		33.61
Fuel and oil	55.81	77.95	74.53	47.81	69.13		56.56
Machinery depreciation	85.29	116.19	111.43	79.80	104.78		90.05
Power and equipment total	333.77	443.24	426.36	254.22	268.11		259.92
Drying and storage	9.68	17.24	16.07	18.87	19.42		19.10
Building repair and rent	42.20	40.93	41.13	40.71	22.64		33.30
Building depreciation	25.50	53.76	49.40	18.62	27.74		22.36
Building total	77.38	111.94	106.61	78.20	69.81		74.76
Labor, unpaid	196.41	109.32	122.75	100.47	64.62		85.76
Labor, paid	44.48	209.56	184.10	29.95	45.12		36.17
Labor total	240.89	318.88	306.85	130.42	109.74		121.94
Insurance and miscellaneous	46.31	58.53	56.65	50.75	44.00		47.98
Livestock services and supplies	155.77	260.30	244.18	36.96	64.10		48.10
Interest on nonland capital	82.71	122.38	116.26	101.42	125.76		111.41
Other costs total	284.79	441.22	417.09	189.13	233.86		207.48
Land charge	209.19	221.06	219.23	219.18	243.37		229.10
Total nonfeed costs	1363.34	1765.76	1703.70	1120.52	1169.91		1140.78
Capital account adjustment	4.39	2.43	2.73	2.65	1.12		2.02
Management returns	120.44	382.31	341.92	76.60	318.48		175.83
Percent crop returns fed	122.12	142.84	136.66	65.10	70.58		66.57
Capital purchases	49,949	166,193	131,524	145,826	142,070		144,815
Interest paid	12,287	32,736	26,637	20,336	45,678		27,159
Percent tillable land in							
Corn and corn silage	46.8	48.9	48.6	57.0	58.7		57.8
Soybeans	21.0	19.3	19.5	20.1	30.4		24.6
Wheat	1.4	4.0	3.6	0.8	1.0		0.9
Other small grains	1.2	0.9	1.0	0.8	0.0		0.4
CRP acres	0.0	0.0	0.0	5.6	0.0		3.1
All hay and pasture	22.7	10.9	12.7	14.8	8.7		12.1
Crop yields, bushels per acre							
Corn	190	198	197	205	218		211
Soybeans	54	61	60	62	65		64
Wheat	48	69	67	88	74		81
Prices received							
Corn (old crop)	4.49	4.19	4.23	4.32	4.25		4.29
Corn (new crop)	3.50	3.17	3.28	3.71	3.61		3.67
Soybeans (old crop)	13.00	13.17	13.14	12.89	13.40		13.21
Soybeans (new crop)	9.89	9.75	9.78	10.59	10.88		10.71

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

Illinois FBFM Association

Operators' Share of Labor and Management Income per Farm---2012, 2013, and 2014 (Sum of All Operators/Farm)



Recently Retired

Jack Kloppenburg was raised on a grain farm in Sangamon County near Springfield. After finishing high school, Jack enrolled at Springfield Junior College and then transferred to Western Illinois University, graduating in June of 1970 with a bachelor's degree in business administration.

After college, Jack went back to the family farm and worked with his father. In the winter of 1990, he started helping with check-in for the Sangamon Valley FBFM Association in the Springfield office. In October of 1994, Jack began working full-time as a fieldman for the Sangamon Valley FBFM Association. His area included Cass, Mason, Menard and Morgan Counties. Jack used his expertise in tax management and managing his own farming operation to assist cooperators in these counties.

Jack has long been involved in the community and his church, and he loves reading and history. Jack retired from FBFM in May 2014 after nearly 20 years of dedicated service.



Gary Knoble was raised on a grain and livestock farm in Crawford County near Palestine. Gary first enrolled at Vincennes University after finishing high school. Later he transferred to the University of Illinois, graduating in 1970 with a bachelor's degree in agricultural science.

Gary began his professional career in June of 1970, working for various pork production companies as well as raising and finishing pigs on his own. Gary began working for the East Central FBFM Association in December of 1998. His area included Champaign and Vermilion Counties. Gary used the financial management expertise he gained in the pork production field to assist cooperators in these counties.

In addition to showing purebred hampshires, Gary has been involved in the community and his church. After 16 years of dedicated service, Gary retired from FBFM in December 2014.



*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.

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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*