

88th ANNUAL

SUMMARY OF
ILLINOIS
FARM BUSINESS
RECORDS
2012

Commercial Farms
Production Costs
Income
Investments



UNIVERSITY OF ILLINOIS
EXTENSION

COLLEGE OF AGRICULTURAL, CONSUMER
AND ENVIRONMENTAL SCIENCES

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Summary of Illinois Farm Business Records for 2012
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College of Agricultural, Consumer and Environmental Sciences.

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ILLINOIS FARM BUSINESS FARM MANAGEMENT ASSOCIATION

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

STATE TOTAL --- 5,688 cooperating farmers and 58 member field staff*
 July 1, 2013, distribution of cooperators by counties and associations

Associations and Field Staff

Associations and Field Staff

BLACKHAWK

606
 Jeffery L. Johnson
 Alan A. Petersohn
 Rodney B. Gieseke
 David A. Goodell
 Tonya M. Wiersema
 Adam W. Drinkall

NORTHEASTERN

36

WESTERN

773
 Roberta B. Boarman
 Robert L. Rhea
 Miriam M. Mock
 Mike R. Shepherd
 Nathan P. Edlefson
 Jeffrey R. Reed
 Ruth Ann McGrew
 Brett W. Goodwin
 Nathan R. Janssen

ILLINOIS VALLEY

612
 John A. Hudson
 Bradley G. Lenschow
 James P. McCabe
 Scott M. Newport
 Daniel G. Entile
 Alissa D. Fosdick

SANGAMON VALLEY

569
 Todd F. Behrends
 James E. Phelan
 Kevin E. Coultas
 John C. Kloppenburg
 Kent D. Leesman
 Jessie N. Mowen

PIONEER

1,087
 Michael C. Heiser
 Kent V. Meister
 Darren L. Bray
 Brian J. Pulley
 Nathan A. Waibel
 Jeffrey A. Marquis
 Lowell J. Stoller
 Jacob M. Springer
 Carla S. Doubet
 Jedediah D. Metzger
 Brandon M. Tate

LINCOLN

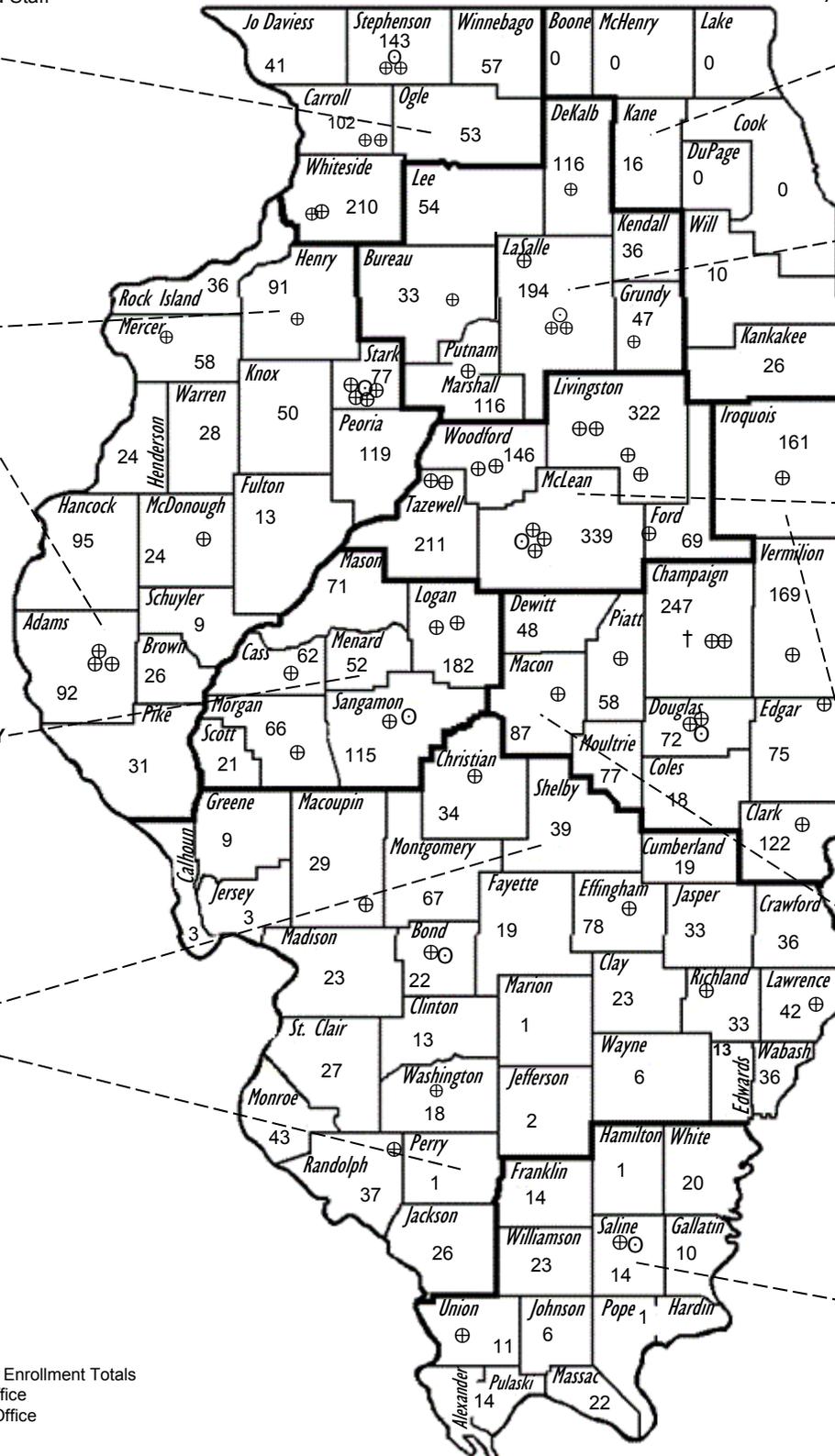
735
 Michael E. Schmitz
 Thomas J. Nolte
 Dathel W. Davidson
 Daniel A. Doan
 Randall J. Harmon
 Mitchel W. Fickling
 Amy A. Cope
 Michael P. Bruns
 Kristine T. Jarden

EAST CENTRAL

1134
 James E. Cullison
 Bruce E. Burk
 Donald E. Becker
 Mitchell A. Fruhling
 Jeffrey D. Lewis
 Robert D. Daggett
 Richard C. Thomas
 Gary L. Knoblett
 Christopher A. Leman
 Michael L. Clark

SHAWNEE

136
 Douglas E. Hileman



* Numbers are Enrollment Totals

57 ⊕ Field Staff Office
 8 ⊙ Association Office
 † State Office

OFFICIAL ENROLLMENT
 July 1, 2013

SOURCE OF DATA

This report is based on data obtained from farm business records on 5,688 Illinois farms. It is the 88th 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 500 acres or total farm sales over \$100,000 is enrolled in this service, which grew steadily until 1982. 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 2012, 9 associations in 102 counties were being served by 58 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 2012 indicate that over 90 percent of the 5,688 farms covered in this report have total sales over \$100,000. In the 2007 Census of Agriculture, farms selling \$100,000 or more accounted for 94 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 2007, there were 23,290 farms in Illinois with sales of \$100,000 or more. The figures that follow, taken from the 2007 Census of Agriculture, show that these farms represented about 57 percent of the 40,826 farms with more than \$10,000 in sales. These farms produced more almost 94 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	43.0	1.9	329
100,000-249,999	22.1	8.4	758
250,000-499,900	17.4	16.6	1,179
500,000+	17.5	32.3	2,316

Most of the 2012 recordkeeping farms covered in this report are within the larger groups. There were 14,261 farms identified by the census with more than \$250,000 total sales

in 2007. About a fourth of these farms (24.5 percent) were enrolled in the Illinois FBFM Association. Of the 9,029 farms in the group having from \$100,000 to \$249,999 in total sales, only 8.4 percent participated in the farm record program. Only about 2 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 2012 was 1,149 acres, compared with an average of 833 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 livestock 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.

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, \$6.74; oats, \$3.81; and wheat, \$7.34. 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 2012 at \$3,600 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 2012. 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 4.5 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 \$23,548.

Land charge or net rent is the bare land priced at current land values multiplied by 2.40 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 2012, using a base earning value of 1979 = 100, was 299.

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, including marketing loan gains, countercyclical payments, and loan deficiency payments (LDPs); 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 BUSINESS TRENDS IN 2012

Illinois agriculture is based largely on crop production, especially corn and soybeans. In 2012, Illinois ranked second in the nation in soybean and corn production. The total value of corn produced on Illinois farms was 12 percent of total U.S. production, while the total value of soybeans produced on Illinois farms was 13 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. Warm and dry conditions in 2012 led to a faster start to planting, with 5 percent of the corn crop being planted by April 1. As of May 6, 89 percent of the corn crop was planted, which was above the historical 5-year average of 47 percent and well above the 2011 average of 27 percent. Ninety-four percent of the soybeans were reported as planted by May 17, compared with 56 percent the year before. A severe drought led to faster crop development, which allowed corn harvest to run ahead of the average pace. Soybean harvest was the same in 2012 as in 2011, and it was still above the 5-year average.

Crop yields. Due to the drought, corn yields were much lower in 2012 than in 2011. Lack of rainfall lowered yields in most parts of the state, especially southern Illinois. The average corn yield for Illinois farms reported by the Illinois Crop Reporting Service was 105 bushels per acre, 52 bushels below the previous year’s yield. This is the lowest since 1988, when it was 73 bushels. The average for 2008 through 2012 is 154 bushels per acre. Farmers participating in the Illinois FBFM program averaged 120 bushels of corn per acre in 2012, 47 bushels below the year before.

Soybean yields for all Illinois farms were reported at 43 bushels per acre in 2012. This was 4.5 bushels less than 2011 as well as 4 bushels less than the 5-year average and the lowest since 2003, when it was 37 bushels. FBFM recordkeeping farms averaged 48 bushels of soybeans per acre in 2012, 4 bushels below their 5-year average. Crop yields on the 5,688 recordkeeping farms covered in this report averaged 12 to 14 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 96 cents to \$1.10 per bushel above 2011 prices (Table 1). Old-crop corn prices received in 2012 averaged \$1.02 to \$1.04 above those received in 2011. New-crop prices received were higher for soybeans and corn compared to the year before. The price received for new-crop corn averaged 69 to 93 cents higher than the year before, and new-crop soybeans averaged \$1.95 to \$1.98 higher. Wheat sold for 36 to 62 cents more per bushel during the year. Prices received for both old-crop corn and old-crop soybeans sold in 2012 were above their inventory prices, resulting in a positive

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

	2012		2011	
	Northern & central	Southern	Northern & central	Southern
Grain prices per bushel				
Sold				
Corn, old crop	\$ 6.37	\$ 6.52	\$ 5.33	\$ 5.50
Corn, new crop	6.59	6.51	5.66	5.82
Soybeans, old crop	12.91	13.04	11.81	12.08
Soybeans, new crop	14.01	13.78	12.06	11.80
Wheat	7.22	7.14	6.60	6.78
Livestock prices per cwt				
Hogs, all weights	\$ 62.92		\$ 64.58	
Fed cattle, all weights	121.14		112.03	
Feeder cattle, all weights, prices paid	146.02		132.60	
Dairy cattle, all weights	78.74		67.73	
Sheep and wool, all weights	129.55		168.46	
Milk per cwt	19.25		20.35	

marketing margin and higher crop returns. The year-end, new-crop inventory price for corn was \$1.25 higher than the year before; for soybeans it was \$3.50 higher. Both corn and soybean prices have been high enough that neither crop was eligible for loan deficiency payments. The national average marketing year price for corn and soybeans will be high enough that producers will not receive a counter-cyclical payment.

Crop production. Corn production totaled 1.29 billion bushels in 2012, 66 million bushels less than the previous year. The final yield was 105 bushels per acre, which was 52 bushels below the previous year’s yield. The yield for the 2012 soybean crop was 43 bushels per acre, 4.5 bushels below the 2011 yield of 47.5 bushels per acre. Production totaled 383 million bushels, 9 percent below the previous year.

The 2012 yield for sorghum for grain was 60 bushels per acre, 31 bushels below the yield in 2011. Sorghum production, at 1.62 million bushels, was down 11 percent from the previous year. The yield for the 2012 winter wheat crop was 63 bushels per acre, 2 bushels per acre more than the previous year. Total production was 40.6 million bushels, 13 percent below the 2011 production of 46.7 million bushels. The oats yield, at 76 bushels per acre, was 8 bushels above 2011. Production of all hay in 2012 was 1.49 million tons, 5 percent below 2011. Alfalfa hay production was up 4 percent, to 990,000 tons. All other hay production decreased to 500,000 tons. The alfalfa yield decreased from 3.4 to 3 tons per acre, as well as all other hay yields decreasing from 2.4 to 2 tons per acre.

Livestock production

Two major determinants in farm income are the price farmers receive for livestock and livestock products and the value of feed fed in producing livestock. Gross returns to all livestock enterprises were lower in 2012 compared to 2011, except for beef cow enterprises. With lower gross

returns and higher feed costs, returns above feed cost were lower for all livestock enterprises. In 2012, the average prices received by farm recordkeepers in the Illinois FBFM Association were 3 percent lower for hogs, 8% higher for fed cattle, and 5 percent lower for milk than they were in 2011 (Table 1). The prices paid for all weights of feeder cattle purchases averaged 10 percent above the 2011 price for feeder cattle, and feeder pigs weighing below 20 pounds averaged 9 percent below the 2011 price. Lower returns and higher feed costs resulted in returns above feed and purchased animals for feeder cattle enterprises to decrease from \$36.77 per hundredweight produced to \$14.29 (Table 10). This is below the 5-year average. Mainly due to the higher feed costs, returns for farrow-to-finish hog producers decreased returns above feed costs to \$9.98 per hundredweight produced in 2012. This was below the 5-year average. Lower milk prices and higher feed costs caused dairy returns above feed cost per cow to decrease from \$2,205 in 2011 to \$1,519 in 2012. This is below the 5-year average. Returns for beef cow herds with calves sold decreased to \$145, which is still 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 2008 through 2012 on all northern Illinois grain farms (located north of a line from Kankakee to Moline) was \$168,372 (Table 2). Operators on about 1,500 grain farms in central Illinois had 5-year average earnings of \$156,305. 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 1,014 tillable acres per farm, compared with an average of 1,113 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 2008 through 2012, grain farm operators in southern Illinois averaged \$134,129 for labor and management. This average increased by \$7,416 compared with the average for the 5-year period from 2007 through 2011.

When the average earnings on Illinois grain farms for the 5-year period from 2008 through 2012 are compared with the earnings from 2007 through 2011, earnings increased in all areas of the state. The average for the 5-year period from 2008 through 2012 increased 11 percent in northern Illinois, 6 percent in central Illinois, and 6 percent in southern Illinois as compared to the 5-year period 2007 through 2011. The 2012 return to operator’s labor and management was higher in the central part of the state but lower in northern and southern Illinois than the 2011 earnings, and all areas were above the 2008–2012 5-year average. The year dropped from the 5-year average, 2007, averaged about \$52,000 lower earnings than in 2012.

Table 2. Operator’s 5-Year Average Share of Labor and Management Income by Size and Type of Farm, 2008 Through 2012

	Number of acres per farm ^a			
	Under 800	800 to 1,199	1,200+	All
Northern Illinois				
Tillable acres	476	995	2,073	1,014
Labor and management earnings by type of farm				
Grain.....	\$80,742	\$177,455	\$331,845	\$168,372
Central Illinois				
Tillable acres	523	936	1,896	1,113
Labor and management earnings by type of farm				
Grain ^b	\$88,570	\$158,789	\$271,438	\$177,063
Grain ^c	73,342	129,533	197,242	121,655
All.....	82,035	146,927	250,113	156,305
Southern Illinois				
Tillable acres	502	986	2,082	1,337
Labor and management earnings by type of farm				
Grain.....	\$54,833	\$116,735	\$195,711	\$134,129
Illinois livestock				
Labor and management earnings by type of farm				
Hog.....	.. ^d	.. ^d	.. ^d	\$77,655
Beef.....	.. ^d	.. ^d	.. ^d	32,984
Dairy.....	.. ^d	.. ^d	.. ^d	36,420

^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.

When average earnings on Illinois livestock farms for the 5-year period from 2008 through 2012 are compared with the earnings from 2007 through 2011, earnings increased for hog and beef enterprises but decreased for dairy enterprises. The average for the 5-year period from 2008 through 2012 increased 25 percent for hog farms, increased 1 percent for beef farms, and decreased 13 percent for dairy farms as compared to the 5-year period 2007 through 2011.

In 2012, the labor and management income for all areas of Illinois averaged \$235,432 per farm. This figure is \$11,983 above the 2011 state average. Returns averaged \$67,610 above the average for the 5-year period 2008 through 2012. Higher crop prices and crop insurance were the main reasons for the higher incomes, even with lower yields. The new crop grain prices resulted in minimum farm program payments in 2012, just like in 2011.

Corn yields were well below the yields recorded the year before. The average corn yield on the 2,725 farms in 2012 was 120 bushels per acre, 47 bushels below the 2011 yield. The average soybean yield in 2012 was 48 bushels per acre, 6 bushels lower than the 54 reported in 2011. Corn and soybean yields were generally highest in northern and western parts of the state. Lack of rainfall, which caused drought conditions in most parts of the state, lowered yields statewide, especially in southern Illinois. The average corn

yield was the lowest since 1995, and the average soybean yield the lowest since 2003.

Year-end inventory price for the 2012 corn crop of \$7.00 per bushel was \$1.25 cents per bushel higher than a year earlier. Soybeans were inventoried at \$14.25 per bushel, \$3.50 higher than December 31, 2011. The average sales price received for the 2011 corn and soybean crop sold in 2012 was above the inventory price, resulting in a positive marketing margin. Crop returns averaged \$997 per tillable acre, \$97 per acre higher than the 2011 crop returns. The average crop returns per acre were at an all-time high.

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, 4.5 percent interest on nonland investment, and a land-use charge equivalent to the average net rent received by landowners for crop-share leases from 2008 to 2011.

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 \$75,000 is needed to pay living expenses and income and Social Security taxes, figures for the lowest 5-year average labor and management income indicate that the average farm operator’s family uses up to \$42,000 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 2,536 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 2,536 farms was \$396,050, up over \$55,000 from \$340,554 a year earlier. Hog farms had the greatest working capital, averaging \$429,242, while dairy farms had the least, averaging \$133,433. 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 3.07, up from 2.76 a year ago. Grain farms recorded the highest (most healthy) current ratio, and beef farms the lowest. The 2012 current ratio was the highest for any year during the last 15 years.

Solvency is a measure of the farm’s overall financial strength and risk-taking ability. The average net worth of the 2,536 farms at the end of 2012 was \$2,750,068, up from \$2,287,223 the year before. Average farm and nonfarm incomes in 2012 were above family living requirements, thus enabling net worth increases. Increasing land values have also boosted net worths for those operators who own land. Hog farms had the highest net worth, followed by grain 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 18.2. The debt-to-farm asset percentage ranged from 17.7 for grain farms to 35.4 for beef farms. The average debt-to-farm asset level of 18.2 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 2,536 farms was 8.3 percent, down from 9.5 percent a year earlier. Grain farms recorded the highest returns, averaging 8.5 percent, while dairy farms recorded the lowest, averaging 3.5 percent. Return on farm equity in 2012 ranged from 10.2 percent for grain farms to 3.1 percent for dairy farms. The average was 9.8 percent, down from 11.5 percent in 2011.

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 1.9 percent for the 2,536 farms, ranging from 1.8 percent for grain farms to 5.7 percent for beef farms. The 1.9 percent was down from 2.1 percent in 2011. The 2012 figure is the lowest since at least 1995. The farm operating income ratio ranged from a high of 34.1 percent for grain farms to 19.0 percent for dairy farms. The average for all farms in 2012 was 33.5 percent, down from 35.0 percent in 2011. The 2008 through 2012 5-year average farm operating income ratio is 30.1 percent. The 2012 farm operating income ratio is above the 5-year average.

Family living expenditures

Total cash living expenditures for a sample of 1,300 Illinois sole-proprietor, farm-operator families in 2012 averaged \$76,668 (Table 4). This figure is 6.6 percent higher than the 2011 average. Capital purchases for family living expenses of \$8,344 include the family’s share of the auto, plus items that exceed \$250 and will last more than 1 year.

Table 3. Financial Characteristics of Illinois Farms for 2012 by Type of Farm

	All farms	Grain farms	Hog farms	Dairy farms	Beef farms
Number of farms.....	2,536	2,421	37	50	28
Liquidity					
Working capital.....	\$396,050	\$407,675	\$429,242	\$133,433	\$210,561
Current ratio	3.07	3.12	2.30	2.17	1.60
Solvency					
Net worth (market)	\$2,750,068	\$2,777,262	\$2,838,803	\$1,720,025	\$2,120,958
Debt-farm equity (%)	22.2	21.5	38.5	32.9	54.8
Debt-farm asset (%)	18.2	17.7	27.8	24.9	35.4
Profitability					
Farm operating income	\$247,078	\$252,403	\$200,095	\$100,377	\$110,726
Return on farm assets (%)	8.3	8.5	4.7	3.5	3.9
Return on farm equity (%)	9.8	10.2	7.3	3.1	5.2
Financial efficiency					
Interest expense ratio (%)	1.9	1.8	3.6	4.0	5.7
Operating expense ratio (%)	56.0	55.7	68.0	64.6	63.5
Depreciation expense ratio (%) ..	7.3	7.3	5.6	8.2	7.9
Farm operating income ratio (%) ..	33.5	34.1	21.7	19.0	20.9
Asset turnover ratio	0.30	0.30	0.24	0.23	0.20

Capital purchases for family living were 9.8 percent of the total cash outlay for all family living expenditures in 2012.

The average farmer in this sample paid \$22,425 in interest in 2012 on operating, machinery, and long-term real estate debts. This interest expense was 4.4 percent of total operating expense (including interest paid) and 2.9 percent of total farm receipts. The average amount of interest paid in 2012 was \$324 less than the amount paid in 2011. Here are the most significant financial facts about 2012:

- Net farm income plus net nonfarm income was \$187,965 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 \$128,037 more than family living expense and taxes for the period 2008 through 2012. The 2012 figure is the largest positive margin ever.
- Net nonfarm income averaged \$36,778 and was the highest amount since this study began. This was \$1,324 more than the 2011 figure of \$35,454.
- Capital purchases were \$119,816, compared to \$104,621 in 2011, or 15 percent more. They were \$24,557 higher

than the average for 2008 through 2012 and at their highest level ever.

- The amount of money borrowed exceeded principal payments for the 24th year in a row. Money borrowed exceeded principal payments by \$31,755. For the 2008 through 2012 time period, money borrowed has exceeded principal payments by an average of \$30,384.
- Of the total living expenses—excluding family capital purchases—charitable contributions accounted for 5 percent, life insurance 5 percent, medical expenses 13 percent, and family living expendables the remaining 77 percent.
- Income and Social Security taxes paid increased by \$6,992, and the total amount of taxes paid, \$26,178, was \$6,128 above the 5-year average for the period 2008 through 2012.
- Medical expenses averaged \$10,100, the first time the average has exceeded \$10,000. Expenses were 8.3 percent higher than the year before.

The 2012 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

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, 2012 ^a	
	2012	2011	2010	2009	High-third	Low-third
Number of farms.....	1,300	1,273	1,200	1,164	160	160
Age of operator.....	56	55	55	54	50	48
Number in family.....	2.8	2.9	2.9	3.0	4.0	3.8
Net farm income	\$262,917	\$242,735	\$176,886	\$ 76,697	\$379,027	\$233,524
Source of dollars						
Net nonfarm income	\$ 36,778	\$ 35,454	\$ 35,976	\$ 34,567	\$ 45,272	\$ 28,827
Money borrowed.....	428,234	398,860	361,671	340,794	650,954	310,619
Farm receipts.....	<u>777,953</u>	<u>669,116</u>	<u>563,312</u>	<u>568,554</u>	<u>1,128,314</u>	<u>636,656</u>
Total sources	\$1,242,965	\$1,103,430	\$960,959	\$943,915	\$1,824,540	\$976,102
Use of dollars						
Interest paid.....	\$ 22,425	\$ 22,749	\$ 22,388	\$ 22,664	\$ 30,207	\$ 16,949
Cash operating expenses.....	491,725	451,756	388,256	389,334	734,018	418,376
Capital farm purchases.....	119,816	104,621	84,055	85,120	145,962	99,379
Payments on principal	396,479	370,759	327,000	319,492	571,463	282,385
Income and Social Security taxes	26,718	19,726	20,064	20,671	35,803	20,040
Net new savings and investments.....	100,790	54,161	44,987	34,200	171,815	81,153
Contributions	3,823	3,066	2,935	2,788	5,944	2,053
Medical expenses.....	10,100	9,322	8,928	8,579	14,306	6,219
Life insurance	4,036	3,702	3,442	3,431	5,053	2,657
Expendables.....	<u>58,709</u>	<u>55,839</u>	<u>52,300</u>	<u>50,369</u>	<u>99,266</u>	<u>39,977</u>
Total living expenses	(\$ 76,668)	(\$ 71,929)	(\$ 67,605)	(\$ 65,167)	(\$ 124,569)	(\$ 50,906)
Living—capital purchases.....	<u>8,344</u>	<u>7,729</u>	<u>6,604</u>	<u>7,267</u>	<u>10,703</u>	<u>6,914</u>
Total uses	\$1,242,965	\$1,103,430	\$960,959	\$943,915	\$1,824,540	\$976,102

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

expenses for the high-third group averaged \$124,569, compared with \$50,906 for the low-third group. The high-third group had gross farm receipts of \$1,128,314, compared to \$636,656 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 high-third group had \$68,733 more remaining than the low-third group. The high-third group had a balance remaining of \$253,224 compared to \$184,491 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 1,300 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 \$61,100 and \$65,000, or 15 to 20 percent below the average total living expenses of these 1,300 Illinois farms. When the \$36,778 net nonfarm income for 2012 is used for living expenses, the remaining \$48,234 must be generated from the farm business to pay the \$85,012 used for total living expenses, including family living capital purchases. The figure of \$48,234 amounts to 6.2 percent of total farm receipts.

Income changes on Illinois farms

The average operator’s net farm income for all farms in 2012 was \$298,028; it was \$273,612 in 2011 (Table 5). The 2012 net farm income was the highest for any year out of at least the last 10 years. 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 2.5 percent in 2012, 2.8 percent in 2011, 3.3 percent in 2010, 3.8 percent in 2009, and 3.7 percent in 2008. The 2.5 percent figure for 2012 was one of the lowest for any year during the last 20 years.

Comparative costs and returns between years and among major types of farming operations are reported in Tables 6 and 8. The sample consisted of grain farms having between 800 and 1,199 acres, or an average of 992 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, 41 months on hog farms, 23 months on beef farms, and 45 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 2012 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.

Table 5. Percent of Illinois Farms and Operator Net Farm Income by Interest Paid as a Percent of Gross Farm Returns, 2008 Through 2012

	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							
2008	23	42	18	4	1	1	100
2009	24	38	18	5	1	2	100
2010	26	41	16	3	1	1	100
2011	27	41	11	2	... ^a	... ^a	100
2012	33	44	10	2	... ^a	... ^a	100
Net farm income							
2008	\$207,942	\$237,489	\$180,539	\$107,261	\$104,624	(\$ 8,605)	\$211,890
2009	111,504	100,971	43,854	4,597	(9,926)	(56,892)	84,212
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

^aLess than 1 percent.

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 \$268,291 in 2012 (Table 6). This income was \$31,713 above that of 2011 and \$74,929 above the 5-year average income for 2008 through 2012. The 2012 net farm income was the highest in the last 30 years. The value of farm production averaged \$783,161, which was \$104,806 above 2011 and \$167,119 above the 2008 through 2012 average. The 2012 value of farm production was the highest since this study began. The value of farm production included a \$14,785 decrease in inventory values compared to 2011, when the inventory value increased by \$68,497. Net cash operating income (adjusted gross) was \$733,428, \$158,343 higher than the 5-year average. Total cash oper-

ating expenses were \$50,254 higher than the year before, while depreciation of \$58,223 was 30 percent higher than the year before and 45 percent higher than the 2008 through 2012 average. Total cash operating expenses for 2012 were the highest on record.

Incomes were higher on these farms in 2012 compared to 2011. Higher prices, a positive marketing margin on corn and beans, and crop insurance were the main factors for the higher incomes. The average soybean yield on these farms in 2012 was 48 bushels per acre, compared to 54 the year before. The average corn yield was 119 bushels per acre, compared to 168 the previous year. Corn was inventoried \$1.25 cents higher at the end of 2012 compared to the beginning; soybeans were inventoried \$3.50 higher. The lower quantities in ending inventory caused the value of inventories to decrease \$14,785 at the end of the year compared to the beginning. Crop returns averaged \$990 per tillable acre in 2012 compared to \$899 in 2011. Crop expenses per acre increased 17 percent. This was the fourth year for the new government farm program. A new part of this program was the Average Crop Revenue Election (ACRE) Program. Producers would receive a payment the following year after the year of production if the state trigger and farm triggers are met. This program is voluntary, and producers who signed up for it had 20 percent less direct payment rates. Producers receive a guaranteed direct payment based on their program yield, base acres, and a set payment rate per bushel. Countercyclical payments are made if market prices fall below a certain “trigger level.” Countercyclical payments are not expected for corn, soybeans, or wheat for the 2012 crop. 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 2012 was 96.1 percent, up from 95.3 percent in 2011. Corn acres decreased slightly from 55.2 percent of tillable acres in 2011 to 54.5 percent in 2012, while soybean acres increased from 40.1 to 41.6 percent.

The average prices received in 2012 for new-crop corn and soybeans of \$6.61 and \$14.03, respectively, were much higher for corn and soybeans than in the previous year. The average prices received for old-crop corn and soybeans, \$6.35 and \$12.96, respectively, were higher than the inventory price at the beginning of the year for soybeans and corn as well as higher than the year before. Capital purchases of \$125,721 in 2012 were \$11,210 more than in 2011 and \$29,228 above the 2008 through 2012 average. Capital purchases were the highest of any year during the last 10 years.

While accrual net farm incomes averaged \$268,291, net cash incomes averaged \$143,868. Management returns were \$172,057 in 2012, compared to \$158,175 in 2011 and the 2008 through 2012 average of \$116,613. The value of farm production per man was \$838,245. The amount of interest

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

	2012	2011	2008–12 average
Number of farms	600	647	626
Total acres	1,039	1,000	1,003
Soil-productivity rating	82	78	79
Percent land owned.....	17	16	16
Percent land crop-shared	44	42	43
Percent land cash-rented	39	37	37
Cash operating income.....	\$745,654	\$621,581	\$586,616
Less purch. feed, livestock ..	<u>12,226</u>	<u>13,341</u>	<u>11,532</u>
Net cash operating income..	\$733,428	\$608,241	\$575,085
Accounts receivable chg.....	64,518	1,617	12,258
Inventory change	<u>(14,785)</u>	<u>68,497</u>	<u>28,700</u>
Value of farm prod	\$783,161	\$678,355	\$616,042
Total cash op. expenses	\$463,840	\$413,586	\$393,010
Prepaid-unpaid change	(7,192)	(16,740)	(10,551)
Annual depreciation.....	<u>58,223</u>	<u>44,930</u>	<u>40,221</u>
Net farm income	\$268,291	\$236,578	\$193,362
Net farm inc. per operator....	\$254,810	\$224,958	\$184,254
Unpaid labor charge	41,165	35,171	35,651
Returns to capital & mgmt ...	227,126	201,408	157,711
Interest charge on capital	<u>55,069</u>	<u>43,233</u>	<u>41,098</u>
Management returns	\$172,057	\$158,175	\$116,613
Total cash income ^a	\$733,428	\$608,241	\$575,085
Total cash expenditures ^a	<u>589,561</u>	<u>528,097</u>	<u>489,503</u>
Cash balance.....	\$143,868	\$ 80,144	\$ 85,582
Capital purchases.....	125,721	114,511	96,493

^aIncludes sales or purchases of capital items.

paid of \$17,363 was the lowest for any type of farm in Tables 6 and 8. Operators for these farms owned 17 percent of the land they farmed, crop-shared 44 percent, and cash-rented 39 percent. Of the total labor of 14.7 months, only 3.2 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 percent of their tillable land to grow corn and soybeans, with 55.7 percent of the acres in corn and 42.6 percent in soybeans. The table compares 2012 costs per acre with 2011 costs. In 2012, the total cost per acre averaged \$929 for corn and \$688 for soybeans. From 2011 to 2012, the total cost per acre increased 18 percent for corn and 16 percent for soybeans.

Nonland costs of \$5.32 per bushel for corn and \$8.58 for soybeans in 2012 are the most relevant costs for continuing production in the short run, especially where land is free of debt. Total cost to produce a bushel increased for corn and soybeans from 2011 to 2012. Costs per bushel for corn increased due primarily to lower yields, soil fertility costs,

power and equipment costs, and land costs. Total costs per bushel increased \$2.84 for corn and \$3.21 for soybeans. If the 2012 yield for corn had been 181 bushels, the same as the average for the period from 2009 through 2012, the total cost per bushel would have been \$5.13. 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 4.5 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 2008 through 2011.

Hog farms. The operator's net farm income in 2012 for Illinois hog farms having 180 acres or more averaged \$229,329 (Table 8). Net incomes were \$72,274 lower than net incomes in 2011 and \$72,369 higher than the average for the 5-year period from 2008 through 2012. The cash balance on these farms of \$123,660 was \$62,614 more than in 2011 and \$73,005 above the average for the 5-year period from 2008 through 2012. Inventories on these farms decreased \$27,289 in 2012, following a \$139,752 increase in 2011. The value of farm production of \$1,323,624 was \$190,991 more than in 2011 and \$347,104 higher than the average for the 5-year period from 2008 through 2012. Production per farmer was \$523,919. Incomes on hog farms decreased in 2012 due to higher feed prices and higher costs. Depreciation of \$75,841 was \$12,841 higher than in 2011.

Management returns were \$105,313 in 2012 compared to \$204,857 in 2011. Management returns were \$99,544 less than in 2011 and \$38,628 above the average for 2008 through 2012. Capital purchases were \$132,247, which was \$12,615 lower than in 2011 and \$33,084 higher than the average for 2008 through 2012. Farm production per one dollar of nonfeed costs of \$1.07 was tied for the highest for any type of livestock farm in Illinois. Purchased feed and livestock for this group totaled \$1,161,659, \$437,508 more than in 2011. The average interest paid on these farms was \$46,050. That was the highest of the livestock farms in this size range. Farm operators in this group owned 20 percent of the land they farmed, crop-shared 24 percent, and cash-rented 56 percent. Total labor was 40.8 months, 27.9 months of which was hired. Corn was planted on 71.2 percent of the acres and soybeans on 25 percent. The average corn yield was 122 bushels per acre and the average soybean yield 49 bushels per acre.

Beef farms. The operator's net farm income for Illinois beef farms having 180 acres or more averaged \$154,210 in 2012 (Table 8). This figure was \$58,008 lower than the 2011 figure and \$45,554 higher than the average from 2008 through 2012. Higher feed costs contributed to the

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

	Corn		Soybeans	
	2012	2011	2012	2011
Number of farms.....	680	659	680	659
Acres grown per farm.....	707	717	541	532
Yield per acre, bu.....	126	174	50	56
Variable nonland costs				
Soil fertility.....	\$200	\$159	\$ 68	\$ 55
Pesticides.....	59	50	36	31
Seed.....	108	96	69	62
Drying and storage.....	23	27	5	5
Machinery repairs, fuel, and hire.....	<u>61</u>	<u>49</u>	<u>53</u>	<u>45</u>
Total, variable costs.....	\$451	\$381	\$231	\$198
Other nonland costs				
Labor.....	\$ 45	\$ 37	\$ 43	\$ 37
Buildings.....	17	11	14	9
Machinery depreciation.....	55	39	48	35
Nonland interest.....	55	51	49	46
Overhead.....	<u>47</u>	<u>45</u>	<u>44</u>	<u>42</u>
Total, other costs.....	\$219	\$183	\$198	\$169
Total, nonland costs.....	\$670	\$564	\$429	\$367
Land costs				
Taxes.....	\$ 39	\$ 34	\$ 39	\$ 34
Adjusted net rent.....	220	190	220	190
Total, land costs.....	\$259	\$224	\$259	\$224
Total, all costs.....	\$929	\$788	\$688	\$591
Nonland cost per bu.....	\$5.32	\$3.24	\$8.58	\$6.55
Total, all costs per bu.....	\$7.37	\$4.53	\$13.76	\$10.55

Average yield, past 4 yrs ...	181	190	56	56
Total, all costs per bu.....	\$5.13	\$4.15	\$12.29	\$10.55

lower earnings. Net farm income for these farms was the lowest of any type of livestock farm in the sort. Feed cost per hundredweight produced increased 22 percent, while the average price received for market cattle increased 8 percent in 2012 compared to 2011. The price paid for feeder cattle went up about 10 percent from the year before. The value of farm production for this group of farms averaged \$653,410, or \$45,804 less than in 2011. Cash operating income averaged \$1,442,508, purchased feed and livestock totaled \$867,650, and net cash operating income averaged \$574,858.

Management returns of \$35,366 in 2012 for these farms were the lowest for any type of livestock farm in the study. Management returns averaged \$17,042 for the period 2008 through 2012. Capital purchases were \$133,251 in 2012, compared to \$113,484 in 2011 and \$73,600 in 2010. The 2008 through 2012 average was \$85,114. Depreciation of \$53,590 was \$7,336 above 2011. Cash operating expenses, excluding purchases of feed and livestock,

totaled \$581,594. The net cash balance for these farms was a *negative* \$6,737.

Costs and returns to produce beef from 2009 through 2012, 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 2011 and 2010, but in the other years, total costs exceeded total returns. An analysis of feeder cattle enterprises is discussed in detail under the livestock section.

Farm operators in this group owned 44 percent of the land they farmed. They crop-shared 16 percent and cash-rented 40 percent. The amount of interest paid was \$42,512. They planted 64.1 percent of their tillable land to corn or corn silage. They also had 13.3 percent of their tillable land in hay and pasture. These farms used 22.6 months of total labor, with 9.1 of that hired labor. The average corn yield on these farms was 106 bushels per acre, and the average soybean yield was 51 bushels per acre. In 2011, corn and soybeans yields on these farms averaged 164 and 57 bushels per acre, respectively.

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

	Hog farms			Beef farms			Dairy farms		
	2012	2011	2008–12 average	2012	2011	2008–12 average	2012	2011	2008–12 average
Number of farms	47	45	55	29	13	23	49	61	58
Total acres	1,133	985	1,013	715	581	675	640	558	534
Soil-productivity rating	80	79	80	73	76	72	68	68	69
Percent land owned.....	20	22	21	44	40	41	39	41	41
Percent land crop shared	24	22	24	16	8	16	3	5	5
Percent land cash rented.....	56	56	56	40	52	42	58	54	54
Cash operating income.....	\$2,442,387	\$1,718,533	\$1,700,652	\$1,442,508	\$1,483,728	\$1,068,621	\$1,138,496	\$926,253	\$765,665
Less purch. feed, livestock	<u>1,161,659</u>	<u>724,151</u>	<u>776,869</u>	<u>867,650</u>	<u>905,751</u>	<u>591,073</u>	<u>263,984</u>	<u>203,191</u>	<u>171,565</u>
Net cash oper. income.....	\$1,280,728	\$994,382	\$923,783	\$574,858	\$577,978	\$477,548	\$874,512	\$723,062	\$594,100
Accounts receivable change..	70,185	(1,501)	13,440	54,293	11,405	15,325	54,024	3,288	9,504
Inventory change	<u>(27,289)</u>	<u>139,752</u>	<u>39,296</u>	<u>24,259</u>	<u>109,832</u>	<u>17,260</u>	<u>(22,023)</u>	<u>63,032</u>	<u>16,494</u>
Value of farm prod	\$1,323,624	\$1,132,633	\$976,520	\$653,410	\$699,214	\$510,134	\$906,513	\$789,382	\$620,098
Total cash oper. expenses	\$1,024,821	\$788,474	\$773,964	\$448,344	\$453,144	\$370,541	\$653,396	\$534,822	\$464,900
Prepaid-unpaid change	(6,366)	(20,443)	(9,753)	(2,733)	(12,401)	(6,643)	(13,227)	(4,959)	(2,590)
Annual depreciation.....	<u>75,841</u>	<u>63,000</u>	<u>55,349</u>	<u>53,590</u>	<u>46,254</u>	<u>37,580</u>	<u>73,325</u>	<u>55,500</u>	<u>46,698</u>
Net farm income	\$229,329	\$301,603	\$156,960	\$154,210	\$212,218	\$108,656	\$193,018	\$204,019	\$111,090
Net farm inc. per operator.....	\$152,737	\$186,545	\$99,991	\$109,016	\$179,751	\$87,982	\$107,317	\$125,552	\$72,095
Unpaid labor charge	46,287	42,629	41,897	48,786	43,154	41,418	60,098	50,798	48,892
Returns to capital & mgmt	183,042	258,974	115,062	105,423	169,064	67,238	132,920	153,221	62,198
Interest charge on capital	<u>77,729</u>	<u>54,116</u>	<u>48,377</u>	<u>70,057</u>	<u>46,837</u>	<u>50,196</u>	<u>64,375</u>	<u>46,624</u>	<u>43,126</u>
Management returns	\$105,313	\$204,857	\$66,685	\$ 35,366	\$122,227	\$17,042	\$ 68,544	\$106,597	\$19,071
Total cash income ^a	\$1,280,728	\$994,382	\$923,783	\$574,858	\$577,978	\$477,548	\$874,512	\$723,062	\$594,100
Total cash expenditures ^a	<u>1,157,068</u>	<u>933,336</u>	<u>873,128</u>	<u>581,594</u>	<u>566,628</u>	<u>455,654</u>	<u>784,488</u>	<u>646,061</u>	<u>551,224</u>
Cash balance.....	\$ 123,660	\$ 61,046	\$ 50,655	(\$ 6,737)	\$ 11,350	\$ 21,894	\$ 90,024	\$ 77,002	\$ 42,876
Capital purchases.....	132,247	144,862	99,163	133,251	113,484	85,114	131,093	111,238	86,324

^aIncludes sales or purchases of capital items.

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 \$193,018 in 2012 (Table 8). This figure was \$11,001 below the 2011 figure and \$81,928 above the 5-year average from 2008 through 2012. The 2012 net farm income for these farms was the second highest ever for Illinois dairy farms. The highest income was recorded in 2011. The farms averaged 38,517 hundredweight of milk produced.

Higher feed costs and lower milk prices were the main factors for the decrease in earnings. The value of farm production was \$906,513, the highest ever. This was \$117,131 higher than 2011 and \$286,415 higher than the 2008 through 2012 average. The value of inventory decreased by \$22,023, while cash operating income increased by \$212,243. Cash operating expenses totaled \$653,396, 22 percent more than in 2011. (A detailed breakdown of the cost of producing milk is given in Table 16.) Management returns of \$68,544 were \$38,053 lower than the 2011 figure and \$49,473 higher than the 5-year average from 2008 through 2012. Capital purchases increased to \$131,093 in 2012, compared to \$111,238 in 2011 and \$68,885 in 2010. The 2008 through 2012 average was \$86,234. This is the highest amount of capital purchases ever for these types of farms. Annual depreciation on these farms averaged \$73,325. These farms used 44.9 months of total labor, 28.2 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, \$33,865, was the lowest of any livestock farm type.

Farm operators in this group owned 39 percent of the land they farmed and cash-rented 58 percent. About 11 percent of the land they farmed was in hay ground; 51 percent was in corn and corn silage. Over 104 percent of the value of crop produced was fed to livestock. The average corn yield was 104 bushels per acre for these farms, which is 60 bushels per acre less than in 2011. The average price received for milk in 2012 was 5 percent lower than the average price received in 2011.

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 1998 through 2012 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 \$120 in 2012 were below the 5-year average of \$132. The 2012 return was below the 1998 through 2012 average. The 2012 return of \$120 was the second lowest during the last 5 years, while 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 resulted in some of the better returns on record. Table 9 shows the return of \$132 per \$100 of feed fed for the most recent 5-year period (2008 through 2012) to be below the previous 5-year period and below the 15-year average of \$142. The 2012 return of \$117 per \$100 of feed fed was \$15 below the most recent 5-year average. Above-average skills are needed in buying, selling, and feeding to meet the competition from other uses for time and money on farms with feeder cattle. Identifying cyclical income movements over a 15-year period in the beef-cattle industry is difficult because this industry is more complex and adjusts more slowly than other livestock enterprises.

The average return above feed and purchased animal costs for dairy enterprises of \$1,519 per cow in 2012 was \$50 below the 5-year average of \$1,569 (Table 10). These returns indicate that the average dairy enterprise has not covered the total estimated cost of production of

\$2,016 per cow from 2007 through 2011. The 2012 return per \$100 of feed fed of \$146 was below the past 5-year average of \$161.

For the beef-herd enterprise, the average returns above the cost of feed and purchased animals for the period from 2008 through 2012 showed great volatility. Producers combining the returns of 2008 and 2009 would have been hard-pressed to cover feed costs. 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 \$86 during the past 5 years. The 2012 return of \$145 covered feed costs, but not total nonfeed costs, estimated at \$190 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 con-

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 (\$)
1998.....	104	97	279	105	220	107	128	2.31
1999.....	178	150	374	160	233	149	131	1.97
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
Averages								
1998–2012.....	162	134	.. . ^a	142	198	134	127	3.21
1998–2002.....	170	137	349	134	216	133	130	2.06
2003–2007.....	184	138	309	160	216	149	138	2.53
2008–2012.....	132	128	.. . ^a	132	161	120	114	5.04

^aData not available.

Table 10. Variations in Returns to Livestock Enterprise Units, 2008 through 2012

	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					
2008.....	\$ 5.84	\$ 1.77	\$ 1.60	\$1,775	(\$ 51)
2009.....	7.50	3.46	13.43	838	32
2010.....	19.71	15.36	35.94	1,506	115
2011.....	20.18	18.88	36.77	2,205	189
2012.....	<u>9.98</u>	<u>10.17</u>	<u>14.29</u>	<u>1,519</u>	<u>145</u>
Five-year average.....	\$12.64	\$ 9.93	\$20.41	\$1,569	\$ 86
Nonfeed costs, 2007 through 2011^b					
Direct cash.....	\$10.61	\$ 6.80	\$15.03	\$1,402	\$134
Other costs.....	<u>8.47</u>	<u>4.16</u>	<u>12.50</u>	<u>614</u>	<u>56</u>
Total.....	\$19.08	\$10.96	\$27.53	\$2,016	\$190

^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.

tractual arrangements to guarantee a certain return. While these contracts may limit upside potential, they can also reduce risk during times of low prices. Expansion plans that require large investments for new facilities should be based on an estimated return high enough to cover all costs. Fluctuations in livestock returns can involve a risk in low-return years.

Hog enterprises

The information on farrow-to-finish enterprises in Table 11 is based on a sample of 35 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 2012 was 380 litters. Average pigs weaned per litter, 9.59, was above the 2011 figure of 9.40. The 2,417 pounds of pork produced per litter was 27 pounds lower than 2011. The 2012 records summarized here for the “all farms” group show that the return of \$9.98 above feed costs per 100 pounds of pork produced was \$10.20 below the 2011 return of \$20.18. The 2012 return was the lowest since 2009.

The 5-year average return above feed costs per 100 pounds produced was \$12.64 (Table 10). Even the 5-year average can vary significantly because of wide fluctuations in returns from year to year. Detailed records show that an average farmer with existing facilities needed a return above feed costs of \$19.08 per 100 pounds to pay for all nonfeed costs in the 2007 through 2011 time period. The return above all costs during this 5-year period of *negative* \$6.44 (\$12.64 minus \$19.08) has led to very little expansion and increase in pork production. Pork production has turned from a profitable industry to an unprofitable one, mainly due to higher feed costs. Despite the negative returns, pork production has continued to increase. Fortunately, strong export demand has supported pork prices. Depending on adjustments in pork production levels and to what level feed costs might drop, the pork industry may return to profitability in 2013. Pork production was up 1.4 percent in 2011 and up 2.2 percent in 2012, and it is expected to increase about 0.6 percent in 2013.

The farrow-to-finish enterprise records for 2012 reported in Table 11 were also sorted by the number of litters produced. The group farrowing 350 or more litters averaged 735 litters. Compared with the average feed cost for all farrow-to-finish enterprises, feed cost per 100 pounds of pork produced was 64 cents lower for the 350-or-more litter group.

The large producers paid slightly less per ton for commercial feed but had the same feed conversion. The average price received for hogs sold by large producers, or the net at the farm, was 6 cents more than the average net received by all producers.

Table 11. Hog Enterprises, 2012 Averages per Farm

	All farms	Farrow-to-finish enterprises ^a
Number of farms.....	35	14
Pork produced, lbs.....	918,589	1,782,658
Pork prod. per litter, lbs.....	2,417	2,426
Total returns.....	\$558,230	\$1,089,469
Value of feed fed.....	\$466,516	\$894,065
Returns per \$100 feed fed.....	\$120	\$122
Number litters farrowed.....	380	735
Pigs farrowed per litter.....	11.15	11.44
Pigs weaned per litter.....	9.59	9.82
Litters per female year.....	1.83	1.90
Pigs weaned per female year...	17.91	19.07
Number pigs weaned.....	3,644	7,218
Death loss, % lbs produced.....	2.2	2.3
Wt per market hog sold, lbs.....	264	263
----- per cwt produced -----		
Price received—market.....	\$64.22	\$64.28
Total returns.....	60.77	61.11
Feed costs.....	<u>50.79</u>	<u>50.15</u>
Return above feed.....	\$ 9.98	\$10.96
Farm grains/complete feed, lbs	233	229
Commercial feed, lbs.....	<u>101</u>	<u>106</u>
Total concentrates, lbs.....	334	335
Cost per cwt supplement.....	\$22.53	\$21.40
Cost per cwt concentrates.....	\$15.21	\$14.99

^a350 or more litters per farm.

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 2012 increased 2.2 percent due to more efficient production, primarily more pigs farrowed and weaned. Pork production in 2013 is expected to increase compared to 2012. Hog prices have moved higher due to greater demand over the last couple of years. Higher feed and fixed costs have increased the cost of production, resulting in lower profit margins.

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 2009, 2010, 2011, and 2012. The value of the feed fed to hogs was more than 75 percent of the crop returns produced on these farms. This intensity of livestock feeding indicates a commitment of major resources to the hog enterprise. The producers in this group probably exercise a higher level of management.

The cost data reported in Table 12 have been divided into two categories: cash costs and other costs. This clas-

sification 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 2012 were \$60.62 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 increased 19 percent as one compared 2012 to 2011. Total nonfeed costs increased 43 cents per 100 pounds of pork produced, with labor costs and livestock expenses representing most of the increase. Feed costs increased as grain prices increased. Total cost of production increased from 2011 to 2012 by \$8.49 (14 percent) per 100 pounds of pork produced.

From 2009 through 2012, the return above all costs averaged a *negative* \$3.58 per 100 pounds of pork produced. Management practices, such as the choice of building systems, type of market used, and on- versus off-farm systems for feed processing affect the individual cost items reported in Table 12. But the return above all costs should accurately reflect the relative efficiency of the of hog enterprises.

Feeder cattle and feeder pig finishing enterprises

Data for 2012 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 2,129,082 pounds in 2012 (Table 13). At 240 pounds of gain per head, this figure amounted to 8,871 head fed per farm in 2012. These feeder pig enterprises represent those that buy weaner pigs and finish them.

The return above the cost of feed and purchased animals from 2008 through 2012 averaged \$9.93 per 100 pounds of gain. This return was \$1.03 below the \$10.96 of all nonfeed costs for the period 2007 through 2011 (Table 10). The 2012 return of \$10.17 was \$8.71 below the 2011 return and 24 cents above the 2008 through 2012 return. Higher feed costs were the main reason for the lower returns.

Given that a 475-pound unit of gain equals one head of feeder cattle, the average of 236,900 pounds of beef produced per farm in 2012 (Table 13) equals 499 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 \$117 in 2012, in comparison with a 5-year average of \$132 and a 15-year average of \$142 (Table 9). The 2012 returns were the lowest in the last 3 years.

The price paid for feeders was \$13.42 per 100 pounds higher in 2012 than it was in 2011; the price received

Table 12. Average Costs and Returns for Farrow-to-Finish Hog Enterprises, 2009 through 2012

	2012	2011	2010	2009	2009–12 average
Number of farms.....	13	9	9	13	11
Tillable acres.....	765	734	720	602	705
Number of litters.....	660	736	818	575	697
Total returns.....	\$60.19	\$65.35	\$53.69	\$38.83	\$54.52
-----per cwt pork produced-----					
Cash costs					
Feed.....	\$49.74	\$41.68	\$32.95	\$31.92	\$39.07
Operating expenses					
Maintenance and power ^a	\$ 5.15	\$ 5.45	\$ 6.39	\$ 4.62	\$ 5.40
Livestock expenses.....	4.69	4.22	3.92	3.10	3.98
Insurance, taxes, and overhead.....	<u>1.04</u>	<u>1.39</u>	<u>1.36</u>	<u>1.68</u>	<u>1.37</u>
Total operating expenses.....	\$10.88	\$11.06	\$11.67	\$ 9.40	\$10.75
Total cash costs.....	\$60.62	\$52.74	\$44.62	\$41.32	\$49.83
Other costs					
Depreciation ^b	\$1.88	\$1.76	\$1.89	\$1.22	\$1.69
Labor.....	4.95	4.43	4.59	5.47	4.86
Interest charge on all capital.....	<u>1.72</u>	<u>1.75</u>	<u>1.75</u>	<u>1.67</u>	<u>1.72</u>
Total other costs.....	\$8.55	\$7.94	\$8.23	\$8.36	\$8.27
Total nonfeed costs.....	\$19.43	\$19.00	\$19.90	\$ 17.76	\$19.02
Total all costs.....	\$69.17	\$60.68	\$52.85	\$ 49.68	\$58.10
Return above all costs.....	(\$8.98)	\$ 4.67	\$ 0.84	(\$10.85)	(\$3.58)

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

^bIncludes machinery, equipment, and building depreciation.

Table 13. Feeder Cattle and Feeder Pig Finishing Enterprises, 2012 Averages per Farm

	Feeder cattle	Feeder-pig finishing ^a
Number of farms.....	69	35
Total lbs produced	236,900	2,129,082
Total returns.....	\$233,718	\$1,026,035
Value of feed fed.....	\$199,865	\$809,602
Returns per \$100 of feed fed.....	\$117	\$127
Death loss, % lbs produced.....	2.1	2.2
Average weight purchased.....	667	14
Price paid per 100 lbs.....	\$146.02	\$276.47
Price received per 100 lbs.....	\$121.14	\$ 60.73
Average weight sold	1,329	272
-- per cwt produced --		
Total returns.....	\$98.66	\$48.19
Feed costs.....	<u>84.37</u>	<u>38.03</u>
Return above feed.....	\$14.29	\$10.16
Farm grains/complete feed, lbs	594	165
Supplement, lbs.....	<u>45</u>	<u>77</u>
Total concentrates, lbs.....	639	242
Hay, lbs.....	53	.. ^b
Corn silage, lbs.....	221	.. ^b
Other silage, lbs.....	41	.. ^b
Hay equivalent, lbs.....	140	.. ^b

^aPurchase weight of 20 lbs and less.

^bData not available.

for cattle sold in 2012 was \$9.11 higher per 100 pounds than the price received in 2011. The average weight of purchased animals was 667 pounds; the average weight of animals sold was 1,329 pounds. Feed cost was \$84.37 per 100 pounds produced in 2012; it was \$69.08 in 2011. Feed costs increased in 2012 and were considerably above the last 10-year average. Higher market cattle prices did not offset an increase in feed costs of \$15.29 per 100 pounds produced, resulting in lower returns above feed in 2012.

Each 100 pounds of beef produced required 639 pounds of concentrates and 53 pounds of hay. The amount of corn silage used in 2012 averaged 221 pounds; other silage averaged 41 pounds, for a total of 262 pounds. Silage use by the feeder cattle enterprise has been fairly constant in the past 4 years; the 10-year average for the period 1993 through 2002 was 497 pounds per 100 pounds of beef produced, compared to 331 pounds for the period 2003 through 2012. The use of 262 pounds of silage per 100 pounds of beef produced in 2012 was the smallest amount fed since 1954. 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 \$20.41 per 100 pounds of beef produced from 2008 through 2012 (Table 10). During this period, returns ranged from \$1.60 in 2008 to \$36.77 in 2011. The returns above feed costs are below the estimated cost of \$27.53 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 down because of the higher feed costs in 2012.

The data in Table 14 show a detailed breakdown for the period from 2009 through 2012 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 977 feeders each year from 2009 through 2012. The 4-year average total cash cost including feed and interest charged on cattle, was \$88.65 per 100 pounds of beef produced. The average total returns of \$89.76 for the same period was more than total cash costs by \$1.11 per 100 pounds produced, or about \$7.83 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 \$9.67 per 100 pounds of beef produced, or \$68 per feeder (\$9.67 multiplied by 7.05 hundredweight of gain per feeder), include depreciation, labor, and interest. Adding the other costs to cash costs results in total costs of \$98.32 per hundredweight over the 4-year period. This was \$8.55 per hundredweight more than the average total returns of \$89.76.

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 minimum size for a herd included in this analysis was 10 milk cows. 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 125 cows. The 2012 average herd size is 137.2 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 2012 was \$146. The average for the period from 2008 through 2012 was \$161 (Table 9). In 2012, milk prices per hundredweight decreased from \$20.35 to \$19.25. From 2011 to 2012, beef prices for market animals sold increased \$17.27 per hundred pounds, while feed costs increased \$2.20 per milk equivalent. Milk production per cow in 2012

of 22,285 pounds was up 1,059 pounds from 2011 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 8 in 2012. 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. The larger herds averaged 109 cows, and the smaller herds averaged 63 cows. The return above feed costs per cow was higher for the larger herds, at \$1,149, compared to a return of \$971 for the smaller herds. The larger herds averaged 21,001 pounds of milk produced per cow, compared to 19,342 pounds for the smaller herds. Feed cost per milk equivalent was lower for the larger herds, at \$14.43, compared to \$15.21 for the smaller herds.

Table 14. Average Costs and Returns for Beef-Feeding Enterprises, 2009 through 2012

	2012	2011	2010	2009	2009–12 average
Number of farms.....	9	9	6	6	8
Average per farm					
Tillable acres.....	724	438	423	423	502
Hundredweight beef produced.....	6,441	4,233	4,406	3,479	4,640
Number head at 475-lb gain equivalents.....	1,356	891	928	732	977
Average weight purchased, lbs.....	553	497	529	548	532
Average weight sold, lbs.....	1,254	1,212	1,216	1,264	1,237
Price received per 100 lbs sold.....	\$116.58	\$108.46	\$ 88.40	\$80.14	\$ 98.40
Price paid per 100 lbs purchased.....	\$137.24	\$108.60	\$102.37	\$88.80	\$109.25
----- per cwt beef produced -----					
Cash costs					
Feed.....	\$93.39	\$75.62	\$55.24	\$58.35	\$70.65
Operating expenses					
Maintenance and power ^b	\$ 7.61	\$ 8.17	\$ 8.11	\$ 4.38	\$ 7.07
Livestock expense.....	5.32	5.97	3.96	3.26	4.63
Insurance, taxes, and overhead.....	1.13	1.16	1.19	1.76	1.31
Interest on cattle ^c	<u>6.03</u>	<u>4.62</u>	<u>4.69</u>	<u>4.64</u>	<u>5.00</u>
Total operating expenses.....	\$20.09	\$19.92	\$17.95	\$14.04	\$18.00
Total cash costs.....	\$113.48	\$95.54	\$73.19	\$72.39	\$88.65
Other costs					
Depreciation ^d	\$ 3.61	\$ 2.33	\$ 2.10	\$ 2.66	\$ 2.68
Labor.....	6.69	5.25	5.15	4.17	5.32
Interest on other capital.....	<u>2.45</u>	<u>1.81</u>	<u>0.97</u>	<u>1.48</u>	<u>1.68</u>
Total other costs.....	\$ 12.75	\$ 9.39	\$ 8.22	\$8.31	\$ 9.67
Total all costs.....	\$126.23	\$104.93	\$81.41	\$ 80.70	\$98.32
Total returns ^e	<u>\$104.98</u>	<u>\$105.11</u>	<u>\$84.09</u>	<u>\$ 64.87</u>	<u>\$89.76</u>
Return above all costs.....	(\$21.25)	\$ 0.19	\$ 2.68	(\$15.83)	(\$8.55)

^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 5.0% for 2009 and 2010 and 4.5% for 2011 and 2012.

^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 average return above feed costs per cow for all dairy herds was \$1,519 in 2012 (Table 15). This figure compares with the recent 5-year average of \$1,569 per cow (Table 10). For the years 2007 through 2011, the 5-year average return above feed costs required to pay market prices for all nonfeed costs is estimated to be about \$2,016 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 2010 through 2012. 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 2008 through 2012. The residual costs, amounting to about 93 percent of the total enterprise costs, were then considered the net cost of producing milk.

Table 15. Dairy Cattle Enterprises, 2012 Averages per Farm

	All farms	High efficiency	
		40-79 cows	80-149 cows
Number of farms.....	70	20	29
Number of cows.....	137.2	63.1	109.0
Milk cows dry, %.....	12.0	12.4	11.9
Animal units in herd.....	260	111	202
Total returns.....	\$663,300	\$266,485	\$488,926
Value of feed fed.....	\$454,867	\$205,246	\$363,730
Return per \$100 of feed fed.....	\$146	\$130	\$134
Return above feed per cow.....	\$1,519	\$971	\$1,149
Total milk produced, cwt.....	30,576	12,197	22,890
Lbs of milk per cow.....	22,285	19,342	21,001
Lbs of butterfat per cow.....	843	779	813
Total beef produced, lbs.....	86,658	35,216	63,553
Pounds of beef per cow.....	632	558	583
Death loss, % lbs produced.....	16.3	17.3	16.5
Price received for:			
cwt milk.....	\$19.25	\$19.06	\$18.77
cwt beef.....	\$113.44	\$107.87	\$120.96
Per cwt milk equivalent ^a			
Feed cost.....	\$13.57	\$15.21	\$14.43
Grain/complete feed, lbs.....	24	22	26
Protein and minerals, lbs.....	17	19	19
Total concentrates, lbs.....	41	41	45
Hay and dry roughage, lbs.....	17	30	22
Corn silage, lbs.....	86	90	80
Other silage, lbs.....	49	46	45
Pasture days per animal unit.....	8	19	6
Hay equivalent per cow, tons.....	8.2	8.7	7.8
Concentrates per cow, lbs.....	10,121	8,657	10,371

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

The differences between the herds with 40 to 79 cows and those with 80 or more for the period from 2010 through 2012 is a combination of slightly higher returns and lower feed costs for the larger herds. For the 3-year period, the milk price for the larger herds is 10 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 \$4.31 lower than for the smaller herds. Total nonfeed costs were 72 cents lower for the larger herds.

In 2012, feed costs per 100 pounds of milk produced increased for small herds (\$1.75) and for large herds (\$1.78). The cost of feed averaged about 58 percent of total production costs in Illinois dairy enterprises. Compared with 2011, total nonfeed costs decreased 3 percent for the small herds, whereas the large herds decreased by 0.1 percent. The total cost of producing 100 pounds of milk in 2012 was \$27.24 for the small herds and \$22.15 for the large herds. The average price received for milk in 2012 decreased for both groups of dairy enterprises. With lower nonfeed costs, returns still did not cover total production costs for either group in 2012. Returns were a *negative* \$8.22 per 100 pounds of milk produced for the small herds and *negative* \$2.68 for the large herds. The returns above all costs per 100 pounds of milk produced had averaged \$5.12 more for the large group than the small group from 2010 through 2012. 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 57 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 2012, 1 less than in 2011. 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 \$125 in 2012. The returns for the 5-year period from 2008 through 2012 averaged \$120, which is below the 15-year average of \$134 for the period from 1998 through 2012 (Table 9). Beef prices received in 2012 averaged \$135.55 per hundredweight, an increase of \$17.90 from prices in 2011. Feed costs per 100 pounds of beef produced increased by \$16.49 to \$100.34 in 2012.

Since 2008, the return above feed costs per cow for the average farmer to feed out calves rather than sell them at

Table 16. Average Milk Production Costs and Returns by Size of Herd, 2010 through 2012

	40–79 cows in herd			80 or more cows in herd		
	2012	2011	2010	2012	2011	2010
Number of farms	12	9	7	24	21	18
Tillable acres	212	181	170	472	431	351
Number of cows.....	63.8	61.6	57.1	232.0	230.9	187.2
Milk per cow, lbs.....	18,391	18,431	18,474	24,094	23,736	22,982
	----- per 100 lbs of milk produced -----					
Price received.....	\$19.02	\$20.73	\$16.46	\$19.47	\$20.76	\$16.44
Cash costs						
Feed	\$16.85	\$15.10	\$11.60	\$12.35	\$10.57	\$ 8.56
Operating expenses						
Maintenance and power ^a	2.28	2.34	2.29	2.46	2.53	2.03
Livestock expense	2.58	3.17	2.56	2.65	2.79	2.84
Insurance, taxes, and overhead	0.24	0.13	0.20	0.34	0.24	0.20
Total operating expenses.....	\$ 5.10	\$ 5.64	\$ 5.05	\$ 5.45	\$ 5.56	\$ 5.07
Total cash costs.....	\$21.95	\$20.74	\$16.65	\$17.80	\$16.13	\$13.63
Other costs						
Depreciation ^b	\$ 0.97	\$ 1.06	\$ 0.85	\$ 0.84	\$ 0.80	\$ 0.65
Labor	3.60	3.14	2.85	2.64	2.56	2.47
Interest charge on all capital.....	0.72	0.90	0.89	0.87	0.89	0.90
Total other costs	\$ 5.29	\$ 5.10	\$ 4.59	\$ 4.35	\$ 4.25	\$ 4.02
Total nonfeed costs.....	\$10.39	\$10.74	\$ 9.64	\$ 9.80	\$ 9.81	\$ 9.09
Total all costs	\$27.24	\$25.84	\$21.24	\$22.15	\$20.38	\$17.65
Return above all costs	(\$8.22)	(\$5.11)	(\$4.78)	(\$2.68)	\$0.38	(\$1.21)

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

^bIncludes machinery, equipment, and building depreciation.

Table 17. Beef-Cow Enterprises, 2012 Averages per Farm

	All farms	Calves sold	Calves fed out
Number of farms.....	158	62	35
Number of cows in herd.....	57	63	63
Animal units in herd.....	.. . ^a	.. . ^a	111
Total lbs produced	40,313	30,041	72,684
Beef per cow, lbs.....	712	476	1,149
Total returns.....	\$54,184	\$45,016	\$86,460
Value of feed fed.....	\$40,448	\$35,887	\$64,938
Return per \$100 feed fed.....	\$134	\$125	\$133
Return above feed per cow	\$243	\$145	\$340
Death loss, lbs.....	2,185	2,387	2,309
% lbs produced.....	5.4	7.9	3.2
Weight per animal sold, lbs	690	548	988
Price per cwt sold—market.....	\$135.55	\$144.14	\$122.37
	----- per cwt produced -----		
Feed costs	\$100.34	\$119.46	\$89.34
Grain/complete feed, lbs.....	189	186	235
Protein and minerals, lbs.....	84	116	62
Total concentrates, lbs.....	273	302	297
Hay and dry roughage, lbs	763	1,026	505
Corn silage, lbs.....	409	469	441
Other silage, lbs.....	72	147	36
Pasture days.....	29	43	21
Pasture days per animal unit... ^a	.. . ^a	135
Hay equivalent per cow, tons...	5.5	5.2	6.4

^aInsufficient data.

weaning has been about \$192 per cow. Additional returns are needed for the added costs of labor, buildings, and capital required to feed out the calves. In 2012, the return above feed costs per cow for feeding calves to market weight was \$195 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 2012 was \$79 for native flocks. The average return for the 5-year period from 2008 through 2012 is \$114 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 decreased from \$180.25 per hundredweight in 2011 to \$140.29 in 2012, while feed costs per hundredweight produced increased by \$20.55 to \$108.09, or 23 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, 2012 Averages per Farm (Native Flocks)

Number of farms.....	9
Number of ewes in flock	42
Wool and mutton produced, lbs.....	6,856
Total returns.....	\$5,840
Value of feed fed.....	\$7,411
Return per \$100 of feed fed.....	\$79
Percent lamb crop	142
Death loss, lbs.....	573
Percent lbs produced.....	8.4
Weight per market animal sold, lbs	112
----- per cwt produced -----	
Price received—market.....	\$140.29
Feed costs.....	\$108.09
Concentrates, lbs.....	372
Hay, lbs.....	574
Pasture days.....	4
Hay equivalent, lbs	620

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. 2012 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

	180-499		500-799		800-1,199		> 1,199		All farms		
	Range in size (total acres)	Management returns	Number of farms	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%
Management returns	455	265	246	120	1,086	1,046	1,016	87	87	87	87
Number of farms	535	1,037	1,600	3,063	1,178	1,063	1,016	87	87	87	87
Total acres in farm	517	1,004	1,515	2,989	1,135	1,015	986	87	87	87	87
Acres of tillable land	405	768	1,197	2,437	897	795	733	87	87	87	87
Operator tillable acres	91	91	91	91	91	91	91	87	87	87	87
Soil rating on tillable land	23	14	12	11	14	14	15	15	15	15	15
Percent land owned	42	46	42	39	43	42	50	50	50	50	50
Percent land crop shared	35	40	46	50	40	44	34	34	34	34	34
Percent land cash rented	1.3	3.4	6.3	14.9	4.4	4.7	2.5	2.5	2.5	2.5	2.5
Months of hired labor	9.8	14.1	18.3	30.7	15.1	15.5	13.0	13.0	13.0	13.0	13.0
Total months labor											
Dollar returns											
Crop returns	418,505	808,091	1,263,439	2,676,620	954,479	771,954	837,512	837,512	837,512	837,512	837,512
Livestock returns above feed	47	14	219	933	176	-120	147	147	147	147	147
Crop returns above feed	3,514	8,460	13,567	46,545	11,753	12,199	3,879	3,879	3,879	3,879	3,879
Custom work	5,810	8,686	11,642	30,411	10,551	10,904	7,817	7,817	7,817	7,817	7,817
Other farm receipts											
Value of farm production	427,876	825,251	1,288,868	2,754,509	976,959	794,936	849,354	849,354	849,354	849,354	849,354
Dollar costs											
Crop expenses	113,284	217,718	341,515	701,598	255,473	246,466	183,510	183,510	183,510	183,510	183,510
Power and equipment	56,974	100,997	149,512	308,774	116,501	115,029	85,241	85,241	85,241	85,241	85,241
Building and fence	15,292	25,654	37,185	76,523	29,546	28,982	23,277	23,277	23,277	23,277	23,277
Labor	27,877	38,456	51,767	96,610	43,465	43,149	34,489	34,489	34,489	34,489	34,489
Insurance and miscellaneous	15,864	29,376	45,342	97,794	34,891	34,613	25,635	25,635	25,635	25,635	25,635
Livestock services and supplies	304	330	289	1,113	397	444	178	178	178	178	178
Interest on nonland capital	20,502	40,571	61,675	126,618	46,451	43,122	38,146	38,146	38,146	38,146	38,146
Real estate taxes	4,900	6,609	7,944	16,661	7,306	6,817	5,761	5,761	5,761	5,761	5,761
Cash rent	41,916	97,462	188,396	458,504	134,682	113,513	77,622	77,622	77,622	77,622	77,622
Other land charges	47,144	75,213	92,510	174,721	78,366	80,683	72,268	72,268	72,268	72,268	72,268
Total nonfeed costs	344,056	632,385	976,135	2,058,916	747,078	712,818	546,128	546,128	546,128	546,128	546,128
Capital account adjustment	2,902	3,634	4,935	13,816	4,747	5,225	3,121	3,121	3,121	3,121	3,121
Management returns	86,722	196,500	317,668	709,409	234,629	87,343	306,347	306,347	306,347	306,347	306,347
Farm production per \$1.00 of nonfeed costs	1.24	1.30	1.32	1.34	1.31	1.12	1.56	1.56	1.56	1.56	1.56
Farm production per man	515,976	916,142	1,163,359	1,426,350	860,861	808,428	1,013,314	1,013,314	1,013,314	1,013,314	1,013,314
Financial summary											
Cash operating income	410,919	764,125	1,210,328	2,481,461	906,977	753,554	766,010	766,010	766,010	766,010	766,010
Inventory change	-9,363	4,954	-14,470	124,110	7,722	-39,131	50,398	50,398	50,398	50,398	50,398
Accts. receivable (net change)	26,682	57,245	96,238	189,693	67,908	82,265	32,783	32,783	32,783	32,783	32,783
Less purchased feed	197	882	2,505	2,846	1,180	545	505	505	505	505	505
Less purchased livestock	81	164	106	433	1,713	433	24	24	24	24	24
Gross farm returns	427,960	825,277	1,289,485	2,777,805	979,715	795,711	848,661	848,661	848,661	848,661	848,661
Cash operating expenses	251,305	473,895	768,902	1,721,985	585,372	534,709	406,017	406,017	406,017	406,017	406,017
Prepaid expenses (- if increased)	-5,990	-3,323	-5,031	-5,284	-5,044	7,013	-13,221	-13,221	-13,221	-13,221	-13,221
Accts. payable (+ if increased)	-211	1,811	-2,605	-12,514	-1,620	5,028	386	386	386	386	386
Total operating expenses	245,104	472,383	761,266	1,704,187	578,709	546,750	393,182	393,182	393,182	393,182	393,182
Income before depreciation	182,856	352,894	528,218	1,073,618	401,006	248,960	455,479	455,479	455,479	455,479	455,479
Less depreciation	30,789	64,200	95,403	191,598	71,347	72,377	56,510	56,510	56,510	56,510	56,510
Capital account adjustment	2,902	3,634	4,935	13,816	4,747	5,225	3,121	3,121	3,121	3,121	3,121
Net farm income	154,969	292,328	437,750	895,836	334,406	181,809	402,090	402,090	402,090	402,090	402,090
Net farm income per operator	152,130	274,765	394,060	658,843	292,847	172,525	374,276	374,276	374,276	374,276	374,276
Labor & mgmt. income per operator	114,953	219,512	324,867	556,049	236,756	117,279	320,054	320,054	320,054	320,054	320,054

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. 2012 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

	180-499		500-799		800-1,199		> 1,199		All farms	
	Number of farms	455	265	246	120	Your farm	1,086	Low 33%	800-1,199	High 33%
Range in size (total acres)									87	87
Management returns										
Number of farms		455	265	246	120	Your farm	1,086			
Selected returns and costs										
per operator tillable acre										
Crop returns	1033.23	1052.81	1055.58	1055.58	1088.40		1063.62	970.77	1143.35	
Livestock returns above feed	0.12	0.02	0.18	0.18	0.38		0.20	-0.15	0.20	
Custom work, other receipts	23.02	22.34	21.06	21.06	31.58		24.85	29.05	15.97	
Value of farm production	1056.36	1075.17	1076.83	1076.83	1130.36		1088.67	999.67	1159.52	
Soil fertility	139.37	144.62	145.21	145.21	148.52		144.98	156.68	128.04	
Pesticides	50.93	49.26	49.09	49.09	45.50		48.40	55.12	43.33	
Seed and other crop expense	89.38	89.77	91.03	91.03	93.89		91.31	98.14	79.16	
Crop total	279.68	283.65	285.33	285.33	287.91		284.69	309.94	250.52	
Light vehicle and utilities	12.17	8.09	6.20	6.20	5.92		7.64	9.03	7.04	
Machinery repairs, supplies	32.72	27.91	24.87	24.87	23.16		26.48	31.08	24.03	
Machinery hire, lease	16.61	12.09	11.29	11.29	14.77		13.51	14.76	10.19	
Fuel and oil	24.95	25.73	26.12	26.12	29.79		26.92	27.79	22.63	
Machinery depreciation	54.21	57.75	56.43	56.43	57.08		55.28	61.99	52.48	
Power and equipment total	140.66	131.58	124.91	124.91	126.71		129.82	144.65	116.37	
Drying and storage	18.37	18.17	14.14	14.14	12.57		15.31	17.90	20.63	
Building repair and rent	10.09	7.12	8.14	8.14	6.64		7.85	8.48	4.82	
Building depreciation	9.29	8.13	8.78	8.78	12.19		9.77	10.06	6.32	
Building total	37.75	33.42	31.07	31.07	31.40		32.92	36.45	31.78	
Labor, unpaid	59.01	38.07	28.53	28.53	18.62		33.31	37.74	38.48	
Labor, paid	9.82	12.04	14.72	14.72	21.02		15.12	16.53	8.61	
Labor total	68.82	50.10	43.25	43.25	39.65		48.43	54.26	47.08	
Insurance and miscellaneous	39.17	38.27	37.88	37.88	40.13		38.88	43.53	35.00	
Livestock services and supplies	0.75	0.43	0.24	0.24	0.46		0.44	0.56	0.24	
Interest on nonland capital	50.62	52.86	51.53	51.53	51.96		51.76	54.23	52.08	
Other costs total	90.53	91.56	89.65	89.65	92.55		91.09	98.32	87.32	
Land charge	231.97	233.58	241.33	241.33	266.69		245.55	252.78	212.49	
Total nonfeed costs	849.42	823.90	815.55	815.55	844.91		832.51	896.41	745.56	
Capital account adjustment	7.16	4.73	4.12	4.12	5.67		5.29	6.57	4.26	
Management returns	214.10	256.01	265.41	265.41	291.12		261.46	109.84	418.22	
Percent crop returns fed	0.01	0.02	0.01	0.01	0.02		0.01	0.02	0.02	
Capital purchases	62,039	129,709	181,566	181,566	381,238		140,897	127,891	114,881	
Interest paid	8,793	16,633	26,909	26,909	66,049		21,136	22,782	12,928	
Percent tillable land in										
Corn and corn silage	54.4	56.2	56.3	56.3	61.1		57.3	56.5	54.9	
Soybeans	43.7	41.7	41.2	41.2	35.8		40.2	41.8	42.7	
Wheat	0.3	0.4	0.2	0.2	0.3		0.3	0.5	0.6	
Other small grains	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
CRP acres	0.3	0.3	0.3	0.3	0.2		0.3	0.4	0.2	
All hay and pasture	0.1	0.1	0.1	0.1	0.1		0.1	0.1	0.0	
Crop yields, bushels per acre										
Corn	132	136	129	129	139		134	125	146	
Soybeans	51	51	50	50	52		51	48	54	
Wheat	89	96	82	82	80		87	111	90	
Prices received										
Corn (old crop)	6.41	6.30	6.36	6.36	6.47		6.39	6.24	6.46	
Corn (new crop)	6.78	6.60	6.80	6.80	6.65		6.70	6.44	6.79	
Soybeans (old crop)	12.95	12.99	12.74	12.74	12.93		12.89	12.72	13.33	
Soybeans (new crop)	14.04	14.06	14.00	14.00	14.09		14.05	13.73	14.67	

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. 2012 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

	180-499		500-799		800-1,199		> 1,199		All farms		800-1,199		
	Range in size (total acres)	Management returns	Number of farms	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%
Total acres in farm	508	1,620	172	89	802	1,139	1,026	1,026	1,022	1,026	1,022	1,026	1,022
Acres of tillable land	482	1,544	974	2,857	1,085	1,085	971	971	983	971	983	971	983
Operator tillable acres	403	1,282	751	2,464	899	899	763	763	698	763	698	763	698
Soil rating on tillable land	78	78	78	77	78	78	78	78	78	78	78	78	78
Percent land owned	31	19	16	17	24	24	17	17	12	17	12	17	12
Percent land crop shared	31	44	44	30	35	35	42	42	54	42	54	42	54
Percent land cash rented	37	48	40	52	42	42	42	42	34	42	34	42	34
Months of hired labor	1.0	2.1	5.3	15.7	3.8	3.8	3.1	3.1	1.7	3.1	1.7	3.1	1.7
Total months labor	10.2	13.6	17.9	30.7	14.9	14.9	14.6	14.6	12.8	14.6	12.8	14.6	12.8
Dollar returns													
Crop returns	398,735	744,416	1,293,074	2,533,161	905,848	905,848	672,600	672,600	743,220	672,600	743,220	672,600	743,220
Livestock returns above feed	136	476	361	2,090	478	478	562	562	-9	562	-9	562	-9
Custom work	3,822	6,067	11,329	35,968	9,509	9,509	7,302	7,302	4,089	7,302	4,089	7,302	4,089
Other farm receipts	5,123	9,000	14,638	29,801	10,782	10,782	11,085	11,085	8,788	11,085	8,788	11,085	8,788
Value of farm production	407,817	1,319,402	2,601,020	926,616	926,616	926,616	691,550	691,550	756,088	691,550	756,088	691,550	756,088
Dollar costs													
Crop expenses	109,222	207,668	360,489	720,123	253,243	253,243	222,036	222,036	176,989	222,036	176,989	222,036	176,989
Power and equipment	59,177	100,977	166,476	329,488	121,672	121,672	108,699	108,699	81,248	108,699	81,248	108,699	81,248
Building and fence	14,511	22,584	39,061	76,593	28,497	28,497	23,782	23,782	17,629	23,782	17,629	23,782	17,629
Labor	31,042	37,252	53,736	95,488	44,470	44,470	39,820	39,820	32,486	39,820	32,486	39,820	32,486
Insurance and miscellaneous	15,733	29,320	49,243	96,660	34,984	34,984	30,483	30,483	23,419	30,483	23,419	30,483	23,419
Livestock services and supplies	491	441	441	309	448	448	699	699	197	699	197	699	197
Interest on nonland capital	19,478	36,206	61,960	122,440	43,811	43,811	36,122	36,122	33,868	36,122	33,868	36,122	33,868
Real estate taxes	4,569	4,515	8,544	14,294	6,489	6,489	4,867	4,867	3,764	4,867	3,764	4,867	3,764
Cash rent	36,644	83,236	167,074	401,065	115,630	115,630	89,309	89,309	63,430	89,309	63,430	89,309	63,430
Other land charges	42,286	67,028	97,832	151,802	71,967	71,967	72,681	72,681	65,417	72,681	65,417	72,681	65,417
Total nonfeed costs	333,151	589,227	1,004,856	2,008,261	721,211	721,211	628,499	628,499	498,448	628,499	498,448	628,499	498,448
Capital account adjustment	3,579	4,787	9,833	4,718	4,718	4,718	5,689	5,689	3,436	5,689	3,436	5,689	3,436
Management returns	78,244	175,518	318,921	602,592	210,123	210,123	68,740	68,740	261,076	68,740	261,076	68,740	261,076
Farm production per \$1.00 of nonfeed costs	1.22	1.29	1.31	1.30	1.28	1.28	1.10	1.10	1.52	1.10	1.52	1.10	1.52
Farm production per man	461,034	857,804	1,123,645	1,311,851	787,598	787,598	727,999	727,999	960,539	727,999	960,539	727,999	960,539
Financial summary													
Cash operating income	389,886	723,885	1,213,880	2,427,925	868,564	868,564	696,918	696,918	687,181	696,918	687,181	696,918	687,181
Inventory change	-6,181	-16,805	-40,528	-54,306	-21,299	-21,299	-48,852	-48,852	8,143	-48,852	8,143	-48,852	8,143
Accts. receivable (net change)	24,377	53,300	148,849	253,079	83,015	83,015	43,522	43,522	61,119	43,522	61,119	43,522	61,119
Less purchased feed	292	397	2,319	6,544	1,444	1,444	360	360	325	360	325	360	325
Less purchased livestock	74	478	423	1,781	430	430	872	872	151	872	151	872	151
Gross farm returns	407,717	759,505	1,319,458	2,618,373	928,407	928,407	690,355	690,355	755,967	690,355	755,967	690,355	755,967
Cash operating expenses	239,106	455,280	792,342	1,709,935	570,034	570,034	482,120	482,120	388,126	482,120	388,126	482,120	388,126
Prepaid expenses (- if increased)	-6,108	-13,166	-14,411	-52,825	-14,675	-14,675	-3,604	-3,604	-25,578	-3,604	-25,578	-3,604	-25,578
Accts. payable (+ if increased)	-410	-2,058	655	-2,366	-772	-772	-1,448	-1,448	-2,097	-1,448	-2,097	-1,448	-2,097
Total operating expenses	232,588	440,057	778,586	1,654,744	554,587	554,587	477,068	477,068	360,451	477,068	360,451	477,068	360,451
Income before depreciation	175,129	319,448	540,872	963,629	373,829	373,829	213,287	213,287	395,516	213,287	395,516	213,287	395,516
Less depreciation	29,822	58,588	96,191	183,929	67,685	67,685	59,998	59,998	52,804	59,998	52,804	59,998	52,804
Capital account adjustment	3,579	4,787	9,833	4,718	4,718	4,718	5,689	5,689	3,436	5,689	3,436	5,689	3,436
Net farm income	148,886	265,647	449,056	789,533	310,853	310,853	158,978	158,978	346,148	158,978	346,148	158,978	346,148
Net farm income per operator	146,710	256,413	400,097	616,606	278,093	278,093	159,321	159,321	330,979	159,321	330,979	159,321	330,979
Labor & mgmt. income per operator	110,007	208,281	322,741	510,869	222,417	222,417	108,220	108,220	287,057	108,220	287,057	108,220	287,057

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. 2012 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

Management returns	180-499		500-799		800-1,199		> 1,199		All farms	
	Number of farms	359	182	172	89	802	Low 33%	High 33%	60	60
Range in size (total acres)										
Selected returns and costs										
per operator tillable acre										
Crop returns	990.01	990.76	1008.61	1028.19	1007.45	881.19	1064.07			
Livestock returns above feed	0.34	0.63	0.28	0.85	0.53	0.74	-0.01			
Custom work, other receipts	22.21	20.05	20.25	26.70	22.57	24.09	18.44			
Value of farm production	1012.55	1011.45	1029.14	1058.73	1030.55	906.02	1082.50			
Soil fertility	134.39	141.41	144.07	151.42	143.86	152.35	124.09			
Pesticides	48.17	49.14	49.57	51.96	49.94	53.41	45.74			
Seed and other crop expense	88.62	85.84	87.54	88.91	87.85	85.13	83.57			
Crop total	271.18	276.39	281.18	292.29	281.65	290.90	253.40			
Light vehicle and utilities	13.20	9.81	7.17	6.93	8.81	9.48	10.18			
Machinery repairs, supplies	34.80	28.16	26.52	25.81	28.27	30.73	21.93			
Machinery hire, lease	19.39	16.60	16.47	14.52	16.49	19.96	13.08			
Fuel and oil	23.78	24.66	26.24	31.36	27.00	26.55	21.52			
Machinery depreciation	55.76	55.17	53.45	55.12	54.75	55.69	49.61			
Power and equipment total	146.93	134.39	129.85	133.74	135.32	142.41	116.32			
Drying and storage	15.74	14.36	11.46	12.63	13.23	12.58	12.78			
Building repair and rent	10.48	8.36	7.41	7.13	8.12	11.66	5.81			
Building depreciation	9.80	7.34	11.60	11.33	10.35	6.91	6.65			
Building total	36.03	30.06	30.47	31.09	31.69	31.16	25.24			
Labor, unpaid	69.35	42.50	29.31	18.92	36.68	41.80	41.12			
Labor, paid	7.72	7.08	12.61	19.84	12.78	10.37	5.39			
Labor total	77.07	49.58	41.91	38.76	49.46	52.17	46.51			
Insurance and miscellaneous	39.06	39.02	38.41	39.23	38.91	39.94	33.53			
Livestock services and supplies	1.22	0.59	0.34	0.13	0.50	0.92	0.28			
Interest on nonland capital	48.36	48.19	48.33	49.70	48.72	47.32	48.49			
Other costs total	88.64	87.80	87.08	89.06	88.13	88.18	82.30			
Land charge	207.32	206.00	213.29	230.21	215.85	218.60	189.86			
Total nonfeed costs	827.17	784.22	783.79	815.14	802.10	823.42	713.63			
Capital account adjustment	8.89	6.37	3.41	3.99	5.25	7.45	4.92			
Management returns	194.27	233.60	248.76	244.59	233.69	90.06	373.78			
Percent crop returns fed	0.02	0.03	0.03	0.06	0.03	0.06	0.02			
Capital purchases	66,036	114,809	192,855	343,248	135,065	110,207	113,500			
Interest paid	9,688	16,649	33,683	79,043	24,110	17,712	11,071			
Percent tillable land in										
Corn and corn silage	56.5	55.2	58.5	60.1	57.9	54.2	54.6			
Soybeans	40.9	41.8	37.7	35.1	38.4	42.8	42.7			
Wheat	0.8	0.6	0.8	0.6	0.7	0.7	0.5			
Other small grains	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CRP acres	0.6	0.4	0.4	1.0	0.6	0.7	0.2			
All hay and pasture	0.5	0.2	0.1	0.3	0.3	0.1	0.4			
Crop yields, bushels per acre										
Corn	126	118	119	126	122	112	126			
Soybeans	48	48	47	47	47	46	49			
Wheat	75	74	77	83	78	65	64			
Prices received										
Corn (old crop)	6.35	6.34	6.35	6.33	6.34	6.17	6.44			
Corn (new crop)	6.68	6.58	6.38	6.51	6.52	6.19	6.96			
Soybeans (old crop)	12.93	12.84	13.01	12.98	12.95	12.62	12.81			
Soybeans (new crop)	14.05	14.06	13.71	14.28	14.02	13.78	14.05			

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. 2012 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

	180-499		500-799		800-1,199		> 1,199		Your farm		All farms		800-1,199		
	Range in size (total acres)	Management returns	Number of farms	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%	Low 33%	High 33%
Total acres in farm	559	1,042	89	64	1,661	2,959	1,444	327						1,029	1,041
Acres of tillable land	490	980	1,592	2,835	1,334	2,401	1,366	1,000						959	1,000
Operator tillable acres	431	827	58	58	1,334	2,401	1,157	852						792	852
Soil rating on tillable land	40	24	19	18	58	58	58	61						59	61
Percent land owned	32	40	42	39	40	39	38	40						44	40
Percent land crop shared	28	35	39	43	35	43	35	38						27	38
Percent land cash rented	2.1	4.0	9.1	19.3	9.1	19.3	7.8	5.3						3.3	5.3
Months of hired labor	11.5	16.8	22.5	38.0	22.5	38.0	20.9	17.0						15.5	17.0
Dollar returns															
Crop returns	319,146	635,442	994,993	1,895,191	994,993	1,895,191	887,001	756,775						527,659	756,775
Livestock returns above feed	401	759	1,683	1,733	1,683	1,733	1,096	1,730						1,961	1,730
Custom work	2,486	3,865	12,671	25,988	12,671	25,988	10,187	6,141						2,264	6,141
Other farm receipts	4,257	8,722	18,282	31,710	18,282	31,710	14,512	5,599						13,737	5,599
Value of farm production	326,290	648,788	1,027,629	1,954,622	1,027,629	1,954,622	912,796	770,245						545,620	770,245
Dollar costs															
Crop expenses	100,013	195,578	330,026	615,212	330,026	615,212	286,245	188,474						202,711	188,474
Power and equipment	65,562	120,739	178,594	342,040	178,594	342,040	163,599	127,089						127,318	127,089
Building and fence	8,693	19,715	25,577	59,252	25,577	59,252	25,813	22,026						22,670	22,026
Labor	36,501	49,230	63,867	116,146	63,867	116,146	62,574	49,662						45,066	49,662
Insurance and miscellaneous	16,621	29,416	48,021	85,156	48,021	85,156	41,633	31,062						26,345	31,062
Livestock services and supplies	289	869	2,312	1,063	2,312	1,063	1,130	400						766	400
Interest on nonland capital	17,886	37,385	57,933	108,136	57,933	108,136	51,100	40,086						40,231	40,086
Real estate taxes	2,793	4,600	5,847	12,156	5,847	12,156	5,888	5,366						5,026	5,366
Cash rent	16,543	41,358	85,731	186,242	85,731	186,242	74,506	35,752						35,653	35,752
Other land charges	43,898	72,562	105,340	159,918	105,340	159,918	90,165	69,004						81,968	69,004
Total nonfeed costs	308,800	571,451	903,247	1,685,322	903,247	1,685,322	802,653	568,920						587,753	568,920
Capital account adjustment	2,633	4,577	2,051	7,558	2,051	7,558	3,902	2,988						7,018	2,988
Management returns	20,123	81,914	126,433	276,858	126,433	276,858	114,045	204,313						-35,115	204,313
Farm production per \$1.00 of nonfeed costs	1.06	1.14	1.14	1.16	1.14	1.16	1.14	1.35						0.93	1.35
Farm production per man	337,460	577,025	725,475	777,753	725,475	777,753	586,383	662,611						526,470	662,611
Financial summary															
Cash operating income	329,330	651,132	1,056,870	1,974,395	1,056,870	1,974,395	926,076	727,562						612,927	727,562
Inventory change	-51,291	-99,335	-159,540	-331,010	-159,540	-331,010	-146,959	-59,334						-98,909	-59,334
Accts. receivable (net change)	51,192	113,003	163,555	416,842	163,555	416,842	168,082	129,394						45,365	129,394
Less purchased feed	2,575	14,349	25,799	75,864	25,799	75,864	26,048	25,169						12,497	25,169
Less purchased livestock	959	1,589	8,158	3,710	8,158	3,710	3,607	1,080						1,751	1,080
Gross farm returns	325,696	648,962	1,026,930	1,980,655	1,026,930	1,980,655	917,543	771,373						545,135	771,373
Cash operating expenses	212,312	410,156	702,212	1,354,799	702,212	1,354,799	616,446	429,844						399,754	429,844
Prepaid expenses (- if increased)	-6,015	-933	-20,194	-33,128	-20,194	-33,128	-13,968	-18,477						4,945	-18,477
Accts. payable (+ if increased)	788	-883	-1,721	1,487	-883	1,487	37	-5,791						1,487	-5,791
Total operating expenses	207,085	408,340	680,838	1,323,393	680,838	1,323,393	602,515	405,576						406,186	405,576
Income before depreciation	118,611	240,522	346,092	657,262	346,092	657,262	315,028	365,797						138,949	365,797
Less depreciation	32,942	65,649	103,565	200,757	103,565	200,757	92,810	68,930						76,293	68,930
Capital account adjustment	2,633	4,577	2,051	7,558	2,051	7,558	3,902	2,988						7,018	2,988
Net farm income	88,302	179,450	244,577	464,063	244,577	464,063	226,120	299,855						69,674	299,855
Net farm income per operator	86,681	169,823	218,161	319,432	169,823	319,432	187,852	293,730						65,708	293,730
Labor & mgmt. income per operator	52,768	119,491	156,448	231,375	119,491	231,375	131,859	241,423						5,996	241,423

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

Table 21a. 2012 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

	180-499		500-799		800-1,199		> 1,199		All farms	
	Range in size (total acres)	Number of farms	Range in size (total acres)	Number of farms	Range in size (total acres)	Number of farms	Range in size (total acres)	Number of farms	Low 33%	High 33%
Management returns		96		78		89		64		327
Number of farms		96		78		89		64		327
Selected returns and costs										
per operator tillable acre										
Crop returns	740.60		768.08		746.15		799.31			766.82
Livestock returns above feed	0.93		0.92		1.26		0.72			0.95
Custom work, other receipts	15.65		15.21		23.21		24.03			21.35
Value of farm production	757.18		784.21		770.62		814.07			789.12
Soil fertility	122.05		125.05		126.59		132.80			128.35
Pesticides	39.54		41.03		42.64		44.85			42.92
Seed and other crop expense	70.50		70.32		78.26		78.57			76.18
Crop total	232.09		236.40		247.49		256.23			247.46
Light vehicle and utilities	11.34		9.17		7.81		7.04			8.11
Machinery repairs, supplies	39.07		34.50		27.67		27.58			30.05
Machinery hire, lease	11.62		10.70		10.25		13.28			11.71
Fuel and oil	28.01		31.22		29.39		34.55			31.65
Machinery depreciation	62.11		60.35		58.81		60.01			59.92
Power and equipment total	152.14		145.94		133.93		142.45			141.43
Drying and storage	4.63		4.92		4.02		3.68			4.10
Building repair and rent	8.22		9.77		7.22		7.39			7.83
Building depreciation	7.31		9.13		7.94		13.61			10.38
Building total	20.17		23.83		19.18		24.68			22.32
Labor, unpaid	70.08		46.93		30.59		23.60			34.86
Labor, paid	14.62		12.58		17.31		24.77			19.24
Labor total	84.70		59.51		47.89		48.37			54.10
Insurance and miscellaneous	38.57		35.56		36.01		35.47			35.99
Livestock services and supplies	0.67		1.05		1.73		0.44			0.98
Interest on nonland capital	41.51		45.19		43.44		45.04			44.18
Other costs total	80.75		81.79		81.19		80.95			81.15
Land charge	146.74		143.26		147.67		149.23			147.45
Total nonfeed costs	716.59		690.73		677.35		701.91			693.90
Capital account adjustment	6.11		5.53		1.54		3.15			3.37
Management returns	46.70		99.01		94.81		115.31			98.59
Percent crop returns fed	1.68		1.89		2.22		1.08			1.76
Capital purchases	63,397		121,084		171,863		327,397			158,348
Interest paid	11,210		17,729		33,704		56,205			27,694
Percent tillable land in										
Corn and corn silage	43.5		45.9		46.3		50.1			47.5
Soybeans	42.9		42.0		43.8		39.4			41.6
Wheat	9.4		8.3		6.9		8.1			7.9
Other small grains	0.0		0.0		0.0		0.0			0.0
CRP acres	0.4		0.5		0.6		0.5			0.5
All hay and pasture	2.3		1.4		1.1		1.0			1.2
Crop yields, bushels per acre										
Corn	43		51		49		57			52
Soybeans	39		40		40		40			40
Wheat	62		66		66		69			67
Prices received										
Corn (old crop)	6.53		6.58		6.50		6.56			6.54
Corn (new crop)	6.78		6.88		6.52		6.35			6.51
Soybeans (old crop)	13.06		13.11		13.07		12.99			13.04
Soybeans (new crop)	14.11		13.94		14.15		13.97			14.04

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

Table 22. 2012 Operator Average Returns, Costs, and Financial Summary by Size and by Cwt of Pork Produced for Illinois Hog Farms

Range in size (total acres) Cwt of pork produced Number of farms	60-799		> 799	Your farm	All farms	Cwt of pork produced	
	23	28	51			< 6,000 cwt	> 6,000 cwt
Total acres in farm	480	1,522	1,052			379	1,025
Acres of tillable land	460	1,475	1,018			363	1,008
Operator tillable acres	393	1,349	918			324	905
Soil rating on tillable land	81	79	80			73	81
Percent land owned	32	18	24			35	16
Percent land crop shared	27	18	22			16	29
Percent land cash rented	41	64	53			50	54
Months of hired labor	12.3	36.8	25.8			1.5	28.0
Total months labor	22.7	50.9	38.2			14.4	41.5
Dollar returns							
Crop returns	392,110	1,394,417	942,396			293,713	883,844
Livestock returns above feed	123,517	351,488	248,677			45,481	140,471
Custom work	4,023	10,854	7,773			2,575	6,388
Other farm receipts	12,271	38,757	26,812			1,419	17,173
Value of farm production	531,921	1,795,516	1,225,659			343,189	1,047,876
Dollar costs							
Crop expenses	103,736	364,959	247,153			79,172	204,291
Power and equipment	98,197	293,348	205,339			58,279	176,039
Building and fence	47,692	174,319	117,213			13,933	61,322
Labor	66,601	168,063	122,306			47,083	127,119
Insurance and miscellaneous	20,975	69,248	47,478			11,593	44,859
Livestock services and supplies	39,148	110,430	78,283			9,497	77,592
Interest on nonland capital	35,928	112,003	77,695			18,931	67,190
Real estate taxes	7,399	11,836	9,835			3,471	8,964
Cash rent	47,223	240,738	153,466			30,006	159,136
Other land charges	48,857	82,814	67,500			31,406	58,032
Total nonfeed costs	515,755	1,627,759	1,126,267			303,370	984,545
Capital account adjustment	1,716	-1,962	-303			0	2,598
Management returns	17,883	165,795	99,089			39,818	65,929
Farm production per \$1.00 of nonfeed costs	1.03	1.10	1.09			1.13	1.06
Farm production per man	331,683	623,062	491,655			288,921	359,969
Financial summary							
Cash operating income	1,076,752	3,251,939	2,270,973			471,272	1,552,505
Inventory change	-52,028	684	-23,088			-64,194	-59,396
Accts. receivable (net change)	34,472	90,676	65,329			55,006	47,104
Less purchased feed	419,944	1,079,850	782,245			112,087	462,343
Less purchased livestock	107,330	462,508	302,330			6,807	29,995
Gross farm returns	531,921	1,800,940	1,228,638			343,189	1,047,876
Cash operating expenses	404,136	1,399,544	950,635			192,483	799,980
Prepaid expenses (- if increased)	-3,813	-20,801	-13,140			7,873	375
Accts. payable (+ if increased)	774	11,316	6,562			1,878	2,717
Total operating expenses	401,097	1,390,058	944,056			202,234	803,071
Income before depreciation	130,824	410,882	284,582			140,955	244,805
Less depreciation	36,113	97,865	70,016			24,213	67,308
Capital account adjustment	1,716	-1,962	-303			0	2,598
Net farm income	96,428	311,056	214,263			116,742	180,095
Net farm income per operator	89,197	188,053	143,471			93,423	135,798
Labor & mgt. income per operator	50,647	148,579	104,414			67,292	90,805

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

Table 22a. 2012 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 acres) Cwt of pork produced Number of farms	60-799		> 799		Your farm		All farms		Cwt of pork produced	
	23	28	28	28			51		< 6,000 cwt	> 6,000 cwt
Selected returns and costs per operator tillable acre									5	13
Crop returns	996.74	1033.45					1026.36		905.96	976.79
Livestock returns above feed	313.98	260.50					270.83		140.29	155.24
Custom work, other receipts	41.42	36.77					37.67		12.32	26.04
Value of farm production	1352.14	1330.72					1334.86		1058.57	1158.07
Soil fertility	122.73	121.90					122.06		121.87	98.92
Pesticides	43.80	49.56					48.45		34.44	34.02
Seed and other crop expense	97.16	99.02					98.66		87.90	92.84
Crop total	263.70	270.48					269.17		244.21	225.77
Light vehicle and utilities	42.23	25.40					28.65		36.32	28.59
Machinery repairs, supplies	55.14	46.86					48.46		35.71	50.10
Machinery hire, lease	41.80	47.33					46.26		20.10	26.76
Fuel and oil	46.75	50.35					49.65		28.75	41.61
Machinery depreciation	63.70	47.48					50.61		58.88	47.49
Power and equipment total	249.62	217.41					223.63		179.76	194.55
Drying and storage	8.39	12.10					11.39		13.98	13.19
Building repair and rent	95.17	96.61					96.33		19.95	34.78
Building depreciation	17.67	20.48					19.94		9.05	19.80
Building total	121.23	129.19					127.66		42.98	67.77
Labor, unpaid	80.32	34.17					43.09		125.74	45.69
Labor, paid	88.98	90.38					90.11		19.49	94.80
Labor total	169.30	124.56					133.20		145.23	140.49
Insurance and miscellaneous	53.32	51.32					51.71		35.76	49.58
Livestock services and supplies	99.51	81.84					85.26		29.29	85.75
Interest on nonland capital	91.33	83.01					84.62		58.39	74.26
Other costs total	244.16	216.18					221.58		123.45	209.58
Land charge	263.04	248.57					251.36		200.13	249.91
Total nonfeed costs	1311.05	1206.39					1226.61		935.75	1088.08
Capital account adjustment	4.36	-1.45					-0.33		0.00	2.87
Management returns	45.46	122.88					107.92		122.82	72.86
Percent crop returns fed	166.37	142.85					153.46		74.33	144.58
Capital purchases	81,024	162,844					125,945		43,659	111,194
Interest paid	21,417	61,097					43,202		7,162	26,934
Percent tillable land in										
Corn and corn silage	67.1	72.1					71.1		52.1	70.1
Soybeans	26.2	24.5					24.8		39.5	25.0
Wheat	3.7	2.3					2.6		3.5	3.4
Other small grains	0.1	0.0					0.0		0.7	0.0
CRP acres	0.7	0.0					0.2		1.4	0.0
All hay and pasture	1.2	0.1					0.3		2.9	0.5
Crop yields, bushels per acre										
Corn	106	124					121		92	119
Soybeans	51	49					49		39	47
Wheat	82	89					87		89	75
Prices received										
Corn (old crop)	6.50	5.99					6.06		6.35	6.58
Corn (new crop)	6.83	6.77					6.79		6.65	5.74
Soybeans (old crop)	12.73	13.39					13.23		13.48	13.77
Soybeans (new crop)	13.47	12.93					13.01		15.34	13.37

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

Table 23. 2012 Operator Average Returns, Costs, and Financial Summary for Illinois Dairy and Beef Farms

Type of Farm	Dairy (by Number of Cows in Herd)			Beef (by Size)		
	10-79	> 79	All farms	180-799	> 799	All farms
Number of cows in herd			60	19	10	29
Range in size (total acres)						
Number of farms	20	40	60	19	10	29
Total acres in farm	262	694	550	482	1,159	715
Acres of tillable land	231	625	493	403	1,056	629
Operator tillable acres	225	620	488	399	890	568
Soil rating on tillable land	67	68	68	70	78	73
Percent land owned	55	40	45	52	29	44
Percent land crop shared	3	2	2	8	32	16
Percent land cash rented	41	58	52	40	40	40
Months of hired labor	2.6	34.3	23.8	2.4	21.8	9.1
Total months labor	16.7	51.5	39.9	14.1	38.8	22.6
Dollar returns						
Crop returns	198,219	680,461	519,714	355,186	940,079	556,873
Livestock returns above feed	39,317	320,315	226,649	19,302	179,332	74,485
Custom work	1,562	5,413	4,130	2,882	9,860	5,288
Other farm receipts	3,762	11,603	8,990	9,381	30,792	16,764
Value of farm production	242,861	1,017,792	769,482	386,750	1,160,062	653,410
Dollar costs						
Crop expenses	40,242	138,781	105,934	90,101	237,089	140,786
Power and equipment	66,639	224,829	172,099	91,811	251,909	147,017
Building and fence	11,471	48,133	35,913	22,004	44,591	29,793
Labor	59,094	172,286	134,556	51,197	115,743	73,454
Insurance and miscellaneous	7,837	31,960	17,134	17,134	36,272	23,733
Livestock services and supplies	29,659	128,204	95,355	14,422	48,952	26,329
Interest on nonland capital	18,046	72,335	54,239	36,863	118,875	65,143
Real estate taxes	3,212	11,594	8,800	6,611	12,954	8,798
Cash rent	11,233	68,467	49,389	25,459	83,647	45,524
Other land charges	17,487	44,320	35,376	44,197	100,331	63,553
Total nonfeed costs	264,921	940,908	715,579	399,797	1,050,363	624,130
Capital account adjustment	636	1,363	1,120	3,314	11,355	6,087
Management returns	-21,425	78,247	45,023	-9,733	121,054	35,366
Farm production per \$1.00 of nonfeed costs	0.92	1.08	1.06	0.97	1.10	1.05
Farm production per man	193,720	242,302	226,108	312,969	490,503	374,188
Financial summary						
Cash operating income	317,352	1,313,071	981,165	905,029	2,463,716	1,442,508
Inventory change	-2,378	-31,166	-21,570	24,889	23,061	24,259
Accts. receivable (net change)	1,398	63,636	42,890	32,630	95,455	54,293
Less purchased feed	65,369	301,414	222,733	153,819	371,830	228,995
Less purchased livestock	8,275	8,275	8,278	421,982	1,050,333	638,655
Gross farm returns	242,728	1,035,847	771,474	386,748	1,160,066	653,410
Cash operating expenses	170,426	752,810	558,682	276,756	774,361	448,344
Prepaid expenses (- if increased)	-1,836	-8,989	-6,605	814	-13,348	-4,069
Accts. payable (+ if increased)	874	-6,126	-3,793	3,329	-2,451	1,336
Total operating expenses	169,463	737,695	548,284	280,900	758,562	445,611
Income before depreciation	73,265	298,152	223,190	105,848	401,506	207,799
Less depreciation	22,743	85,982	64,902	30,039	115,988	59,676
Capital account adjustment	636	1,363	1,120	3,314	11,355	6,087
Net farm income	51,157	213,533	159,408	79,123	296,873	154,210
Net farm income per operator	51,157	109,956	90,356	73,432	176,626	109,016
Labor & mgt. income per operator	21,775	58,335	46,149	27,044	101,578	52,745

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

Table 23a. 2012 Operator Average Operating Costs, Land Use, Yields, and Prices Received for Illinois Dairy and Beef Farms

Type of Farm	Dairy (by Number of Cows in Herd)				Beef (by Size)			
	10-79	> 79	Your farm	All farms	180-799	> 799	Your farm	All farms
Number of cows in herd				60	19	10	0	29
Range in size (total acres)								
Number of farms	20	40		60				
Selected returns and costs								
per operator tillable acre								
Crop returns	882.94	1,097.30		1,064.44	890.54	1,056.39		980.11
Livestock returns above feed	175.13	516.53		464.21	48.39	201.52		131.09
Custom work, other receipts	23.72	27.44		26.87	30.75	45.68		38.81
Value of farm production	1,081.78	1,641.27		1,555.52	969.68	1,303.59		1,150.02
Soil fertility	78.79	108.92		104.30	109.41	139.60		125.71
Pesticides	29.01	39.37		37.78	38.24	37.78		37.99
Seed and other crop expense	71.45	75.51		74.89	78.26	89.05		84.09
Crop total	179.25	223.79		216.97	225.91	266.42		247.79
Light vehicle and utilities	38.65	41.64		41.18	19.72	12.02		15.56
Machinery repairs, supplies	86.95	69.49		72.17	57.28	57.09		57.18
Machinery hire, lease	33.33	87.99		79.61	60.96	54.76		57.61
Fuel and oil	58.65	67.86		66.45	38.05	67.80		54.11
Machinery depreciation	79.25	95.58		93.07	54.19	91.41		74.29
Power and equipment total	296.83	362.55		352.48	230.19	283.08		258.75
Drying and storage	2.81	9.27		8.28	7.10	6.38		6.71
Building repair and rent	27.97	25.99		26.29	27.42	14.24		20.30
Building depreciation	20.32	42.36		38.98	20.65	29.48		25.42
Building total	51.10	77.62		73.55	55.17	50.11		52.44
Labor, unpaid	223.29	99.13		118.16	104.50	58.36		79.58
Labor, paid	39.93	178.69		157.42	23.87	71.70		49.70
Labor total	263.23	277.82		275.59	128.36	130.06		129.28
Insurance and miscellaneous	34.91	51.54		48.99	42.96	40.76		41.77
Livestock services and supplies	132.11	206.74		195.30	36.16	55.01		46.34
Interest on nonland capital	80.38	116.65		111.09	92.42	133.58		114.65
Other costs total	247.40	374.92		355.38	171.54	229.35		202.76
Land charge	142.24	200.57		191.63	191.22	221.30		207.46
Total nonfeed costs	1180.05	1517.29		1465.60	1002.39	1180.32		1098.49
Capital account adjustment	2.83	2.20		2.29	8.31	12.76		10.71
Management returns	-95.43	126.18		92.21	-24.40	136.03		62.25
Percent crop returns fed	108.43	115.25		112.97	99.28	64.23		87.19
Capital purchases	50,269	140,406		110,360	69,296	254,764		133,251
Interest paid	11,721	38,385		29,497	32,579	61,384		42,512
Percent tillable land in								
Corn and corn silage	49.1	51.1		50.8	58.4	68.3		64.1
Soybeans	16.0	18.5		18.1	13.7	22.4		18.8
Wheat	3.2	3.9		3.7	3.3	1.3		2.1
Other small grains	1.3	0.4		0.6	0.0	0.0		0.0
CRP acres	0.0	0.0		0.0	0.8	0.0		0.3
All hay and pasture	24.3	9.7		11.9	22.8	6.4		13.3
Crop yields, bushels per acre								
Corn	101	105		104	120	95		106
Soybeans	39	44		43	49	51		51
Wheat	59	76		74	89	95		91
Prices received								
Corn (old crop)	6.39	6.58		6.56	6.33	6.44		6.39
Corn (new crop)	6.67	6.31		6.46	6.54	6.89		6.67
Soybeans (old crop)	12.43	12.95		12.93	12.93	13.07		13.03
Soybeans (new crop)	14.95	14.12		14.24	14.64	15.36		14.98

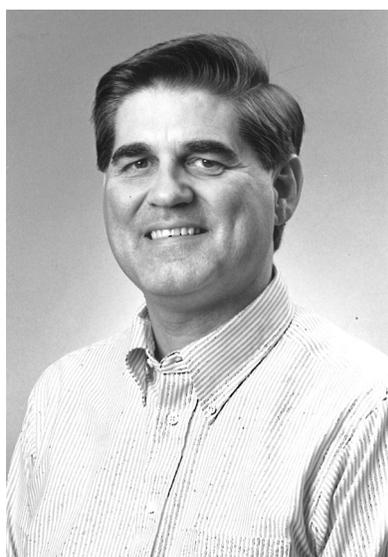
Note: Variations in totals due to rounding to the nearest dollar.

Recently Retired

Gary Goodwin was raised on a grain and livestock farm in Will County near Wilmington. After finishing high school, Gary enrolled at the University of Illinois, graduating in June 1973 with a bachelor's degree in agricultural economics.

Gary began his professional career in June 1974 as a real estate appraiser for Truman Esmond Agency in Ottawa. After three and a half years, he began working for the Western FBFM Association in the winter of 1977. His area included Peoria and Stark counties, where Gary used his expertise in entities and farm appraisals to assist co-operators. In 1984, Gary became the executive fieldstaff for Western FBFM Association; he served in this capacity for over 27 years.

Gary has been involved in the community and very active in his church during his working years. He retired from FBFM in the spring of 2012, after 35 years of dedicated service.



Maurice Sprout was raised on a farm in Warren County near Cameron. A few years after finishing high school, Maurice enrolled at Illinois State University, graduating in 1969 with a degree in agriculture education. He began his professional career that September as a vocational agricultural instructor in the Fairbury–Cropsey school system. While teaching, Maurice enrolled in graduate school at the University of Illinois and completed a master's degree in agriculture education in 1972.

Maurice was hired by the Pioneer FBFM Association in June 1974, with an area including McLean County. Maurice continued his love of teaching agriculture to assist his co-operators. He was the executive fieldstaff and business manager for the Pioneer FBFM Association for many years.

Maurice was passionate about his work and retired from FBFM in the spring of 2012, after 38 years of dedicated service.

Donna Cline began working in the Department of Agricultural and Consumer Economics Department at the University of Illinois in the fall of 1988. One of her first duties was assisting Dr. Peter Barry in editing the *American Journal of Agricultural Economics*. In the summer of 1991, Donna began working as the administrative assistant for the Illinois Farm Business Farm Management Association in Mumford Hall. Her dedication and professionalism were evident in the day-to-day operation of the FBFM state office. A “people person,” Donna enjoyed meeting fieldstaff when they were in Urbana-Champaign, whether for training or to visit the University of Illinois campus.

Donna was raised in Downers Grove, Illinois, and made a home and career in the Champaign-Urbana area with her family. Donna loves animals, especially her dogs and birds. In retirement, she enjoys spending time in her garden and spending time with her family. Donna retired from FBFM in the summer of 2012 after more than 20 years of dedicated service.





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*