

## Contents

Source of data ..... 1
Uses for this report ..... 1
Terms and accounting methods ..... 2
Farm business trends in 2010 ..... 3
Crop production .....  3
Livestock production ..... 4
Labor and management income ..... 4
Financial characteristics ..... 6
Family living expenditures ..... 7
Income changes on Illinois farms ..... 8
Livestock enterprises ..... 12
Patterns and fluctuations ..... 12
Beef-herd enterprises ..... 13
Hog enterprises ..... 13
Feeder cattle and feeder pig finishing enterprises ..... 16
Dairy enterprises ..... 17
Beef-cow herds ..... 19
Sheep enterprises ..... 19
Appendix A: Tables 19-23a ..... 21

## In-Text Tables

1 Average Prices Received and Paid by Farm Recordkeepers for Grain, Livestock, and Milk ..... 4
2 Operator's 5-Year Average Share of Labor and Management Income by Size and Type of Farm, 2006 Through 2010 ..... 5
3 Financial Characteristics of Illinois Farms for 2010 by Type of Farm ..... 6
4 Average Sources and Uses of Funds Over a 4-Year Period and by Noncapital Living Expenses for Selected Illinois Farms ..... 7
5 Percent of Illinois Farms and Operator Net Farm Income by Interest Paid as a Percent of Gross Farm Returns, 2006 Through 2010 ..... 8
6 Averages for Selected Total Farm Items on 340- to 799-Acre Illinois Grain, Hog, and Beef Farms ..... 9
7 Average Cost per Tillable Acre to Grow Corn and Soybeans on Central Illinois Grain Farms with No Livestock ..... 10
8 Averages for Selected Total Farm Items on 340- to 799-Acre Illinois Dairy Farms ..... 12
9 Returns per \$100 of Feed Fed to Different Classes of Livestock ..... 13
10 Variations in Returns to Livestock Enterprise Units, 2006 through 2010 ..... 14
11 Hog Enterprises, 2010 Averages per Farm ..... 15
12 Average Costs and Returns for Farrow-to-Finish Hog Enterprises by Size of Enterprise, 2007 Through 2010 ..... 15
13 Feeder Cattle and Feeder Pig Finishing Enterprises, 2010 Averages per Farm ..... 16
14 Average Costs and Returns for Beef-Feeding Enterprises, 2007 Through 2010 ..... 17
15 Dairy Cattle Enterprises, 2010 Averages Per Farm ..... 18
16 Average Milk Production Costs and Returns by Size of Herd, 2008 Through 2010 ..... 19
17 Beef-Cow Enterprises, 2010 Averages per Farm ..... 20
18 Sheep Enterprises (Native Flocks), 2010 Averages per Farm ..... 20

## Summary of Illinois Farm Business Records for 2010

 was prepared by D.D. Raab, B.L. Zwilling, and J.H. Locher of the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences.
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UNIVERSITY OF ILLINOIS EXTENSION

## 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—5,774 cooperating farmers and 63 member field staff*
July 1, 2011, distribution of cooperators by counties and associations


## SOURCE OF DATA

This report is based on data obtained from farm business records on 5,775 Illinois farms. It is the 86 th 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 2010, 9 associations in 102 counties were being served by 61 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- <br> tions | Counties <br> involved | Field staff <br> employed | Farmers <br> involved |
| :--- | :---: | :---: | :---: | :---: |
| $1940 \ldots \ldots \ldots \ldots$. | 3 | 23 | 3 | 680 |
| $1950 \ldots \ldots \ldots \ldots$. | 8 | 59 | 15 | 2,760 |
| $1960 \ldots \ldots \ldots \ldots$. | 10 | 100 | 33 | 5,494 |
| $1970 \ldots \ldots \ldots \ldots$. | 10 | 102 | 42 | 6,553 |
| $1980 \ldots \ldots \ldots \ldots \ldots$ | 10 | 102 | 67 | 8,205 |
| $1990 \ldots \ldots \ldots \ldots \ldots$. | 10 | 102 | 70 | 7,192 |
| $2000 \ldots \ldots \ldots \ldots \ldots$ | 9 | 102 | 66 | 6,647 |
| $2010 \ldots \ldots \ldots \ldots$ |  |  |  |  |

Estimates for 2010 indicate that over 90 percent of the 5,775 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 <br> sales $\mathbf{( \$ )}$ | \% of all farms, <br> $\mathbf{\$ 1 0 , 0 0 0 + \text { sales }}$ | \% of census <br> farms enrolled | No. of farms <br> 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 2010 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 2010 was 1,092 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, $\$ 3.86$; oats, $\$ 2.48$; and wheat, $\$ 5.12$. 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
- Building repairs and rents
- Drying and storage
- Hired labor
- Livestock expenses
- Taxes
- Insurance
- Miscellaneous expenses
- Farm share of electricity, telephone, and light vehicle 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 longerterm 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 2010 at $\$ 3,250$ 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 2010. 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 5.0 percent on the sum of one-half the average of the

January 1 and December 31 inventory values of grain, plus the average of the January 1 and December 31 inventories of remaining capital investment in livestock, machinery and light vehicles, buildings, and soil fertility, plus onehalf the cash operating expense, exclusive of interest paid. In Tables 6 and 9, 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 $\$ 22,128$.

Land charge or net rent is the bare land priced at current land values multiplied by 2.75 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 2010, using a base earning value of $1979=100$, was 207.

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.

Netfarm 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 inter-est-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 2010

Illinois agriculture is based largely on crop production, especially corn and soybeans. In 2010, Illinois ranked second in the nation in soybean and corn production. The total value of corn and soybeans produced on Illinois farms was 16 percent of the total U.S. production for these crops. In 2010, cash receipts from farm marketing of corn and soybeans represented 79 percent of the total cash receipts in Illinois from all crops and livestock, and 94 percent of the cash receipts from all crops marketed.

## 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. Planting started in the middle of April with good conditions which lead to 87 percent of the corn crop to be completed by May 2 . This was well above the last two years as well as the 5-year average of 47 percent. 97 percent of the corn and 47 percent of the soybeans were reported as planted by May 24 . Above average temperatures in the summer months lead to faster crop development, but the higher temperatures during pollination affected the corn yield. Harvest progressed faster than in 2009 with 97 percent of the corn crop harvested by October 25 and the soybean harvest was one of the fastest on record.

Crop yields. In spite of the early planting and average precipitation, warmer summer temperatures during the growing season resulted in poorer corn yields for many producers. Too much rainfall lowered yields in certain parts of the state, including western Illinois. The average corn yield for Illinois farms reported by the Illinois Crop Reporting Service was 157 bushels per acre, 17 bushels below the previous year's. The average for 2005 through 2010 is 170 bushels per acre. Farmers participating in the Illinois FBFM program averaged 164 bushels of corn per acre in 2010, 18 bushels below the year before.

Soybean yields for all Illinois farms were reported at 51.5 bushels per acre in 2010. This was the highest on record, 4 bushels higher than the 5 -year average of 47 bushels per acre. FBFM recordkeeping farms averaged 55 bushels of soybeans per acre in 2010, 3 bushels above their 5-year average. Crop yields on the 5,775 recordkeeping farms covered in this report averaged 4 to 7 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 28 to 46 cents per bushel below 2009 prices (Table 1). Old-crop corn prices received in 2010 averaged 25 to 38 cents below those received in 2009. New-crop prices received were higher for soybeans and corn compared to the year before. The price received for new-crop corn averaged 42 to 46 cents higher than the year before and for new-crop soybeans averaged 52 to 71 cents higher. Wheat sold for 44 cents to $\$ 1.22$ more
per bushel during the year. Prices received for both old-crop corn and old-crop soybeans sold in 2010 were above their inventory prices, resulting in a positive marketing margin and boosting crop returns. The year-end, new-crop inventory price for corn was $\$ 2.00$ higher than the year before; for soybeans it was $\$ 3.25$ 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 countercyclical payment.

Crop Production Index 2010a. The Illinois All Crop Production Index for 2010 (2010 Annual Bulletin, USDANASS, Illinois Field Office) was down 1 point from the previous year to 144 percent of the 1977 base. Corn production totaled 1.95 billion bushels in 2010, 5 percent less than the previous year. The final yield was 157 bushels per acre, 17 bushels below the previous year's yield of 174 bushels per acre. The yield for the 2010 soybean crop was 51.5 bushels per acre, 5.5 bushels above the 2009 yield of 46 bushels per acre. Production totaled 466 million bushels, 8 percent above the previous year.

The 2010 yield for sorghum for grain was 96 bushels per acre, 14 bushels above the yield in 2009 . Sorghum production, at 3.17 million bushels, was up 7 percent less from the previous year. The yield for the 2010 winter wheat crop was 56 bushels per acre, the same as the previous year. Total production was 16.5 million bushels, 64 percent below the 2009 production of 45.9 million bushels. The oats yield, at 65 bushels per acre, the same as 2009 . Production of all hay in 2010 was 1.92 million tons, 4 percent below 2009. Alfalfa hay production was down 2 percent, to 1.29 million tons. All other hay production decreased 7 percent, to 624,000 tons. The alfalfa yield decreased from 3.9 to 3.8 tons per acre, while all other hay yields decreased from 2.5 to 2.4 tons per acre.

| Crop Production Index, 1976-2010 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Index | Year | Index | Year | Index |
| 1978 | 97 | 1989 | 110 | 2000 | 133 |
| 1979 | 114 | 1990 | 109 | 2001 | 134 |
| 1980 | 92 | 1991 | 99 | 2002 | 124 |
| 1981 | 113 | 1992 | 128 | 2003 | 129 |
| 1982 | 115 | 1993 | 112 | 2004 | 156 |
| 1983 | 66 | 1994 | 136 | 2005 | 122 |
| 1984 | 97 | 1995 | 102 | 2006 | 143 |
| 1985 | 120 | 1996 | 118 | 2007 | 146 |
| 1986 | 112 | 1997 | 121 | 2008 | 149 |
| 1987 | 99 | 1998 | 127 | 2009 | 145 |
| 1988 | 66 | 1999 | 121 | 2010 | 144 |

## 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 hog, dairy, beef cow and feeder cattle enterprises were higher in 2010 compared to 2009 , while returns to the feeder pig finishing enterprise were lower. With higher gross returns and feed costs similar to 2009, returns above feed cost were
higher for all livestock enterprises. In 2010, the average prices received by farm recordkeepers in the Illinois FBFM Association were 30 percent higher for hogs, 12 percent higher for fed cattle, and 24 percent higher for milk than they were in 2009 (Table 1). The prices paid for all weights of feeder cattle purchases averaged 14 percent above the 2009 price for feeder cattle, and feeder pigs weighing below 20 pounds averaged 5 percent above the 2009 price. Higher returns and stable feed costs resulted in returns above feed and purchased animals for feeder cattle enterprises to increase from $\$ 13.43$ per hundredweight produced to $\$ 35.94$ (Table 10). This is the above the 5 -year average and is the highest in 5 years. Mainly due to the higher price received returns for farrow-to-finish hog producers increased returns above feed costs to $\$ 19.71$ per hundredweight produced in 2010. This was above the 5 -year average and the highest in 5 years. Higher milk prices caused dairy returns above feed cost per cow to increase from $\$ 838$ in 2009 to $\$ 1,506$ in 2010. This is below the 5 -year average, but is the second highest in the last 5 years. Returns for beef cow herds with calves sold increased to $\$ 115$, which is 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 2006 through 2010 on all northern Illinois grain farms (located north of a line from Kankakee to Moline) was $\$ 116,141$ (Table 2). Operators on about 1,400 grain farms in central Illinois had 5-year average earnings of $\$ 120,304$. Central Illinois occupies the area between the Kankakee-Moline line in the north and the Mattoon-Alton line in the south. Smaller farms and variable soil quality in northern Illinois have generated smaller earnings from crops.

The grain farms in northern Illinois averaged 972 tillable acres per farm, compared with an average of 1,092 tillable

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

|  | 2010 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Northern \& central | Southern | Northern \& central | South ern |
| Grain prices per bushel |  |  |  |  |
| Sold |  |  |  |  |
| Corn, old crop | \$ 3.60 | \$ 3.80 | \$ 3.98 | \$ 4.05 |
| Corn, new crop | 4.17 | 4.20 | 3.75 | 3.74 |
| Soybeans, old crop........ | 9.94 | 10.07 | 10.40 | 10.35 |
| Soybeans, new crop ....... | 10.27 | 10.44 | 9.75 | 9.73 |
| Wheat | 4.59 | 5.68 | 4.15 | 4.46 |
| Livestock prices per cwt |  |  |  |  |
| Hogs, all weights ............. | ... \$ 5 | . 24 |  | . 81 |
| Fed cattle, all weights.... | .... 9 | . 41 |  | . 63 |
| Feeder cattle, all weights, |  |  |  |  |
| Dairy cattle, all weights. | .... 6 | . 38 |  | . 51 |
| Sheep and wool, all weights | ....... 129 | . 44 |  | . 89 |
| Milk per cwt................... | ..... 16 | . 30 |  | . 12 |

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 2006 through 2010 grain farms, operators in southern Illinois averaged $\$ 107,973$ for labor and management. This average increased by $\$ 26,626$ compared with the average for the 5 -year period from 2005 through 2009.

When the average earnings on Illinois grain farms for the 5-year period from 2006 through 2010 are compared with the earnings from 2005 through 2009, earnings increased in all areas of the state. The average for the 5-year period from 2006 through 2010 increased 33 percent in northern Illinois, 21 percent in central Illinois and 33 percent in southern Illinois as compared to the 5-year period 2005 through 2009. The 2010 return to operator's labor and management for all areas of the state was significantly higher than the 2009 earnings and above the 2005-2009 5-year average. The year dropped from the 5-year average, 2005, averaged about $\$ 122,000$ lower earnings than in 2010

When average earnings on Illinois livestock farms for the 5-year period from 2006 through 2010 are compared with the earnings from 2005 through 2009, earnings increased for hog and beef enterprises, but decreased for dairy enterprises. The average for the 5-year period from 2006 through 2010 increased 20 percent for hog farms, 73

## Table 2. Operator's 5-Year Average Share of Labor and Management Income by Size and Type of Farm, 2006 Through 2010

|  | Tillable acres per farm |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Under 500 | $\begin{gathered} 500 \text { to } \\ 7999 \end{gathered}$ | 800+ | All |
|  | Northern Illinois |  |  |  |
| Tillable acres ...... | 347 | 636 | 1,537 | 972 |
| Labor and management earnings by type of farm |  |  |  |  |
| Grain............... | \$35,949 | \$79,784 | \$185,159 | \$116,141 |
|  | Central Illinois |  |  |  |
| Tillable acres ...... | 357 | 656 | 1,465 | 1,092 |
| Labor and management earnings by type of farm |  |  |  |  |
| Grain ${ }^{\text {a }}$............. | \$49,912 | \$83,931 | \$174,666 | \$136,108 |
| Grain ${ }^{\text {b }}$................ | 37,061 | 72,082 | 138,146 | 102,422 |
| All................... | 43,429 | 76,590 | 158,640 | 120,304 |
| Southern Illinois |  |  |  |  |
| Tillable acres ...... | 349 | 661 | 1,632 | 1,296 |
| Labor and management earnings by type of farm |  |  |  |  |
| Grain............... | \$29,142 | \$58,973 | \$135,008 | \$107,973 |
| Illinois livestock |  |  |  |  |
| Labor and management earnings by type of farm |  |  |  |  |
| Hog................. | . . ${ }^{\text {c }}$ | . . . | \$53,575 | \$46,372 |
| Beef................ | .c | . | . . c | 12,954 |
| Dairy ............... | . . . | . . . ${ }^{\text {c }}$ | . . . 6 | 27,951 |

[^0]percent for beef farms, and decreased 10 percent for dairy farms as compared to the 5-year period 2005 through 2009.

In 2010, the labor and management income for all areas of Illinois averaged $\$ 160,118$ per farm. This figure is $\$ 115,567$ above the 2009 state average. Returns averaged $\$ 35,208$ above the average for the 5 -year period 2006 through 2010. Lower costs and higher new crop prices were the main reasons for the higher incomes. The new crop grain prices resulted in minimum farm program payments in 2010, just like in 2009.

Corn yields were below the good yields recorded the year before. The average corn yield on the 2,588 farms in 2010 was 164 bushels per acre, 18 bushels lower than the 2009 yield. The average soybean yield in 2010 was 55 bushels per acre, 5 bushel higher than the 50 reported in 2009 . Corn and soybean yields were generally highest in central and northern parts of the state. Too much rainfall lowered yields in certain parts of the state, including western Illinois. The average corn yield was the lowest in the last five years, and the average soybean yield was the highest on record.

Year-end inventory price for the 2010 corn crop of $\$ 5.50$ per bushel was $\$ 2.00$ per bushel higher than a year earlier. Soybeans were inventoried at $\$ 13.00$ per bushel, $\$ 3.25$ higher than December 31, 2009. The average sales price received for the 2009 corn and soybean crop sold in 2010 was above the inventory price, resulting in a positive marketing margin. Crop returns averaged $\$ 775$ per tillable acre, $\$ 100$ per acre lower than the 2009 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, 5.0 percent interest on nonland investment, and a land-use charge equivalent to the average net rent received by landowners for crop-share leases from 2006 to 2009.

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 $\$ 70,000$ 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 $\$ 57,000$ 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 2,504 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 2,504 farms was $\$ 270,477$, down over $\$ 37,000$ from $\$ 307,957$ a year earlier. Grain farms had the greatest working capital, averaging $\$ 277,779$ while dairy farms had the least, averaging $\$ 43,533$. Most of the assets of a dairy farm - the dairy herd, buildings, and land-are noncurrent assets. The average current ratio for all the farms was 2.54 , up from 2.27 a year ago. Grain farms recorded the highest (most healthy) current ratio, and dairy farms the lowest. The 2010 current ratio was the highest for any year during the last 10 years.

Solvency is a measure of the farm's overall financial strength and risk-taking ability. The average net worth of the 2,504 farms at the end of 2010 was $\$ 1,946,075$, up from $\$ 1,740.705$ the year before. Average farm and nonfarm incomes in 2010 were above family living requirements, thus enabling net worth increases. Increasing land values have also boosted net worths for those operators who own land. Grain farms had the highest net worth, followed by beef farms, with dairy farms recording the lowest. The debt-to-farm equity and debt-to-farm asset indicators show how debt capital is combined with equity capital. This is useful in looking at the risk exposure of the business. The average debt-to-farm asset percentage for all farms was 21.3. The debt-to-farm asset percentage ranged from 21.0 for grain farms to 33.4 for beef farms. The average debt-to-farm asset level of 21.3 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 2,504 farms was 8.1 percent, up from 3.0 percent a year earlier. Hog farms recorded the highest returns, averaging 8.5 percent, while dairy farms recorded the lowest, averaging 3.1 percent. Return on farm equity in 2010 ranged from 9.9 percent for grain farms to 1.8 percent for beef and dairy farms. The average was 9.6 percent, up from 2.6 percent in 2009.

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

Table 3. Financial Characteristics of Illinois Farms for 2010 by Type of Farm

|  | All farms | Grain farms | Hog farms | Dairy farms | Beef farms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms.......................... | 2,504 | 2,383 | 43 | 54 | 24 |
| Liquidity |  |  |  |  |  |
| Working capital........................ | \$270,477 | \$277,779 | \$224,867 | \$43,533 | \$137,836 |
| Current ratio ............................ | 2.54 | 2.58 | 2.01 | 1.63 | 1.81 |
| Solvency |  |  |  |  |  |
| Net worth (market) ................... | \$1,946,075 | \$1,968,908 | \$1,679,701 | \$1,163,776 | \$1,916,370 |
| Debt-farm equity (\%) ................ | 27.1 | 26.5 | 40.9 | 31.1 | 50.2 |
| Debt-farm asset (\%)................. | 21.3 | 21.0 | 29.1 | 23.7 | 33.4 |
| Profitability |  |  |  |  |  |
| Farm operating income ............. | \$172,270 | \$175,274 | \$151,141 | \$75,685 | \$129,182 |
| Return on farm assets (\%) ......... | 8.1 | 8.3 | 8.5 | 3.1 | 3.6 |
| Return on farm equity (\%)......... | 9.6 | 9.9 | 6.8 | 1.8 | 1.8 |
| Financial efficiency |  |  |  |  |  |
| Interest expense ratio (\%)......... | 2.7 | 2.5 | 5.4 | 5.6 | 8.4 |
| Operating expense ratio (\%) ...... | 57.2 | 57.0 | 58.4 | 64.1 | 59.6 |
| Depreciation expense ratio (\%).. | 6.8 | 6.8 | 5.4 | 8.3 | 7.5 |
| Farm operating income ratio (\%) | 32.4 | 32.8 | 31.4 | 20.2 | 23.0 |
| Asset turnover ratio.................. | 0.31 | 0.31 | 0.32 | 0.25 | 0.23 |

the farm business. The interest-expense ratio averaged 2.7 percent for the 2,504 farms, ranging from 2.5 percent for grain farms to 8.4 percent for beef farms. The 2.7 percent was down from 3.3 percent in 2009. The 2010 figure is the lowest since at least 1995. The farm operating income ratio ranged from a high of 32.8 percent for grain farms to 20.2 percent for dairy farms. The average for all farms in 2010 was 32.4 percent, up from 16.8 percent in 2009. The 2006 through 2010 5-year average farm operating income ratio is 29.3 percent. The 2010 farm operating income ratio is above the 5-year average.

## Family living expenditures

Total cash living expenditures for a sample of 1,200 Illinois sole-proprietor, farm-operator families in 2010 averaged $\$ 67,605$ (Table 4). This figure is 3.7 higher than the 2009 average. Capital purchases for family living expenses of $\$ 6,604$ include the family's share of the auto, plus items that exceed $\$ 250$ and will last more than 1 year. Capital purchases for family living were 8.9 percent of the total cash outlay for all family living expenditures in 2010.

The average farmer in this sample paid \$22,388 in interest in 2010 on operating, machinery, and long-term real estate debts. This interest expense was 5.4 percent of total operating expense (including interest paid) and 4.0 percent of total farm receipts. The average amount of interest paid in 2010 was $\$ 276$ less than the amount paid in 2009. Here are the most significant financial facts about 2010:

- Net farm income plus net nonfarm income was $\$ 118,589$ 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 \$95,162 more than family living expense and taxes for the period 2006 through 2010. The 2007 figure of $\$ 147,967$, the largest positive margin ever, exceeded 2010 by $\$ 29,378$.
- Net nonfarm income averaged \$35,967 and was the highest amount since this study began. This was $\$ 1,409$ more than the 2009 figure of $\$ 34,567$.
- Capital purchases were $\$ 84,055$, compared to $\$ 85,120$ in 2009 , or 1 percent less. They were $\$ 13,684$ higher than

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, 2010a |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2008 | 2007 | High-third | Low-third |
| Number of farms........................ | 1,200 | 1,164 | 1,176 | 1,232 | 172 | 172 |
| Age of operator......................... | 55 | 54 | 54 | 53 | 49 | 48 |
| Number in family...................... | 2.9 | 3.0 | 3.0 | 3.0 | 4.0 | 3.8 |
| Net farm income ....................... | \$176,886 | \$ 76,697 | \$194,207 | \$193,675 | \$229,078 | \$146,955 |
| Source of dollars |  |  |  |  |  |  |
| Net nonfarm income | \$ 35,976 | \$ 34,567 | \$ 30,913 | \$ 31,668 | \$ 48,030 | \$ 27,202 |
| Money borrowed...................... | 361,671 | 340,794 | 368,663 | 306,747 | 577,669 | 266,311 |
| Farm receipts.. | 563,312 | 568,554 | 581,949 | 446,952 | 757,162 | 493,537 |
| Total sources ............................ | \$960,959 | \$943,915 | \$981,525 | \$785,367 | \$1,382,861 | \$787,050 |
| Use of dollars |  |  |  |  |  |  |
| Interest paid.. | \$ 22,388 | \$ 22,664 | \$ 25,387 | \$ 25,681 | \$ 30,044 | \$ 21,093 |
| Cash operating expenses............ | 388,256 | 389,334 | 409,072 | 319,035 | 528,119 | 347,796 |
| Capital farm purchases............... | 84,055 | 85,120 | 82,684 | 59,969 | 127,271 | 72,684 |
| Payments on principal ................ | 327,000 | 319,492 | 332,573 | 274,809 | 500,476 | 255,688 |
| Income \& Social Security taxes .... | 20,064 | 20,671 | 15,770 | 10,964 | 22,041 | 15,271 |
| Net new savings and investments | 44,987 | 34,200 | 43,352 | 28,497 | 59,123 | 26,312 |
| Contributions ............................ | 2,935 | 2,788 | 2,667 | 2,303 | 3,682 | 1,489 |
| Medical expenses...................... | 8,928 | 8,579 | 8,328 | 8,071 | 12,274 | 5,717 |
| Life insurance ........................... | 3,442 | 3,431 | 3,202 | 3,039 | 4,359 | 2,070 |
| Expendables............................... | 52,300 | 50,369 | 50,975 | 46,881 | 86,382 | 34,462 |
| Total living expenses .................. | \$(67,605) | \$ $(65,167)$ | \$(65,172) | \$(60,294) | \$ $(106,697)$ | \$(43,738) |
| Living-capital purchases............ | 6,604 | 7,267 | 7,514 | 6,118 | 9,090 | 4,468 |
| Total uses ............................... | \$960,959 | \$943,915 | \$981,525 | \$785,367 | \$1,382,861 | \$787,050 |

[^1]the average for 2006 through 2010 and at their second highest level ever.

- The amount of money borrowed exceeded principal payments for the 22 nd year in a row. Money borrowed exceeded principal payments by $\$ 34,671$. For the 2006 through 2010 time period, money borrowed has exceeded principal payments by an average of $\$ 28,156$.
- Of the total living expenses-excluding family capital pur-chases-charitable contributions accounted for 4 percent, life insurance 5 percent, medical expenses 13 percent, and family living expendables the remaining 78 percent.
- Income and Social Security taxes paid decreased by $\$ 607$, and the total amount of taxes paid, $\$ 20,064$, was $\$ 4,520$ above the 5-year average for the period 2006 through 2010. The amount of taxes paid was the second highest since 1993.
- Medical expenses averaged $\$ 8,928$. In the last four years the average has exceeded $\$ 8,000$. Expenses were 4.1 percent higher than the year before.

The 2010 records from 3- to 5-member families were sorted into high one-third and low one-third groups according to total living expenses (Table 4). The total cash living expenses for the high-third group averaged $\$ 106,697$, compared with $\$ 43,738$ for the low-third group. The high-third group had gross farm receipts of $\$ 757,162$, compared to $\$ 493,537$ 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 highthird group had $\$ 28,600$ more remaining than the high-third group. The high-third group had a balance remaining of $\$ 139,280$ compared to $\$ 110,680$ 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 1,200 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 $\$ 54,000$ and $\$ 57,400$, or 15 to 20 percent below the average total living expenses of these 1,200 Illinois farms. When the $\$ 35,967$ net nonfarm income for 2010 is used for living expenses, the remaining $\$ 38,233$ must be generated from the farm business to pay the $\$ 74,209$ used for total living expenses, including family living capital purchases. The figure of $\$ 38,233$ amounts to 6.8 percent of total farm receipts.

## Income changes on Illinois farms

The average operator's net farm income for all farms in 2010 was $\$ 209,994$; it was $\$ 86,147$ in 2009 (Table 5). The 2007 and 2008 net farm incomes were the highest for any years 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 25 percent of the gross farm return is used to pay interest, the operator's net farm income is usually negative. Interest paid as a part of gross farm returns for all operators averaged 3.3 percent in 2010, 3.8 percent in 2009, 3.7 percent in 2008, 4.5 percent in 2007 , and 5.0 percent in 2006. The 3.3 percent figure for 2010 was the second 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, hog, beef, and dairy farms having between 340 and 799 acres, or an average of 565 tillable acres. Labor available on farms of this size averaged 11 months on grain farms, 26 months on hog farms, 17 months on beef farms, and 36 months on dairy farms. These tables contain only operator data; landlord data are not included.

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

Table 5. Percent of Illinois Farms and Operator Net Farm Income by Interest Paid as a Percent of Gross Farm Returns, 2006 Through 2010

|  | Interest paid as a percent of gross farm returns |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 1 | 1-4.9 | 5-9.9 | 10-14.9 | 15-19.9 | 20-24.9 | 25+ | All |
| Percent of farms |  |  |  |  |  |  |  |  |
| 2006 ..................... | 18 | 37 | 30 | 10 | 3 | 1 | 1 | 100 |
| 2007 ..................... | 20 | 44 | 26 | 6 | 2 | 1 | 1 | 100 |
| 2008 ..................... | 25 | 48 | 20 | 4 | 1 | . .a | . . a | 100 |
| 2009 ..................... | 26 | 44 | 21 | 5 | 1 | 1 | 1 | 100 |
| 2010 ..................... | 30 | 47 | 17 | 4 | 1 | 1 | . . a | 100 |
| Net farm income |  |  |  |  |  |  |  |  |
| 2006..................... | 285,188 | 125,227 | 100,904 | 60,677 | 25,174 | 11,501 | $(24,478)$ | 134,992 |
| 2007 ..................... | 226,020 | 241,170 | 197,512 | 124,680 | 68,661 | 31,157 | $(2,808)$ | 212,991 |
| 2008 ..................... | 212,170 | 241,542 | 182,070 | 119,682 | 114,869 | (196) | $(35,749)$ | 213,528 |
| 2009 ..................... | 118,671 | 104,255 | 47,945 | 3,037 | $(23,421)$ | $(42,371)$ | $(89,296)$ | 86,147 |
| 2010 ..................... | 233,512 | 227,060 | 166,026 | 91,643 | 67,076 | 26,498 | $(26,522)$ | 209,994 |

[^2]figures for 2010 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. Two important differences in the accrual method of income tax accounting should be noted: the provision for capital gains on livestock sales, which was in effect until 1987, and the inclusion of interest paid as a farm expense. The operator's share of net farm income has the interest expense deducted from it.

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

Grain farms. The operator's net farm income for Illinois grain farms having 340 to 799 acres and no livestock averaged \$119,497 in 2010 (Table 6). This income was $\$ 70,559$ above that of 2009, and \$25,694 above the 5-year average income for 2006 through 2010. The 2010 net farm income was the third highest since the early 1970s. The value of farm production averaged $\$ 359,102$, which was $\$ 57,564$ above 2009 and $\$ 51,535$ above the 2006-10 average. The 2010 value of farm production was the highest since this study began. The value of farm production included a $\$ 47,209$ increase in inventory values compared to 2009 , when the inventory value decreased by $\$ 15,925$. Net cash operating income (adjusted gross) was $\$ 312,200$ , $\$ 32,528$ higher than the 5-year average. Total cash operating expenses were almost the same as the year before, while depreciation of $\$ 22,312$ was 15 percent higher and 39 percent higher than the 2006-10 average. Total cash operating expenses were the second highest on record. Incomes were considerably higher on these farms in 2010 compared to 2009. Higher ending inventories was the main factor for the higher incomes. The average soybean yield on these farms in 2010 was 55 bushels per acre, compared to 49 the year before. The average corn yield was 165 bushels per acre, compared to 181 the previous year. Corn was inventoried $\$ 2.00$ higher at the end of 2010 compared to the beginning; soybeans were inventoried $\$ 3.25$ higher. The higher ending inventory prices caused the value of invento-
ries to increase $\$ 47,209$ at the end of the year compared to the beginning. Crop returns averaged $\$ 755$ per tillable acre in 2010 compared to $\$ 636$ in 2009. Crop expenses per acre decreased 13 percent. This was the second 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 was voluntary and producers that signed up for this program 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 2010 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 2010 was 96.1 percent, up from 95.4 percent in 2009. Corn acres increased slightly from 54.1 percent of tillable acres in 2009 to 54.5 percent in 2010, while soybean acres increased from 41.3 to 41.6 percent.

The average prices received in 2010 for new-crop corn and soybeans of $\$ 4.19$ and $\$ 10.29$, respectively, were higher for corn and soybeans than in the previous year. The average prices received for old-crop corn and soybeans, \$3.59 and $\$ 9.89$, respectively, were higher than the inventory price at the beginning of the year for soybeans and corn, helping to boost crop returns. Capital purchases of $\$ 44,319$ in 2010 were $\$ 3,282$ more than in 2009 and $\$ 7,247$ above the 2006-10 average. Capital purchases were the second highest of any year during the last 10 years.

While accrual net farm incomes averaged \$119,497, net cash incomes averaged $\$ 42,335$. Management returns were $\$ 58,540$ in 2010, compared to negative 5,516 in 2009 and the 2006-10 average of $\$ 40,569$. Management returns for grain farms were higher than all other farm types, except hog farms in 2010. The value of farm production per man of $\$ 411,015$ was the highest for any type of farm. The amount of interest paid of $\$ 11,951$ was the lowest for any type of farm in Tables 6 and 8. Operators for these farms owned 26 percent of the land they farmed, crop-shared 36 percent and cash rented 37 percent. Of the total labor of 11.1 months, only 1.5 months were hired labor. The total months of labor used on these 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 99 percent of their tillable land to grow corn and soybeans, with 55.8 percent of the acres in corn and 42.8 percent in soybeans. The table compares 2010 costs per acre with 2009 costs. In 2010, the total cost per acre averaged $\$ 717$ for corn and $\$ 539$ for soybeans. From 2009
to 2010, the total cost per acre decreased 9 percent for corn and 1 percent for soybeans.

Nonland costs of $\$ 3.07$ per bushel for corn and $\$ 5.63$ for soybeans in 2010 are the most relevant costs for continuing production in the short run, especially where land is free of debt. Total cost to produce a bushel increased for corn and decreased for soybeans from 2009 to 2010. Costs per bushel for corn increased due primarily to lower yields. Total costs per bushel increased 18 cents for corn and decreased 95 cents for soybeans. If the 2010 yield for corn had been 190 bushels, the same as the average for the period from 2007 through 2010, the total cost per bushel would have been $\$ 3.77$. 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 5.0 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 2006 through 2009.

Hog farms. The operator's net farm income in 2010 for Illinois hog farms having 340 to 799 acres averaged negative $\$ 191$,017 (Table 6). Net incomes were $\$ 209,014$ higher than net incomes in 2009 and $\$ 104,063$ higher than the average for the 5-year period from 2006 through 2010. The cash balance on these farms of $\$ 71,483$ was $\$ 64,364$ more than in 2009 and $\$ 27,119$ above the average for the 5 -year period from 2006 through 2010. Inventories on these farms increased $\$ 75,969$ in 2010, following a $\$ 14,436$ decrease in 2009. The value of farm production of $\$ 643,086$ was $\$ 227,391$ more than in 2009 and $\$ 159,412$ higher than the average for the 5-year period from 2006 through 2010. Production per farmer was $\$ 360,013$. Incomes on hog farms increased in 2010 due to higher prices received for pork and

Table 6. Averages for Selected Total Farm Items on 340- to 799-Acre Illinois Grain, Hog, and Beef Farms

|  | Grain farms |  |  | Hog farms |  |  | Beef farms |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2006-10 <br> average | 2010 | 2009 | 2006-10 <br> average | 2010 | 2009 | 2006-10 <br> average |
| Number of farms . | 804 | 801 | 732 | 23 | 24 | 30 | 9 | 11 | 10 |
| Total acres | 596 | 598 | 604 | 588 | 589 | 592 | 585 | 646 | 663 |
| Soil-productivity rating ..... | 82 | 82 | 82 | 81 | 76 | 78 | 73 | 71 | 71 |
| Percent land owned........ | 26 | 25 | 25 | 24 | 19 | 23 | 35 | 42 | 41 |
| Percent land crop shared | 36 | 38 | 39 | 28 | 17 | 25 | 19 | 13 | 15 |
| Percent land cash rented | 37 | 38 | 36 | 49 | 64 | 52 | 46 | 44 | 44 |
| Cash operating income... | 18,958 | \$326,127 | \$283,196 | \$1,182,606 | \$857,116 | \$886,314 | \$859,251 | \$489,911 | \$607,898 |
| Less purch. feed, Ivstk.... | 6,758 | 5,253 | 3,524 | 613,984 | 419,885 | 426,116 | 463,260 | 175,045 | 277,310 |
| Net cash op. income....... | \$312,200 | \$320,874 | \$279,672 | \$568,622 | \$437,232 | \$460,199 | \$395,991 | \$313,866 | \$330,588 |
| Accounts rec. change. | (308) | $(3,410)$ | $(1,595)$ | $(1,504)$ | $(7,101)$ | $(3,355)$ | $(3,791)$ | $(3,035)$ | $(2,631)$ |
| Inventory change........... | 47,209 | $(15,925)$ | 29,490 | 75,969 | $(14,436)$ | 26,831 | 46,882 | $(48,676)$ | $(4,971)$ |
| Value of farm prod .......... $\$$ | \$359,102 | \$301,538 | \$307,567 | \$643,086 | \$415,695 | \$483,674 | \$439,082 | \$262,155 | \$322,986 |
| Total cash op. expenses... | \$225,545 | \$225,487 | \$202,079 | \$446,357 | \$395,024 | \$370,972 | \$309,065 | \$247,078 | \$247,230 |
| Prepaid-unpaid change .. | $(8,253)$ | $(7,711)$ | $(4,354)$ | $(26,039)$ | 11,973 | $(3,022)$ | $(18,853)$ | $(3,995)$ | $(7,374)$ |
| Annual depreciation....... | 22,312 | 19,401 | 16,039 | 31,752 | 26,695 | 28,770 | 27,736 | 23,222 | 23,183 |
| Net farm income ........... | \$119,497 | \$ 48,938 | \$ 93,803 | \$ 191,017 | \$ $(17,997)$ | \$ 86,954 | \$121,135 | \$ $(4,150)$ | \$ 59,948 |
| Net farm inc. per op'er.... | \$116,620 | \$48,286 | \$ 92,286 | \$ 176,743 | \$ $(7,276)$ | \$ 77,103 | \$112,676 | \$ $(4,917)$ | \$ 56,027 |
| Unpaid labor charge ....... | 31,143 | 29,036 | 28,227 | 38,053 | 35,689 | 35,114 | 44,778 | 37,200 | 40,190 |
| Returns to cap. \& mgmt... | 88,355 | 19,902 | 65,576 | 152,964 | $(53,685)$ | 51,840 | 76,357 | 41,350 | 19,758 |
| Interest charge on capital . | 29,814 | 25,418 | 25,008 | 18,530 | 27,044 | 30,035 | 37,737 | 44,082 | 42,956 |
| Management returns .... | \$ 58,540 | \$ $(5,516)$ | \$ 40,569 | \$ 134,434 | \$ (80,730) | \$ 21,805 | \$ 38,620 | \$ $(85,432)$ | \$(23,199) |
| Total cash income ${ }^{\text {a }}$............ | \$312,200 | \$320,874 | \$279,672 | \$568,622 | \$437,232 | \$460,199 | \$395,991 | \$313,866 | \$330,588 |
| Total cash expenditures ${ }^{\text {a }}$... | 269,865 | 266,524 | 239,151 | 497,140 | 430,113 | 415,835 | 336,775 | 292,290 | 288,860 |
| Cash balance................. \$ | \$ 42,335 | \$ 54,350 | \$ 40,521 | \$ 71,483 | \$ 7,119 | \$ 44,364 | \$ 59,216 | \$ 21,575 | \$ 41,727 |
| Capital purchases........... | 44,319 | 41,037 | 37,072 | 50,783 | 35,089 | 44,863 | 27,710 | 45,212 | 41,631 |

[^3]higher crop returns. Depreciation of $\$ 31,752$ was $\$ 5,057$ higher than in 2009.

Management returns were $\$ 134,434$ in 2010 compared to negative $\$ 80,730$ in 2009. Management returns were $\$ 215,164$ more than in 2009 and $\$ 112,629$ above the average for 2006 through 2010. Management returns for this type of farm were the highest for any other type of farm in Illinois. Capital purchases were $\$ 50,783$, which was $\$ 15,694$ higher than in 2009 and $\$ 5,920$ higher than the average for 2006 through 2010. Capital purchases in 2009 averaged $\$ 35,089$. Farm production per one dollar of nonfeed costs of $\$ 1.25$ was the highest for any type of farm in Illinois . Purchased feed and livestock for this group totaled $\$ 613,984, \$ 194,099$ more than 2009. The average interest paid on these farms was $\$ 41,483$. That was the highest of the farms in this size range. Farm operators in this group owned 24 percent of the land they farmed, crop-shared 28 percent, and cash-rented 49 percent. Total labor was 26.0 months, 14.3 months of which was hired. Corn was planted on 59 percent of the acres and soybeans on 37 percent. The average corn yield was 166 bushels per acre and the average soybean yield 58 bushels per acre.

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

|  | Corn |  | Soybeans |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2010 | 2009 |
| Number of farms.. | 628 | 617 | 628 | 617 |
| Acres grown per farm ........ | 684 | 736 | 542 | 513 |
| Yield per acre, bu ............. | 168 | 192 | 60 | 55 |
| Variable nonland costs |  |  |  |  |
| Soil fertility .................... | \$122 | \$185 | \$ 42 | \$ 62 |
| Pesticides ..................... | 44 | 52 | 27 | 31 |
| Seed | 95 | 90 | 61 | 58 |
| Drying and storage . | 35 | 52 | 7 | 8 |
| Machinery repairs, fuel, and hire. | 47 | 45 | 43 | 40 |
| Total, variable costs ..... | \$343 | \$424 | \$180 | \$199 |
| Other nonland costs |  |  |  |  |
| Labor .. | \$ 40 | \$ 40 | \$ 38 | \$ 38 |
| Buildings ..................... | 10 | 10 | 8 | 7 |
| Machinery depreciation . | 38 | 35 | 34 | 31 |
| Nonland interest ........... | 50 | 46 | 45 | 42 |
| Overhead..................... | 35 | 38 | 33 | 36 |
| Total, other costs ........ | \$173 | \$169 | \$158 | \$154 |
| Total, nonland costs..... | \$516 | \$593 | \$338 | \$353 |
| Land costs |  |  |  |  |
| Taxes .......................... | \$ 31 | \$ 29 | \$ 31 | \$ 29 |
| Adjusted net rent........... | 170 | 164 | 170 | 164 |
| Total, land costs................ | \$201 | \$193 | \$201 | \$193 |
| Total, all costs ................ | \$717 | \$786 | \$539 | \$546 |
| Nonland cost per bu .......... | \$3.07 | \$3.09 | \$5.63 | \$6.42 |
| Total, all costs per bu........ | \$4.27 | \$4.09 | \$8.98 | \$9.93 |
| Average yield, past 4 yrs ... | 190 | 193 | 56 | 55 |
| Total, all costs per bu......... | \$3.77 | \$4.07 | \$9.63 | \$9.93 |

Beeffarms. The operator's net farm income for Illinois beef farms having 340 to 799 acres averaged $\$ 121,135$ in 2010 (Table 6). This figure was $\$ 125,285$ higher than the 2009 figure and $\$ 61,187$ higher than the average from 2006 through 2010. Higher market cattle prices and increases in crop returns contributed to the higher earnings. Net farm income for these farms was the lowest of any type of farm in the sort. Feed cost per hundredweight produced decreased 10 percent, while the average price received for market cattle increased 12 percent in 2010 compared to 2009. The price paid for feeder cattle went up about 14 percent from the year before. The value of farm production for this group of farms averaged $\$ 439,082$ or $\$ 176,927$ more than in 2009. Cash operating income averaged $\$ 859,251$, purchased feed and livestock totaled $\$ 463,260$, and net cash operating income averaged $\$ 395,991$.

Management returns of $\$ 38,620$ in 2010 for these farms were the lowest for any type of farm in the acreage range study. Management returns averaged a negative \$23,199 for the period 2006 through 2010. Capital purchases were $\$ 27,710$ in 2010, compared to $\$ 45,212$ in 2009 and $\$ 55,686$ in 2008. The 2006 through 2010 average was $\$ 41,631$. Depreciation of $\$ 27,736$ was $\$ 4,514$ above 2009. Cash operating expenses, excluding purchases of feed and livestock, totaled $\$ 309,065$. The net cash balance for these farms was \$59,216.

Costs and returns to produce beef from 2007 through 2010, 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 2010; but in the prior three 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 35 percent of the land they farmed. They crop-shared 19 percent and cash rented 46 percent. Operators in this group averaged the second lowest amount of interest paid, $\$ 28,088$. They planted 59 percent of their tillable land to corn or corn silage. They also had 17 percent of their tillable land in hay and pasture. These farms used 16.9 months of total labor, with 3.1 of that hired labor. The average corn yield on these farms was 156 bushels per acre and the average soybean yield was 52 bushels per acre. In 2009, corn and soybeans yields on these farms averaged 167 and 46 bushels per acre, respectively.

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

Dairy farms. The operator's net farm income for Illinois dairy farms having 340 to 799 acres averaged 148,265 in 2010 (Table 8). This figure was $\$ 168,034$ above the 2009
figure and $\$ 63,959$ above the 5 -year average from 2006 through 2010. The 2010 net farm income for these farms was the second highest ever for Illinois dairy farms. The highest income was recorded in 2007. The farms averaged \$30,119 hundredweight of milk produced.

Higher milk prices and higher crop returns were the main factors for the increase in earnings. The value of farm production was $\$ 653,700$, the highest for any type of farm in Illinois in 2010. This was $\$ 218,183$ higher than 2009 and $\$ 128,594$ higher than the 2006-2010 average. It was the highest ever for these farms. The value of inventory increased by $\$ 57,578$, while cash operating income increased by $\$ 186,767$. Cash operating expenses totaled $\$ 466,576$, 18 percent more than in 2009. (A detailed breakdown of the cost of producing milk is given in Table 16.) Management returns were $\$ 48,858$. Management returns were $\$ 149,254$ higher than the 2009 figure and $\$ 51,737$ higher than the 5 -year average from 2006 through 2010. Management returns were the second lowest for any type of farm in this acreage range. Capital purchases increased to $\$ 98,263$ in 2010, compared to $\$ 48,664$ in 2009 and $\$ 96,060$ in 2008.

Table 8. Averages for Selected Total Farm Items on 340- to 799-Acre Illinois Dairy Farms

|  | 2010 | 2009 | $\begin{gathered} \hline 2006-10 \\ \text { average } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Number of farms. | 21 | 21 | 22 |
| Total acres | 598 | 551 | 574 |
| Soil productivity rating ........... | 68 | 69 | 69 |
| Percent land owned. | 34 | 34 | 35 |
| Percent land crop shared. | 9 | 5 | 8 |
| Percent land cash rented.. | 56 | 61 | 57 |
| Cash operating income.... | \$740,874 | \$554,107 | \$615,682 |
| Less purch. feed, Ivstk........... | 141,895 | 109,596 | 125,192 |
| Net cash operating income..... | \$598,979 | \$444,511 | \$490,490 |
| Accounts receivable change... | $(2,857)$ | 464 | $(2,527)$ |
| Inventory change | 57,578 | $(9,458)$ | 37,143 |
| Value of farm production. | \$653,700 | \$435,517 | \$525,106 |
| Total cash op. expenses......... | \$466,576 | \$393,528 | \$400,115 |
| Prepaid-unpaid change | $(10,930)$ | 19,881 | 890 |
| Annual depreciation. | 49,789 | 41,876 | 39,794 |
| Net farm income .................. | \$148,265 | \$ $(19,769)$ | \$ 84,306 |
| Net farm income per operator | \$126,420 | \$ $(17,087)$ | \$ 71,585 |
| Unpaid labor charge .............. | 52,464 | 50,190 | 48,827 |
| Returns to capital and mgmt... | 95,801 | $(69,959)$ | 35,479 |
| Interest charge on capital ....... | 46,943 | 30,437 | 38,358 |
| Management returns ............ | \$ 48,858 | \$(100,396) | \$ $(2,879)$ |
| Total cash income ${ }^{\text {a }}$ | \$598,979 | \$444,511 | \$490,490 |
| Total cash expenditures ${ }^{\text {a }}$ | 564,839 | 442,191 | 472,500 |
| Cash balance. | \$ 34,140 | \$ 2,320 | \$ 17,990 |
| Capital purchases................ | 98,263 | 48,664 | 72,386 |

[^4]The 2006 through 2010 average was $\$ 72,386$. This is the highest amount of capital purchases ever for these type of farms. Annual depreciation on these farms averaged $\$ 49,789$. These farms used 36.4 months of total labor, 20.2 months of which was hired labor. The total labor used was the highest for any type of farm in the state. The average interest expense paid by these operators, $\$ 29,620$, was the second highest of any farm type.

Farm operators in this group owned 34 percent of the land they farmed and cash-rented 56 percent. About 14 percent of the land they farmed was in hay ground, the second highest for any type of farm; 50 percent was in corn and corn silage. Over 76 percent of the value of crop produced was fed to livestock. The average corn yield was 160 bushels per acre for these farms was 6 bushels per acre less than in 2009. The average price received for milk in 2010 was 24 percent higher than the average price received in 2009.

## 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 1996 through 2010 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 $\$ 156$ in 2010 were above the 5-year average of $\$ 143$. The 2010 return was below the 1996 through 2010
average. The 2010 return of $\$ 156$ was the second highest 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 $\$ 131$ per $\$ 100$ of feed fed for the most recent 5-year period (2006 through 2010) to be below the previous 5 -year period and only slightly below the 15-year average of $\$ 139$. The 2010 return of $\$ 163$ per $\$ 100$ of feed fed was $\$ 32$ above the most recent 5-year average. Above-average skills are needed in buying, selling, and feeding to meet the competition from other uses for time and money on farms with feeder cattle. Identifying cyclical income movements over a 15-year period in the beef-cattle industry is difficult because this industry is more complex and adjusts more slowly than other livestock enterprises.

The average return above feed and purchased animal costs for dairy enterprises of $\$ 1,506$ per cow in 2010 was $\$ 90$ below the 5-year average of $\$ 1,596$ (Table 10). These returns indicate that the average dairy enterprise has not covered the total estimated cost of production of $\$ 1,884$ per cow from 2005 through 2009. The 2010 return per $\$ 100$ of feed fed of $\$ 168$ was below the past 5-year average of $\$ 178$.

## Beef-herd enterprises

For the beef-herd enterprise, the average returns above the cost of feed and purchased animals for the period from 2006
through 2010 showed great volatility. Producers combining the returns of 2007,2008 , 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 $\$ 54$ during the past 5 years. The 2010 return of $\$ 115$ covered feed costs, but not total nonfeed costs, estimated at $\$ 203$ per cow.

Raising livestock has become more competitive and specialized. Average profit margins are narrow. Fewer farmers are willing to stay in business, because returns in some enterprises barely cover direct operating costs. As an alternative, more producers are specializing in a certain phase of livestock production and entering contractual arrangements to guarantee a certain return. While these contracts may limit upside potential, they can also reduce risk during times of low prices. Expansion plans that require large investments for new facilities should be based on an estimated return high enough to cover all costs. Fluctuations in livestock returns can involve a risk in low-return years. The estimated nonfeed cost for future livestock production also is shown in Table 10.

## Hog enterprises

The information on farrow-to-finish enterprises in Table 11 is based on a sample of 39 enterprises farrowing 10 litters

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 (\$) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996. | 167 | 149 | 186 | 113 | 167 | 79 | 128 | 3.70 |
| 1997........................ | 161 | 122 | 238 | 122 | 169 | 116 | 141 | 2.71 |
| 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 | $\ldots{ }^{\text {. }}$ a | 126 | 138 | 109 | 75 | 3.76 |
| 2010....................... | 156 | 127 | . . ${ }^{\text {a }}$ | 163 | 168 | 135 | 139 | 3.86 |
| Averages |  |  |  |  |  |  |  |  |
| 1996-2010............... | 166 | 134 | . . ${ }^{\text {a }}$ | 139 | 198 | 129 | 128 | 2.78 |
| 1996-2000............... | 164 | 137 | 281 | 129 | 197 | 118 | 134 | 2.52 |
| 2001-2005............... | 191 | 141 | 342 | 158 | 220 | 153 | 138 | 2.19 |
| 2006-2010............... | 143 | 124 | . . a | 131 | 178 | 116 | 114 | 3.63 |

[^5]Table 10. Variations in Returns to Livestock Enterprise Units, 2006 through 2010

|  | 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 |  |  |  |  |  |
| 2006. | \$19.25 | \$12.97 | \$ 9.60 | \$1,501 | \$128 |
| 2007. | 11.04 | 6.67 | 21.37 | 2,360 | 45 |
| 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 |
| Five-year average............................... | \$12.67 | \$ 8.05 | \$16.39 | \$1,596 | \$ 54 |
| Nonfeed costs, 2005 through 2009 |  |  |  |  |  |
| Direct cash.. | \$10.68 ${ }^{\text {b }}$ | \$ $6.41^{\text {c }}$ | \$18.98 ${ }^{\text {b }}$ | \$1,002 ${ }^{\text {b }}$ | \$ $36{ }^{\text {c }}$ |
| Other costs | $9.59{ }^{\text {b }}$ | $6.28{ }^{\text {c }}$ | $9.09{ }^{\text {b }}$ | $882^{\text {b }}$ | $167^{\text {c }}$ |
| Total. | \$20.27 | \$12.68 | \$28.07 | \$1,884 | \$203 |
| Nonfeed costs for future production |  |  |  |  |  |
| Direct cash......................................... | \$14.06 | \$ $8.43{ }^{\text {d }}$ | \$24.98 ${ }^{\text {d }}$ | \$1,483 | \$ 53 |
| Other costs ........................................ | 12.61 | 8.26 | 11.96 | 1,306 | $\underline{247}$ |
| Total ................................................ | \$26.67 | \$16.69 | \$36.94 | \$2,789 | \$300 |

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 from 2005 to 2009.
cIncludes veterinary costs, utilities, fuel, equipment repair costs, and depreciation (from Crop and Livestock Budget, Examples for Illinois). dlncludes interest on purchase cost: one-third year for feeder-pig finishing and one-half year for feeder cattle.
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 2010 was 395 litters. Average pigs weaned per litter of 8.96 , was below the 2009 figure of 9.28 . The 2,275 pounds of pork produced per litter was 121 pounds lower than 2009. The 2010 records summarized here for the "all farms" group show that the return of $\$ 19.71$ above feed costs per 100 pounds of pork produced was $\$ 12.21$ above the 2009 return of $\$ 7.50$. The 2010 return was the highest since 2005.

The 5-year average return above feed costs per 100 pounds produced was $\$ 12.67$ (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 $\$ 20.27$ per 100 pounds to pay for all nonfeed costs in the 2005 through 2009 time period. The return above all costs during this 5-year period of negative $\$ 7.60$ (\$12.67 minus $\$ 20.27$ ) 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 2011. Pork production was down 1.5 percent in 2009 and 2.4 percent in 2010, and it is expected to increase about 1 percent in 2011.

The farrow-to-finish enterprise records for 2010 reported in Table 11 were also sorted by the number of litters produced. The group farrowing 350 or more litters averaged 805 litters. Compared with the average feed cost for all farrow-to-finish enterprises, feed cost per 100 pounds of pork produced was 77 cents lower for the 850 -litter group

The large producers paid slightly less per ton for commercial feed but had better feed conversion. The average price received for hogs sold by large producers, or the net at the farm, was 9 cents less than the average net received by all producers.

A substantial profit margin is required to compensate for the risk and detailed management involved in hog production compared with other resource uses. Large-scale hog production in modern confinement facilities requires high capital investment. The future recovery of this investment is uncertain. The salvage value of confinement hog facilities is low. In addition, acquiring the managerial skills for the large-scale production of hogs in confinement may discourage any rapid expansion of large hog-producing units. Pork production in 2010 decreased 2.4 percent due to higher costs and prior years of high feed costs. Pork production in 2011 is expected to increase compared to 2010. Hog prices have moved up due to decreasing pork production. 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 2007,2008, 2009 and 2010. The value of the feed fed to hogs was more than 75 percent of the crop returns produced on these farms. This intensity

Table 11. Hog Enterprises, 2010 Averages per Farm

|  | All farms | Farrow-to-finish enterprises ${ }^{a}$ |
| :---: | :---: | :---: |
| Number of farms........ | 39 | 15 |
| Pork produced, lbs.. | 899,588 | 1,854,982 |
| Pork prod. per litter, lbs............ | 2,275 | 2,303 |
| Total returns. | \$492,661 | \$1,011,892 |
| Value of feed fed. | \$315,366 | \$636,023 |
| Returns per \$100 feed fed........ | \$156 | \$159 |
| Number litters farrowed ........... | 395 | 805 |
| Pigs farrowed per litter............. | 10.62 | 10.76 |
| Pigs weaned per litter.............. | 8.96 | 9.12 |
| Litters per female year............. | 1.98 | 2.06 |
| Pigs weaned per female year... | 17.90 | 19.04 |
| Number pigs weaned.............. | 3,539 | 7,342 |
| Death loss, \% lbs produced...... | 2.7 | 2.7 |
| Wt per market |  |  |
|  | - - - per | produced--- |
| Price received-market ........... | \$53.55 | \$53.46 |
| Total returns......................... | 54.77 | 54.55 |
| Feed costs........................... | 35.06 | 34.29 |
| Return above feed................ | \$19.71 | \$20.26 |
| Farm grains/complete feed, lbs | 258 | 255 |
| Commercial feed, Ibs............... | 75 | 72 |
| Total concentrates, Ibs............. | 333 | 327 |
| Cost per cwt supplement......... | \$22.77 | \$22.79 |
| Cost per cwt concentrates........ | \$10.53 | \$10.48 |

$\mathrm{a}_{350}$ or more litters per farm.
of livestock feeding indicates a commitment of major resources to the hog enterprise. The producers in this group probably exercise a higher level of management.

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

As reported in Table 12, cash costs of production in 2010 was $\$ 44.62$ per 100 pounds of pork produced. Feed is included as a cash cost, although for most producers a major 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. A one-person farm does not hire much labor, whereas a major share of the labor will be hired on a four-person farm.

Feed costs increased slightly as one compared 2010 to 2009. Total nonfeed costs increased $\$ 2.14$ per 100 pounds of pork produced with maintenance and power expenses representing most of the increase. Feed costs increased as grain prices increased. Total cost of production increased from 2009 to 2010 by $\$ 3.17$ ( 6 percent) per 100 pounds of pork produced.

From 2007 through 2010, the return above all costs averaged a negative $\$ 10.40$ per 100 pounds of pork produced. Management practices, such as the choice of building sys-

Table 12. Average Costs and Returns for Farrow-to-Finish Hog Enterprises, 2007 through 2010

|  | 2010 | 2009 | 2008 | 2007 | $\begin{gathered} 2007-10 \\ \text { average } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms................................................ | 9 | 13 | 14 | 13 | 13 |
| Tillable acres | 720 | 602 | 761 | 462 | 608 |
| Number of litters | 818 | 575 | 614 | 560 | 583 |
| Total returns. | \$53.69 | \$38.83 | \$44.36 | \$40.73 | \$41.31 |
| Cash costs |  |  |  |  |  |
| Feed ................................................................ | \$32.95 | \$31.92 | \$37.07 | \$29.64 | \$32.88 |
| Operating expenses: |  |  |  |  |  |
| Maintenance and power ${ }^{\text {a }}$............................... | \$ 6.39 | \$ 4.62 | \$ 5.27 | \$ 5.32 | \$ 5.07 |
| Livestock expenses....................................... | 3.92 | 3.10 | 3.92 | 3.34 | 3.45 |
| Insurance, taxes, and overhead...................... | 1.36 | 1.68 | 1.73 | 1.32 | 1.58 |
| Total operating expenses. | \$11.67 | \$ 9.40 | \$10.92 | \$ 9.98 | \$10.10 |
| Total cash costs.. | \$44.62 | \$41.32 | \$47.99 | \$39.62 | \$42.98 |
| Other costs |  |  |  |  |  |
| Depreciation ${ }^{\text {b }}$. | \$1.89 | \$1.22 | \$1.26 | \$1.27 | \$1.25 |
| Labor | 4.59 | 5.47 | 4.57 | 5.13 | 5.06 |
| Interest charge on all capital................................ | 1.75 | 1.67 | 2.37 | 3.22 | 2.42 |
| Total other costs ................................................ | \$8.23 | \$8.36 | \$8.20 | \$9.62 | \$8.73 |
| Total nonfeed costs............................................ | \$19.90 | \$ 17.76 | \$ 19.12 | \$19.60 | \$ 18.83 |
| Total all costs.. | \$52.85 | \$ 49.68 | \$ 56.19 | \$49.24 | \$ 51.70 |
| Return above all costs................................... | \$ 0.84 | \$(10.85) | \$(11.83) | \$(8.51) | \$(10.40) |

alncludes utilities, machinery, equipment and building repairs, machine hire, and fuel.
bIncludes machinery, equipment, and building depreciation.
tems, method of transporting hogs to market, 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 2010 on the feeder cattle and feeder pig finishing enterprises are presented in Tables 13 and 14. These enterprise summaries include weights and values on partly finished animals purchased in previous years and on animals purchased during the current year.

The average amount of pork produced per farm from feeder pig enterprises was $1,310,852$ pounds in 2010 (Table 13). At 240 pounds of gain per head, this figure amounted to 5,462 head fed per farm in 2010. These feeder pig enterprises represent those that buy weaner pigs and finish them.

The return above the cost of feed and purchased animals from 2006 through 2010 averaged $\$ 8.05$ per 100 pounds of gain. This return was $\$ 4.63$ below the $\$ 12.68$ of all nonfeed costs for the period 2005 through 2009. (Table 10). The 2010 return of $\$ 15.36$ was $\$ 11.90$ above the 2009 return and $\$ 7.31$ above the 2006 through 2010 return. Higher price received was the main reasons for the lower returns.

Given that a 475-pound unit of gain equals one head of feeder cattle, the average of 168,457 pounds of beef produced per farm in 2010 (Table 13) equals 355 head of feeder cattle per farm. That figure is slightly lower than the year before. The return per $\$ 100$ of feed for feeder cattle enterprises was $\$ 163$ in 2010, in comparison with a 5-year average of $\$ 131$ and a 15 -year average of $\$ 139$ (Table 9). The 2010 returns were the highest in the last 5 years.

The price paid for feeders was $\$ 13.37$ per 100 pounds higher in 2010 than it was in 2009; the price received for cattle sold in 2010 was $\$ 9.78$ higher per 100 pounds than the price received in 2009. The average weight of purchased animals was 670 pounds; the average weight of animals sold was 1,296 pounds. Feed cost was $\$ 57.24$ per 100 pounds produced in 2010; it was $\$ 51.79$ in 2009 . Feed costs increased slightly in 2010 and were considerably above the last 10-year average. Higher market cattle prices did offset an increase in feed costs of $\$ 5.45$ per 100 pounds produced, resulting in higher returns above feed in 2010.

Each 100 pounds of beef produced required 744 pounds of concentrates and 96 pounds of hay. The amount of corn silage used in 2010 averaged 234 pounds; other silage averaged 34 pounds, for a total of 268 pounds. Silage use by the feeder cattle enterprise has decreased in the past 5 years except for 2008, the 10-year average for the period 1991 through 2000 was 528 pounds per 100 pounds of beef produced, compared to 364 pounds for the period 2001 through 2010. The use of 268 pounds of silage per 100 pounds of beef produced in 2010 was the smallest amount fed since 1963. 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 $\$ 16.39$ per 100 pounds of beef produced from 2006 through 2010 (Table 10). During this period, returns ranged from $\$ 1.60$ in 2008 to $\$ 35.94$ in 2010. The returns above feed costs are below the estimated cost of $\$ 28.07$ 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 up because of the extremely higher returns in 2010.

The data in Table 14 show a detailed breakdown for the period from 2007 through 2010 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 826 feeders each year from 2007 through 2010. The 4-year average total cash cost including feed and

## Table 13. Feeder Cattle and Feeder Pig Finishing Enterprises, 2010 Averages per Farm

|  | Feeder cattle | Feeder-pig finishinga |
| :---: | :---: | :---: |
| Number of farms. | 88 | 35 |
| Total lbs produced ...................... | 168,457 | 1,310,852 |
| Total returns. | \$156,955 | \$576,468 |
| Value of feed fed. | \$ 96,419 | \$351,722 |
| Returns per \$100 of feed fed........ | \$163 | \$164 |
| Death loss, \% lbs produced........ | 2.7 | 1.8 |
| Average weight purchased.......... | 670 | 14 |
| Price paid per 100 lbs................. | \$106.86 | \$257.88 |
| Price received per $100 \mathrm{lbs} . . . . . . . . .$. | \$ 92.41 | \$ 55.41 |
| Average weight sold ................... | 1,296 | 267 |
|  | - - per cwt produced - - |  |
| Total returns. | \$93.17 | \$43.98 |
| Feed costs. | \$57.24 | $\underline{26.83}$ |
| Return above feed | \$35.60 | \$17.15 |
| Farm grains/complete feed, lbs .... | 693 | 179 |
| Supplement, lbs......................... | 51 | 85 |
| Total concentrates, Ibs............... | 744 | 264 |
| Hay, lbs..................................... | 96 | . . . ${ }^{\text {b }}$ |
| Corn silage, Ibs.......................... | 234 | . .b |
| Other silage, lbs......................... | 34 | . .b |
| Hay equivalent, lbs ..................... | 200 | . .b |

apurchase weight of 20 lbs and less.
${ }^{\text {b }}$ Data not available.
interest charged on cattle, was $\$ 73.01$ per 100 pounds of beef produced. The average total returns of $\$ 71.13$ for the same period was less than total cash costs by $\$ 1.88$ per 100 pounds produced, or about $\$ 12.01$ 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 $\$ 8.86$ per 100 pounds of beef produced, or $\$ 57$ per feeder ( $\$ 8.86$ multiplied by 6.39 hundredweight of gain per feeder), include depreciation, labor, and interest. Adding the other costs to cash costs results in total costs of $\$ 81.86$ per hundredweight over the 4 -year period. This was $\$ 10.74$ per hundredweight more than the average total returns of \$71.13.

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. Since 2004, herd size has been around 100 cows. The 2010 average herd size is 121.1 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.

Table 14. Average Costs and Returns for Beef-Feeding Enterprises, 2007 through 2010

|  | 2010 | 2009 | 2008 | 2007 | 2007-10 <br> average |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms. | 6 | 6 | 9 | 6 | 7 |
| Average per farm |  |  |  |  |  |
| Tillable acres. | 423 | 423 | 464 | 543 | 463 |
| Hundredweight beef produced | 4,406 | 3,479 | 3,855 | 4,431 | 4,043 |
| Number head at 475-lb gain equivalents.................... | 928 | 732 | 812 | 933 | 826 |
| Average weight purchased, lbs................................. | 529 | 548 | 697 | 660 | 609 |
| Average weight sold, lbs. | 1,216 | 1,264 | 1,296 | 1,214 | 1,248 |
| Price received per 100 lbs sold | \$ 88.40 | \$80.14 | \$ 92.67 | \$ 91.05 | \$88.07 |
| Price paid per 100 lbs purchased............................ | \$102.37 | \$88.80 | \$104.85 | \$103.22 | \$99.81 |
| Cash costs |  |  |  |  |  |
| Feed | \$55.24 | \$58.35 | \$62.34 | \$43.17 | \$54.78 |
| Operating expenses |  |  |  |  |  |
| Maintenance and power ${ }^{\text {b }}$....................................... | \$ 8.11 | \$ 4.39 | \$ 6.21 | \$ 7.99 | \$ 6.68 |
| Livestock expense. | 3.96 | 3.26 | 5.60 | 4.06 | 4.22 |
| Insurance, taxes, and overhead | 1.19 | 1.75 | 2.52 | 2.12 | 1.90 |
|  | 4.69 | 4.64 | 5.13 | 7.31 | 5.44 |
| Total operating expenses........................................... | \$17.95 | \$14.04 | \$19.46 | \$21.48 | \$18.23 |
| Total cash costs. | \$73.19 | \$72.39 | \$81.80 | \$64.65 | \$73.01 |
| Other costs |  |  |  |  |  |
| Depreciation ${ }^{\text {d }}$ | \$ 2.10 | \$ 2.66 | \$ 2.50 | \$ 2.95 | \$ 2.55 |
| Labor | 5.15 | 4.17 | 3.54 | 5.00 | 4.47 |
| Interest on other capital.......................................... | 0.97 | 1.48 | 1.77 | 3.13 | 1.84 |
| Total other costs | \$ 8.22 | \$8.31 | \$ 7.81 | \$ 11.08 | \$ 8.86 |
| Total all costs.. | \$81.41 | \$ 80.70 | \$ 89.61 | \$ 75.73 | \$ 81.86 |
| Total returns ${ }^{\text {e }}$........................................................... | \$84.09 | \$ 64.87 | \$ 70.62 | \$ 64.92 | \$ 71.13 |
| Return above all costs ............................................. | \$ 2.68 | \$(15.83) | \$(18.99) | \$(10.81) | \$(10.74) |

[^6]The return per $\$ 100$ of feed fed to dairy cattle in 2010 was $\$ 168$, the second lowest since 1996 and 1997. The average for the period from 2006 through 2010 was $\$ 178$ (Table 9). In 2010, milk prices per hundredweight increased from $\$ 13.12$ to $\$ 16.30$. From 2009 to 2010, beef prices for market animals sold increased $\$ 7.46$ per hundred pounds, while feed costs decreased 53 cents per milk equivalent. Milk production per cow in 2010 of 20,791 pounds was up 377 pounds from 2009 and the second 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 13 in 2010. 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 104 cows, and the smaller herds averaged 58 cows. The return

## Table 15. Dairy Cattle Enterprises, 2010 Averages per Farm

|  | All farms | High efficiency |  |
| :---: | :---: | :---: | :---: |
|  |  | 40-79 | 80-149 |
|  |  | cows | cows |
| Number of farms. | 79 | 25 | 29 |
| Number of cows. | 121.1 | 57.9 | 103.6 |
| Milk cows dry, \% | 12.9 | 14.7 | 11.5 |
| Animal units in herd | 231 | 109 | 194 |
| Total returns. | \$448,876 | \$185,488 | \$377,322 |
| Value of feed fed. | \$266,460 | \$127,622 | \$231,722 |
| Return per \$100 of feed fed | \$168 | \$145 | \$163 |
| Return above feed per cow . | \$1,506 | \$999 | \$1,405 |
| Total milk produced, cwt ..... | 25,187 | 10,401 | 20,765 |
| Lbs of milk per cow............ | 20,791 | 17,962 | 20,038 |
| Lbs of butterfat per cow ....... | 749 | 658 | 741 |
| Total beef produced, Ibs ...... | 74,162 | 35,369 | 55,419 |
| Pounds of beef per cow....... | 612 | 611 | 535 |
| Death loss, \% lbs produced. | 16.8 | 21.7 | 20.4 |
| Price received for: cwt milk | \$16.30 | \$15.94 | \$16.66 |
| cwt beef ........................... | \$83.81 | \$74.86 | \$88.24 |
| Per cwt milk equivalent ${ }^{\text {a }}$ |  |  |  |
| Feed cost. | \$ 9.84 | \$11.25 | \$ 6.63 |
| Grain/complete feed, Ibs.... | 30 | 36 | 33 |
| Protein and minerals, lbs... | 16 | 18 | 16 |
| Total concentrates, lbs..... | 46 | 54 | 49 |
| Hay and dry roughage, lbs | 21 | 30 | 26 |
| Corn silage, Ibs................ | 86 | 92 | 87 |
| Other silage, lbs................ | 51 | 55 | 39 |
| Pasture days per animal unit | 13 | 18 | 21 |
| Hay equivalent per cow, tons | 8.2 | 8.5 | 7.9 |
| Concentrates per cow, lbs ... | 10,315 | 10,653 | 10,604 |

${ }^{2}$ Milk equivalent equals value of beef produced divided by average price
received per cwt milk plus cwt of milk produced.
above feed costs per cow was higher for the larger herds, at $\$ 1,405$, compared to a return of $\$ 999$ for the smaller herds. The larger herds averaged 20,038 pounds of milk produced per cow, compared to 17,962 pounds for the smaller herds. Feed cost per milk equivalent was lower for the larger herds, at $\$ 6.63$, compared to $\$ 11.25$ for the smaller herds.

The average return above feed costs per cow for all dairy herds was $\$ 1,506$ in 2010 (Table 15). This figure compares with the recent 5 -year average of $\$ 1,596$ per cow (Table 10). For the years 2005 through 2009, the 5 -year average return above feed costs required to pay market prices for all nonfeed costs is estimated to be about $\$ 1,884$ per cow. The estimated return above feed costs currently required to attract new investments for dairy herds is about $\$ 2,789$ 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 2008 through 2010. 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 2006 through 2010. The residual costs, amounting to about 91 percent of the total enterprise costs, were then considered the net cost of producing milk.

The differences between the herds with 40 to 79 cows and those with 80 or more for the period from 2008 through 2010 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 14 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 $\$ 1.43$ lower than for the smaller herds. Total nonfeed costs were 22 cents higher for the larger herds.

In 2010, feed costs per 100 pounds of milk produced increased for small herds (\$1.18) and decreased for large herds ( 38 cents). The cost of feed averaged about 50 percent of total production costs in Illinois dairy enterprises. Compared with 2009 , total nonfeed costs increased 7 percent for the small herds, whereas the large herds decreased by 3 percent. The total cost of producing 100 pounds of milk in 2010 was $\$ 21.24$ for the small herds and $\$ 17.65$ for the large herds. The average price received for milk in 2010 increased for both groups of dairy enterprises. With higher milk prices, returns still did not cover total production costs in 2010. Returns were a negative $\$ 4.78$ per 100 pounds of milk produced for the small herds and a negative $\$ 1.21$ for the large herds. The returns above all costs per 100 pounds of milk produced had averaged $\$ 1.35$ more for the large
group than the small group from 2008 through 2010. 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 31 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 cows. The herd size was 55 cows in 2010 , the same as in 2009. 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 averaged $\$ 135$ in 2010. The returns for the 5 -year period from 2006 through 2010 averaged $\$ 116$, which is below the 15year average of $\$ 129$ for the period from 1996 through 2010 (Table 9). Beef prices received in 2010 averaged $\$ 97.02$ per hundredweight, a increase of $\$ 7.06$ from prices in 2009.

Feed costs per 100 pounds of beef produced decreased by $\$ 2.09$ to $\$ 65.86$ in 2010.

Since 2006, the return above feed costs per cow for the average farmer to feed out calves rather than sell them at weaning has been about $\$ 167$ per cow. Additional returns are needed for the added costs of labor, buildings, and capital required to feed out the calves. In 2010, the return above feed costs per cow for feeding calves to market weight was $\$ 252$ more than selling them at weaning. The difference in returns between the two enterprises for the past 5-year average is $\$ 113$.

## Sheep enterprises

Sheep production is a minor enterprise on Illinois recordkeeping 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 2010 was $\$ 139$ for native flocks. The average return for the 5-year period from 2006 through 2010 is $\$ 114$ per $\$ 100$ feed fed. The pounds of wool and mutton produced per farm have remained fairly constant for the past 10 years. The price received for sheep increased from $\$ 102.57$ per hundredweight in 2009 to $\$ 134.33$ in 2010, while feed costs per hundredweight produced decreased by $\$ 27.91$ to $\$ 70.82$, or 28 percent. Most Illinois farmers who keep sheep do so as a supplemental enterprise in order to market nonsalable feeds and labor.

Table 16. Average Milk Production Costs and Returns by Size of Herd, 2008 through 2010

|  | 40-79 cows in herd |  |  | 80 or more cows in herd |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2008 | 2010 | 2009 | 2008 |
| Number of farms | 7 | 14 | 13 | 18 | 26 | 24 |
| Tillable acres ....................................... | 170 | 196 | 207 | 351 | 445 | 368 |
| Number of cows.................................... | 57.1 | 58.8 | 56.9 | 187.2 | 192.3 | 180.5 |
| Milk per cow, lbs . | 18,474 | 18,734 | 18,579 | 22,982 | 22,503 | 21,227 |
|  |  |  | per | ds of mi | ed |  |
| Price received. | \$16.46 | \$13.16 | \$19.15 | \$16.44 | \$13.39 | \$19.25 |
| Cash costs |  |  |  |  |  |  |
| Feed.. | \$11.60 | \$10.42 | \$10.44 | \$ 8.56 | \$ 8.94 | \$10.07 |
| Operating expenses |  |  |  |  |  |  |
| Maintenance and power ${ }^{\text {a }}$. | 2.29 | 2.31 | 2.36 | 2.03 | 1.99 | 2.42 |
| Livestock expense................................. | 2.56 | 2.14 | 2.24 | 2.84 | 2.94 | 2.44 |
| Insurance, taxes, and overhead ............... | 0.20 | 0.31 | 0.39 | 0.20 | 0.26 | 0.32 |
| Total operating expenses......................... | \$ 5.05 | \$ 4.76 | \$ 4.99 | \$ 5.07 | \$ 5.19 | \$ 5.18 |
| Total cash costs..................................... | \$16.65 | \$15.18 | \$15.43 | \$13.63 | \$14.13 | \$15.25 |
| Other costs |  |  |  |  |  |  |
| Depreciation ${ }^{\text {b }}$....................................... | \$ 0.85 | \$ 0.80 | \$ 0.65 | \$ 0.65 | \$ 0.76 | \$ 0.81 |
| Labor ................................................. | 2.85 | 2.55 | 2.63 | 2.47 | 2.50 | 2.70 |
| Interest charge on all capital. | 0.89 | 0.90 | 0.95 | 0.90 | 0.89 | 1.11 |
| Total other costs .................................... | \$ 4.59 | \$ 4.25 | \$ 4.23 | \$ 4.02 | \$ 4.15 | \$ 4.62 |
| Total nonfeed costs................................ | \$ 9.64 | \$ 9.01 | \$ 9.22 | \$ 9.09 | \$ 9.34 | \$ 9.80 |
| Total all costs ....................................... | \$21.24 | \$19.43 | \$19.66 | \$17.65 | \$18.28 | \$19.87 |
| Return above all costs. | \$(4.78) | \$(6.27) | \$(0.51) | \$(1.21) | \$(4.89) | \$(0.62) |

[^7]
## Table 17. Beef-Cow Enterprises, 2010 Averages per Farm

|  | All farms | Calves sold | Calves fed out |
| :---: | :---: | :---: | :---: |
| Number of farms.......... | 156 | 62 | 36 |
| Number of cows in herd.. | 55 | 59 | 54 |
| Animal units in herd. | 80 | 81 | 88 |
| Total lbs produced | 38,912 | 26,984 | 60,945 |
| Beef per cow, lbs ................... | 705 | 458 | 1,123 |
| Total returns. | \$36,374 | \$25,991 | \$55,876 |
| Value of feed fed. | \$25,625 | \$19,224 | \$35,939 |
| Return per \$100 feed fed... | \$ 142 | \$135 | \$155 |
| Return above feed per cow ..... | \$(195) | \$115 | \$367 |
| Death loss, lbs. | 2,172 | 2,516 | 2,619 |
| \% lbs produced. | 5.6 | 9.3 | 4.3 |
| Weight per animal sold, Ibs ..... | 714 | 542 | 1,049 |
| Price per cwt sold-market...... | \$ 97.02 | \$100.20 | \$ 93.60 |
|  | -- - per | wt produ |  |
| Feed costs. | \$65.86 | \$71.24 | \$58.97 |
| Grain/complete feed, lbs... | 167 | 146 | 237 |
| Protein and minerals, lbs. | 75 | 101 | 68 |
| Total concentrates, lbs....... | 242 | 247 | 305 |
| Hay and dry roughage, lbs ...... | 731 | 957 | 479 |
| Corn silage, lbs.. | 311 | 116 | 308 |
| Other silage, Ibs.... | 70 | 51 | 37 |
| Pasture days... | 26 | 42 | 19 |
| Pasture days per animal unit... | 129 | 138 | 134 |
| Hay equivalent per cow, tons... | 5.0 | 4.4 | 5.7 |

## Table 18. Sheep Enterprises, 2010 Averages per Farm (Native Flocks)

| Number of farms.. | 5 |
| :---: | :---: |
| Number of ewes in flock | 43 |
| Wool and mutton produced, Ibs | 8,957 |
| Total returns. | \$8,801 |
| Value of feed fed. | \$6,343 |
| Return per \$100 of feed fed. | \$139 |
| Percent lamb crop | 139 |
| Death loss, Ibs. | 742 |
| Percent lbs produced. | 8.3 |
| Weight per market animal sold, lbs | 125 |
| -------- per cwt produced |  |
| Price received-market.. | \$134.33 |
| Feed costs. | \$ 70.82 |
| Concentrates, libs. | 384 |
| Hay, lbs.. | 482 |
| Pasture days.. | 9 |
| Hay equivalent, lbs | 660 |

## 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. 2010 Operator Average Returns, Costs, and Financial Summary by Size and by Management Returns for Northern and Central

| Range in size (total acres) Management returns Number of farms | $\begin{array}{r} 180-499 \\ 190 \\ \hline \end{array}$ | $\begin{array}{r} 500-799 \\ 243 \\ \hline \end{array}$ | $\begin{array}{r} 800-1,199 \\ 262 \\ \hline \end{array}$ | $\begin{array}{r} >1,199 \\ 335 \\ \hline \end{array}$ | Your farm | All farms$1,030$ | 800-1,199 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Low 33\% | High 33\% |
|  |  |  |  |  |  |  | 86 | 86 |
| Total acres in farm | 372 | 674 | 1,019 | 1,976 |  | 1,129 | 1,000 | 1,024 |
| Acres of tillable land | 358 | 655 | 988 | 1,931 |  | 1,100 | 968 | 998 |
| Operator tillable acres | 292 | 494 | 738 | 1,510 |  | 849 | 737 | 711 |
| Soil rating on tillable land | 91 | 92 | 91 | 91 |  | 91 | 91 | 91 |
| Percent land owned | 29 | 17 | 15 | 12 |  | 17 | 16 | 14 |
| Percent land crop shared | 34 | 49 | 49 | 44 |  | 45 | 46 | 57 |
| Percent land cash rented | 37 | 34 | 35 | 44 |  | 38 | 38 | 29 |
| Months of hired labor | 1.0 | 1.4 | 3.1 | 9.1 |  | 4.3 | 4.1 | 2.6 |
| Total months labor | 7.9 | 11.2 | 13.9 | 22.1 |  | 14.8 | 14.8 | 12.9 |
| Dollar returns |  |  |  |  |  |  |  |  |
| Crop returns | 233,877 | 394,815 | 590,331 | 1,215,803 |  | 681,880 | 531,571 | 617,155 |
| Livestock returns above feed | -5 | 143 | 68 | 145 |  | 97 | 245 | 12 |
| Custom work | 1,578 | 3,119 | 5,125 | 14,238 |  | 6,962 | 5,634 | 4,684 |
| Other farm receipts | 4,061 | 6,119 | 10,450 | 19,745 |  | 11,273 | 14,551 | 9,297 |
| Value of farm production | 239,511 | 404,196 | 605,974 | 1,249,931 |  | 700,212 | 552,001 | 631,148 |
| Dollar costs |  |  |  |  |  |  |  |  |
| Crop expenses | 57,509 | 100,811 | 152,330 | 314,075 |  | 175,291 | 162,033 | 134,488 |
| Power and equipment | 34,918 | 53,671 | 77,805 | 148,749 |  | 87,274 | 88,210 | 63,638 |
| Building and fence | 11,744 | 18,090 | 26,119 | 48,218 |  | 28,761 | 27,837 | 22,702 |
| Labor | 20,876 | 27,757 | 33,285 | 56,661 |  | 37,295 | 35,462 | 29,714 |
| Insurance and miscellaneous | 14,549 | 23,399 | 37,216 | 78,870 |  | 43,323 | 47,597 | 29,905 |
| Livestock services and supplies | 143 | 322 | 289 | 619 |  | 377 | 438 | 273 |
| Interest on nonland capital | 12,236 | 21,612 | 33,783 | 66,498 |  | 37,577 | 35,092 | 31,825 |
| Real estate taxes | 3,448 | 4,104 | 5,250 | 7,862 |  | 5,497 | 4,997 | 5,114 |
| Cash rent | 23,391 | 41,853 | 68,267 | 193,855 |  | 94,604 | 76,742 | 51,738 |
| Other land charges | 27,799 | 44,402 | 62,955 | 93,849 |  | 62,141 | 65,109 | 61,713 |
| Total nonfeed costs | 206,614 | 336,019 | 497,300 | 1,009,258 |  | 572,139 | 543,517 | 431,111 |
| Capital account adjustment | 1,216 | 2,176 | 5,180 | 4,138 |  | 3,401 | 2,289 | 10,244 |
| Management returns | 38,330 | 77,585 | 125,323 | 272,267 |  | 145,806 | 24,075 | 220,338 |
| Farm production per $\$ 1.00$ of nonfeed costs | 1.16 | 1.20 | 1.22 | 1.24 |  | 1.22 | 1.02 | 1.46 |
| Farm production per man | 286,057 | 502,014 | 694,150 | 929,301 |  | 650,023 | 602,288 | 779,344 |
| Financial summary |  |  |  |  |  |  |  |  |
| Cash operating income | 213,107 | 350,808 | 538,303 | 1,109,950 |  | 620,005 | 543,632 | 507,869 |
| Inventory change | 27,329 | 54,939 | 69,465 | 150,773 |  | 84,710 | 9,413 | 125,684 |
| Accts. receivable (net change) | -705 | -976 | -1,292 | -2,339 |  | -1,450 | 160 | -2,276 |
| Less purchased feed | 70 | 75 | 263 | 3,684 |  | 1,296 | 672 | 46 |
| Less purchased livestock | 16 | 465 | 244 | 366 |  | 294 | 537 | 132 |
| Gross farm returns | 239,645 | 404,231 | 605,969 | 1,254,336 |  | 701,677 | 551,995 | 631,100 |
| Cash operating expenses | 147,505 | 247,778 | 375,354 | 817,407 |  | 447,000 | 407,468 | 318,502 |
| Prepaid expenses (- if increased) | -5,542 | -6,814 | -10,168 | -25,637 |  | -13,554 | -3,321 | -10,220 |
| Accts. payable (+ if increased) | -491 | -991 | -4,038 | -3,348 |  | -2,440 | -3,101 | -4,498 |
| Total operating expenses | 141,472 | 239,974 | 361,148 | 788,422 |  | 431,005 | 401,047 | 303,785 |
| Income before depreciation | 98,173 | 164,257 | 244,821 | 465,914 |  | 270,672 | 150,948 | 327,316 |
| Less depreciation | 15,006 | 26,592 | 45,002 | 84,783 |  | 48,064 | 51,772 | 38,823 |
| Capital account adjustment | 1,216 | 2,176 | 5,180 | 4,138 |  | 3,401 | 2,289 | 10,244 |
| Net farm income | 84,383 | 139,842 | 204,998 | 385,269 |  | 226,009 | 101,465 | 298,736 |
| Net farm income per operator | 81,864 | 136,982 | 197,416 | 315,390 |  | 200,213 | 96,794 | 287,178 |
| Labor \& mgt. income per operator | 58,488 | 107,274 | 154,321 | 257,431 |  | 159,079 | 56,160 | 243,914 |

Table 19a. 2010 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Management Returns for Northern

| Range in size (total acres) Management returns Number of farms | $\begin{array}{r} 180-499 \\ 190 \\ \hline \hline \end{array}$ | $\begin{array}{r} 500-799 \\ 243 \\ \hline \end{array}$ | $\begin{array}{r} 800-1,199 \\ 262 \\ \hline \end{array}$ | $>1,199$ | Your farm | All farms$1,030$ | 800-1,199 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Low 33\% | High 33\% |
|  |  |  |  |  |  |  | 86 | 86 |
| Selected returns and costs per operator tillable acre |  |  |  |  |  |  |  |  |
| Crop returns | 801.37 | 799.51 | 800.30 | 804.99 |  | 802.97 | 721.38 | 868.19 |
| Livestock returns above feed | -0.02 | 0.29 | 0.09 | 0.10 |  | 0.11 | 0.33 | 0.02 |
| Custom work, other receipts | 19.32 | 18.71 | 21.12 | 22.50 |  | 21.47 | 27.39 | 19.67 |
| Value of farm production | 820.67 | 818.51 | 821.51 | 827.58 |  | 824.56 | 749.10 | 887.88 |
| Soil fertility | 79.82 | 88.06 | 89.38 | 90.36 |  | 89.16 | 94.49 | 82.98 |
| Pesticides | 37.94 | 37.83 | 35.55 | 35.80 |  | 36.16 | 38.61 | 32.40 |
| Seed and other crop expense | 79.29 | 78.25 | 81.59 | 81.79 |  | 81.10 | 86.79 | 73.82 |
| Crop total | 197.05 | 204.15 | 206.51 | 207.95 |  | 206.42 | 219.89 | 189.19 |
| Light vehicle and utilities | 14.52 | 10.18 | 7.78 | 6.35 |  | 7.71 | 9.59 | 6.87 |
| Machinery repairs, supplies | 28.42 | 26.96 | 24.92 | 20.14 |  | 22.66 | 29.34 | 19.76 |
| Machinery hire, lease | 18.71 | 14.26 | 10.44 | 10.94 |  | 11.78 | 10.20 | 8.93 |
| Fuel and oil | 19.58 | 20.48 | 20.67 | 21.81 |  | 21.23 | 21.60 | 18.60 |
| Machinery depreciation | 38.41 | 36.81 | 41.66 | 39.24 |  | 39.39 | 48.98 | 35.37 |
| Power and equipment total | 119.65 | 108.68 | 105.48 | 98.49 |  | 102.77 | 119.71 | 89.52 |
| Drying and storage | 23.11 | 22.95 | 24.16 | 20.71 |  | 21.93 | 23.12 | 23.18 |
| Building repair and rent | 9.77 | 7.35 | 5.53 | 5.04 |  | 5.77 | 8.03 | 3.94 |
| Building depreciation | 7.36 | 6.33 | 5.72 | 6.17 |  | 6.17 | 6.63 | 4.82 |
| Building total | 40.24 | 36.63 | 35.41 | 31.93 |  | 33.87 | 37.78 | 31.94 |
| Labor, unpaid | 63.32 | 48.90 | 35.27 | 21.70 |  | 31.07 | 35.28 | 33.82 |
| Labor, paid | 8.21 | 7.30 | 9.86 | 15.81 |  | 12.85 | 12.84 | 7.98 |
| Labor total | 71.53 | 56.21 | 45.12 | 37.52 |  | 43.92 | 48.12 | 41.80 |
| Insurance and miscellaneous | 49.85 | 47.38 | 50.45 | 52.22 |  | 51.02 | 64.59 | 42.07 |
| Livestock services and supplies | 0.49 | 0.65 | 0.39 | 0.41 |  | 0.44 | 0.59 | 0.38 |
| Interest on nonland capital | 41.93 | 43.76 | 45.80 | 44.03 |  | 44.25 | 47.62 | 44.77 |
| Other costs total | 92.27 | 91.80 | 96.64 | 96.66 |  | 95.71 | 112.81 | 87.22 |
| Land charge | 187.22 | 182.98 | 185.01 | 195.70 |  | 191.05 | 199.28 | 166.79 |
| Total nonfeed costs | 707.95 | 680.45 | 674.18 | 668.23 |  | 673.74 | 737.59 | 606.47 |
| Capital account adjustment | 4.16 | 4.41 | 7.02 | 2.74 |  | 4.01 | 3.11 | 14.41 |
| Management returns | 116.88 | 142.47 | 154.35 | 162.09 |  | 154.82 | 14.62 | 295.82 |
| Percent crop returns fed | 0.01 | 0.03 | 0.03 | 0.02 |  | 0.02 | 0.04 | 0.01 |
| Capital purchases | 25,077 | 53,022 | 82,911 | 163,830 |  | 91,509 | 92,644 | 81,937 |
| Interest paid | 6,740 | 11,275 | 16,328 | 33,979 |  | 19,108 | 19,879 | 12,397 |
| Percent tillable land in |  |  |  |  |  |  |  |  |
| Corn and corn silage | 54.7 | 54.9 | 55.6 | 58.2 |  | 56.9 | 57.4 | 53.1 |
| Soybeans | 44.0 | 42.8 | 42.2 | 39.3 |  | 40.7 | 40.6 | 43.9 |
| Wheat | 0.1 | 0.2 | 0.2 | 0.1 |  | 0.2 | 0.3 | 0.2 |
| Other small grains | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |
| CRP acres | 0.2 | 0.3 | 0.3 | 0.2 |  | 0.3 | 0.4 | 0.3 |
| All hay and pasture | 0.2 | 0.3 | 0.2 | 0.1 |  | 0.1 | 0.2 | 0.1 |
| Crop yields, bushels per acre |  |  |  |  |  |  |  |  |
| Corn | 172 | 173 | 171 | 171 |  | 171 | 160 | 179 |
| Soybeans | 58 | 60 | 60 | 60 |  | 59 | 58 | 60 |
| Wheat | 64 | 63 | 72 | 70 |  | 69 | 67 | 76 |
| Prices received |  |  |  |  |  |  |  |  |
| Corn (old crop) | 3.58 | 3.60 | 3.59 | 3.60 |  | 3.60 | 3.55 | 3.57 |
| Corn (new crop) | 4.28 | 4.24 | 4.23 | 4.22 |  | 4.23 | 4.13 | 4.17 |
| Soybeans (old crop) | 9.91 | 9.93 | 10.04 | 10.06 |  | 10.02 | 10.03 | 10.03 |
| Soybeans (new crop) | 10.33 | 10.27 | 10.32 | 10.30 |  | 10.30 | 10.07 | 10.55 |

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. 2010 Operator Average Returns, Costs, and Financial Summary by Size and by Management Returns for Northern and Central

| Range in size (total acres) Management returns Number of farms | $\begin{array}{r} 180-499 \\ 180 \\ \hline \end{array}$ | $\begin{array}{r} 500-799 \\ 160 \\ \hline \end{array}$ | $\begin{array}{r} \hline 800-1,199 \\ 163 \\ \hline \end{array}$ | $>1,199$ | Your farm | All farms$745$ | 800-1,199 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Low 33\% | High 33\% |
|  |  |  |  |  |  |  | 54 | 54 |
| Total acres in farm | 360 | 670 | 1,030 | 2,048 |  | 1,121 | 1,012 | 1,028 |
| Acres of tillable land | 340 | 644 | 982 | 1,977 |  | 1,078 | 961 | 996 |
| Operator tillable acres | 297 | 533 | 783 | 1,624 |  | 885 | 764 | 778 |
| Soil rating on tillable land | 77 | 78 | 78 | 78 |  | 78 | 77 | 79 |
| Percent land owned | 38 | 26 | 16 | 14 |  | 23 | 18 | 16 |
| Percent land crop shared | 26 | 34 | 40 | 37 |  | 34 | 40 | 43 |
| Percent land cash rented | 37 | 40 | 44 | 49 |  | 43 | 42 | 41 |
| Months of hired labor | 0.7 | 1.3 | 2.7 | 8.2 |  | 3.7 | 4.1 | 2.0 |
| Total months labor | 8.9 | 11.2 | 14.1 | 22.0 |  | 14.8 | 15.9 | 12.7 |
| Dollar returns |  |  |  |  |  |  |  |  |
| Crop returns | 222,163 | 389,897 | 578,324 | 1,206,778 |  | 655,946 | 513,916 | 622,026 |
| Livestock returns above feed | 112 | 191 | 716 | 843 |  | 499 | -45 | 2,084 |
| Custom work | 2,345 | 3,754 | 5,803 | 16,371 |  | 7,960 | 5,430 | 5,050 |
| Other farm receipts | 2,541 | 5,701 | 7,757 | 17,967 |  | 9,372 | 7,860 | 9,212 |
| Value of farm production | 227,161 | 399,543 | 592,600 | 1,241,959 |  | 673,777 | 527,162 | 638,372 |
| Dollar costs |  |  |  |  |  |  |  |  |
| Crop expenses | 56,309 | 106,829 | 156,512 | 327,880 |  | 177,297 | 166,055 | 140,822 |
| Power and equipment | 38,483 | 61,069 | 83,154 | 174,894 |  | 97,418 | 88,585 | 72,871 |
| Building and fence | 11,883 | 17,976 | 24,459 | 45,290 |  | 26,795 | 23,510 | 24,801 |
| Labor | 24,644 | 30,156 | 36,342 | 60,727 |  | 40,108 | 42,113 | 31,522 |
| Insurance and miscellaneous | 14,141 | 24,318 | 36,028 | 81,419 |  | 42,969 | 37,042 | 34,955 |
| Livestock services and supplies | 290 | 272 | 414 | 615 |  | 419 | 519 | 472 |
| Interest on nonland capital | 12,244 | 21,398 | 32,520 | 69,692 |  | 37,307 | 31,582 | 32,141 |
| Real estate taxes | 3,416 | 3,917 | 3,944 | 8,216 |  | 5,198 | 4,356 | 3,960 |
| Cash rent | 20,311 | 42,674 | 70,893 | 186,422 |  | 90,139 | 66,036 | 66,543 |
| Other land charges | 26,187 | 40,411 | 51,777 | 91,231 |  | 55,969 | 56,395 | 51,085 |
| Total nonfeed costs | 207,909 | 349,020 | 496,042 | 1,046,385 |  | 573,620 | 516,193 | 459,171 |
| Capital account adjustment | 1,233 | 1,988 | 4,986 | 7,169 |  | 4,145 | 4,212 | 7,800 |
| Management returns | 24,540 | 59,623 | 113,439 | 230,835 |  | 118,536 | 26,667 | 199,044 |
| Farm production per \$1.00 of nonfeed costs | 1.09 | 1.14 | 1.19 | 1.19 |  | 1.17 | 1.02 | 1.39 |
| Farm production per man | 254,692 | 451,956 | 635,791 | 908,698 |  | 592,881 | 525,288 | 730,398 |
| Financial summary |  |  |  |  |  |  |  |  |
| Cash operating income | 201,421 | 360,151 | 533,700 | 1,109,390 |  | 603,149 | 514,121 | 537,068 |
| Inventory change | 26,628 | 39,525 | 59,809 | 136,646 |  | 72,395 | 12,580 | 101,265 |
| Accts. receivable (net change) | -56 | 1,344 | 405 | 2,447 |  | 1,159 | 1,468 | 2,968 |
| Less purchased feed | 499 | 1,346 | 218 | 3,469 |  | 1,584 | 169 | 457 |
| Less purchased livestock | 244 | 103 | 880 | 595 |  | 467 | 133 | 2,523 |
| Gross farm returns | 227,250 | 399,571 | 592,817 | 1,244,419 |  | 674,651 | 527,868 | 638,320 |
| Cash operating expenses | 143,124 | 263,411 | 382,235 | 839,669 |  | 447,534 | 401,305 | 354,760 |
| Prepaid expenses (- if increased) | -4,804 | -9,860 | -15,270 | -20,016 |  | -13,121 | -15,654 | -19,029 |
| Accts. payable (+ if increased) | -355 | -1,898 | -1,241 | -2,625 |  | -1,617 | -1,604 | -1,581 |
| Total operating expenses | 137,965 | 251,653 | 365,725 | 817,028 |  | 432,795 | 384,047 | 334,150 |
| Income before depreciation | 89,285 | 147,917 | 227,092 | 427,391 |  | 241,856 | 143,821 | 304,170 |
| Less depreciation | 16,484 | 26,675 | 43,289 | 90,544 |  | 48,594 | 45,332 | 39,032 |
| Capital account adjustment | 1,233 | 1,988 | 4,986 | 7,169 |  | 4,145 | 4,212 | 7,800 |
| Net farm income | 74,034 | 123,231 | 188,789 | 344,016 |  | 197,406 | 102,700 | 272,938 |
| Net farm income per operator | 74,065 | 121,378 | 182,599 | 296,691 |  | 180,289 | 96,443 | 265,273 |
| Labor \& mgt. income per operator | 51,189 | 90,979 | 145,202 | 238,369 |  | 141,106 | 60,324 | 227,272 |

Table 20a. 2010 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Management Returns for Northern

| Range in size (total acres) Management returns | 180-499 | 500-799 | 800-1,199 | $>1,199$ | Your farm | All farms$745$ | 800-1,199 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Low 33\% | High 33\% |
| Number of farms | 180 | 160 | 163 | 242 |  |  | 54 | 54 |
| Selected returns and costs |  |  |  |  |  |  |  |  |
| Crop returns | 748.21 | 731.85 | 738.73 | 742.95 |  | 741.12 | 672.47 | 799.41 |
| Livestock returns above feed | 0.38 | 0.36 | 0.91 | 0.52 |  | 0.56 | -0.06 | 2.68 |
| Custom work, other receipts | 16.46 | 17.75 | 17.32 | 21.14 |  | 19.58 | 17.39 | 18.33 |
| Value of farm production | 765.04 | 749.96 | 756.96 | 764.61 |  | 761.27 | 689.80 | 820.41 |
| Soil fertility | 80.14 | 88.32 | 85.29 | 86.36 |  | 85.90 | 99.43 | 70.84 |
| Pesticides | 34.72 | 35.32 | 37.11 | 38.03 |  | 37.23 | 39.05 | 35.09 |
| Seed and other crop expense | 74.78 | 76.88 | 77.52 | 77.47 |  | 77.19 | 78.81 | 75.05 |
| Crop total | 189.64 | 200.52 | 199.92 | 201.86 |  | 200.32 | 217.29 | 180.98 |
| Light vehicle and utilities | 14.64 | 10.53 | 9.08 | 6.66 |  | 8.28 | 10.07 | 8.88 |
| Machinery repairs, supplies | 30.42 | 30.17 | 23.66 | 23.10 |  | 24.72 | 25.68 | 20.77 |
| Machinery hire, lease | 21.41 | 17.15 | 14.10 | 15.62 |  | 15.99 | 17.31 | 11.21 |
| Fuel and oil | 21.23 | 19.73 | 19.61 | 22.65 |  | 21.57 | 20.63 | 17.67 |
| Machinery depreciation | 41.90 | 37.06 | 39.77 | 39.64 |  | 39.51 | 42.23 | 35.12 |
| Power and equipment total | 129.60 | 114.63 | 106.22 | 107.67 |  | 110.07 | 115.92 | 93.65 |
| Drying and storage | 21.68 | 19.99 | 19.46 | 15.19 |  | 17.17 | 17.91 | 20.53 |
| Building repair and rent | 8.69 | 7.16 | 5.64 | 4.82 |  | 5.59 | 6.07 | 5.29 |
| Building depreciation | 9.65 | 6.59 | 6.14 | 7.87 |  | 7.51 | 6.78 | 6.06 |
| Building total | 40.02 | 33.74 | 31.24 | 27.88 |  | 30.27 | 30.76 | 31.87 |
| Labor, unpaid | 79.31 | 50.64 | 37.38 | 22.71 |  | 33.75 | 40.00 | 34.71 |
| Labor, paid | 3.68 | 5.97 | 9.04 | 14.67 |  | 11.57 | 15.10 | 5.80 |
| Labor total | 83.00 | 56.60 | 46.42 | 37.39 |  | 45.32 | 55.11 | 40.51 |
| Insurance and miscellaneous | 47.63 | 45.65 | 46.02 | 50.13 |  | 48.55 | 48.47 | 44.92 |
| Livestock services and supplies | 0.98 | 0.51 | 0.53 | 0.38 |  | 0.47 | 0.68 | 0.61 |
| Interest on nonland capital | 41.24 | 40.16 | 41.54 | 42.91 |  | 42.15 | 41.33 | 41.31 |
| Other costs total | 89.84 | 86.32 | 88.09 | 93.41 |  | 91.17 | 90.47 | 86.84 |
| Land charge | 168.10 | 163.30 | 161.73 | 176.00 |  | 170.95 | 165.90 | 156.26 |
| Total nonfeed costs | 700.20 | 655.12 | 633.62 | 644.21 |  | 648.11 | 675.45 | 590.11 |
| Capital account adjustment | 4.15 | 3.73 | 6.37 | 4.41 |  | 4.68 | 5.51 | 10.02 |
| Management returns | 68.99 | 98.57 | 129.71 | 124.82 |  | 117.85 | 19.86 | 240.33 |
| Percent crop returns fed | 0.02 | 0.02 | 0.04 | 0.03 |  | 0.03 | 0.04 | 0.05 |
| Capital purchases | 30,019 | 46,347 | 77,832 | 182,043 |  | 93,369 | 69,429 | 82,943 |
| Interest paid | 8,593 | 14,794 | 17,777 | 45,331 |  | 23,868 | 19,816 | 16,755 |
| Percent tillable land in |  |  |  |  |  |  |  |  |
| Corn and corn silage | 55.1 | 56.6 | 55.7 | 58.3 |  | 57.3 | 58.3 | 54.5 |
| Soybeans | 42.2 | 40.5 | 41.5 | 38.4 |  | 39.6 | 37.6 | 43.6 |
| Wheat | 0.7 | 0.3 | 0.4 | 0.3 |  | 0.4 | 0.6 | 0.2 |
| Other small grains | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |
| CRP acres | 0.9 | 0.9 | 0.4 | 0.5 |  | 0.6 | 0.6 | 0.4 |
| All hay and pasture | 0.3 | 0.4 | 0.4 | 0.3 |  | 0.3 | 0.8 | 0.2 |
| Crop yields, bushels per acre |  |  |  |  |  |  |  |  |
| Corn | 165 | 159 | 163 | 164 |  | 163 | 152 | 172 |
| Soybeans | 54 | 52 | 55 | 55 |  | 54 | 52 | 56 |
| Wheat | 64 | 60 | 66 | 58 |  | 61 | 50 | 58 |
| Prices received |  |  |  |  |  |  |  |  |
| Corn (old crop) | 3.59 | 3.57 | 3.60 | 3.63 |  | 3.62 | 3.57 | 3.65 |
| Corn (new crop) | 4.40 | 4.16 | 4.18 | 4.11 |  | 4.15 | 4.05 | 4.24 |
| Soybeans (old crop) | 9.82 | 9.83 | 9.87 | 9.98 |  | 9.92 | 9.83 | 9.77 |
| Soybeans (new crop) | 10.31 | 10.28 | 10.19 | 10.21 |  | 10.22 | 10.00 | 10.33 |

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-till, and timber soils.
Table 21. 2010 Operator Average Returns, Costs, and Financial Summary by Size and by Management Returns for Southern Illinois Grain

| Range in size (total acres) Management returns Number of farms | $180-499$ | $500-799$$44$ | $800-1,199$ | $>1,199$ | Your farm | All farms$305$ | 800-1,199 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Low 33\% | High 33\% |
|  |  |  |  |  |  |  | 27 | 27 |
| Total acres in farm | 376 | 716 | 1,067 | 2,097 |  | 1,382 | 1,084 | 1,074 |
| Acres of tillable land | 340 | 647 | 1,003 | 2,011 |  | 1,311 | 1,007 | 1,012 |
| Operator tillable acres | 308 | 570 | 832 | 1,677 |  | 1,100 | 828 | 835 |
| Soil rating on tillable land | 59 | 57 | 58 | 58 |  | 58 | 56 | 59 |
| Percent land owned | 51 | 34 | 23 | 17 |  | 26 | 22 | 22 |
| Percent land crop shared | 29 | 32 | 45 | 44 |  | 40 | 44 | 45 |
| Percent land cash rented | 20 | 34 | 32 | 40 |  | 34 | 33 | 33 |
| Months of hired labor | 0.6 | 4.0 | 4.3 | 12.8 |  | 7.6 | 4.7 | 3.7 |
| Total months labor | 8.6 | 14.2 | 15.9 | 28.2 |  | 20.1 | 16.8 | 14.8 |
| Dollar returns |  |  |  |  |  |  |  |  |
| Crop returns | 200,310 | 377,995 | 566,960 | 1,138,997 |  | 744,955 | 477,331 | 655,523 |
| Livestock returns above feed | 1,416 | 2,291 | 1,821 | 9,253 |  | 5,170 | 4,443 | 1,902 |
| Custom work | 1,088 | 1,295 | 3,548 | 10,947 |  | 6,199 | 4,136 | 2,222 |
| Other farm receipts | 2,604 | 5,868 | 6,514 | 18,108 |  | 11,077 | 6,669 | 9,427 |
| Value of farm production | 205,418 | 387,449 | 578,843 | 1,177,305 |  | 767,402 | 492,579 | 669,074 |
| Dollar costs |  |  |  |  |  |  |  |  |
| Crop expenses | 52,175 | 105,146 | 146,053 | 307,746 |  | 199,546 | 154,178 | 142,050 |
| Power and equipment | 36,589 | 64,029 | 93,039 | 186,511 |  | 122,881 | 94,560 | 91,781 |
| Building and fence | 6,466 | 11,083 | 18,179 | 32,496 |  | 21,935 | 19,586 | 16,495 |
| Labor | 24,817 | 40,890 | 41,613 | 73,728 |  | 53,566 | 43,288 | 38,946 |
| Insurance and miscellaneous | 10,937 | 23,995 | 32,355 | 69,988 |  | 45,034 | 35,065 | 26,097 |
| Livestock services and supplies | 401 | 552 | 1,942 | 2,107 |  | 1,598 | 3,561 | 1,106 |
| Interest on nonland capital | 10,414 | 20,337 | 33,364 | 66,620 |  | 43,187 | 29,757 | 35,104 |
| Real estate taxes | 1,866 | 2,784 | 3,678 | 5,590 |  | 4,152 | 3,033 | 3,370 |
| Cash rent | 7,777 | 21,441 | 34,793 | 97,206 |  | 57,093 | 36,653 | 33,889 |
| Other land charges | 27,405 | 41,513 | 61,084 | 105,444 |  | 73,438 | 61,605 | 59,722 |
| Total nonfeed costs | 178,848 | 331,770 | 466,101 | 947,435 |  | 622,430 | 481,286 | 448,560 |
| Capital account adjustment | 1,102 | 1,476 | 4,504 | 4,845 |  | 3,740 | 5,699 | 4,545 |
| Management returns | 30,106 | 63,615 | 126,625 | 256,230 |  | 162,144 | 26,252 | 232,947 |
| Farm production per \$1.00 of nonfeed costs | 1.15 | 1.17 | 1.24 | 1.24 |  | 1.23 | 1.02 | 1.49 |
| Farm production per man | 226,484 | 377,537 | 558,147 | 674,737 |  | 537,702 | 470,516 | 663,527 |
| Financial summary |  |  |  |  |  |  |  |  |
| Cash operating income | 176,989 | 318,621 | 484,329 | 1,059,245 |  | 675,334 | 476,652 | 474,565 |
| Inventory change | 33,347 | 69,784 | 110,407 | 170,149 |  | 120,518 | 38,910 | 206,966 |
| Accts. receivable (net change) | -793 | 1,345 | -1,529 | -3,417 |  | -1,859 | -234 | 45 |
| Less purchased feed | 2,213 | 2,521 | 10,418 | 38,155 |  | 20,581 | 15,071 | 9,395 |
| Less purchased livestock | 1,697 | 163 | 3,585 | 6,809 |  | 4,273 | 7,517 | 1,844 |
| Gross farm returns | 205,632 | 387,067 | 579,204 | 1,181,014 |  | 769,139 | 492,741 | 670,337 |
| Cash operating expenses | 119,362 | 236,663 | 338,458 | 716,184 |  | 462,551 | 354,686 | 320,062 |
| Prepaid expenses (- if increased) | -2,627 | -5,166 | -8,350 | -8,374 |  | -7,095 | -5,490 | -4,370 |
| Accts. payable (+ if increased) | -695 | 501 | 1,600 | 1,702 |  | 1,164 | 2,045 | 1,102 |
| Total operating expenses | 116,039 | 231,998 | 331,709 | 709,511 |  | 456,620 | 351,241 | 316,794 |
| Income before depreciation | 89,593 | 155,068 | 247,495 | 471,502 |  | 312,519 | 141,500 | 353,543 |
| Less depreciation | 13,484 | 26,992 | 46,549 | 100,326 |  | 63,222 | 42,404 | 46,664 |
| Capital account adjustment | 1,102 | 1,476 | 4,504 | 4,845 |  | 3,740 | 5,699 | 4,545 |
| Net farm income | 77,210 | 129,552 | 205,450 | 376,021 |  | 253,038 | 104,795 | 311,424 |
| Net farm income per operator | 77,167 | 122,987 | 202,802 | 281,542 |  | 208,943 | 99,888 | 308,387 |
| Labor \& mgt. income per operator | 56,031 | 91,688 | 161,548 | 225,302 |  | 165,231 | 61,916 | 266,061 |

Note: Variations in totals due to rounding to the nearest dollar.
Table 21a. 2010 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Management Returns for Southern

| Range in size (total acres) Management returns Number of farms | $\begin{array}{r} 180-499 \\ 43 \\ \hline \end{array}$ | $\begin{array}{r} 500-799 \\ 44 \\ \hline \end{array}$ | $\begin{array}{r} \hline 800-1,199 \\ 81 \\ \hline \end{array}$ | $\begin{array}{r} \hline>1,199 \\ 137 \\ \hline \end{array}$ | Your farm | All farms 305 | 800-1,199 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Low 33\% | High 33\% |
|  |  |  |  |  |  |  | 27 | 27 |
| Selected returns and costs per operator tillable acre |  |  |  |  |  |  |  |  |
| Crop returns | 651.34 | 662.94 | 681.53 | 679.13 |  | 677.31 | 576.41 | 785.51 |
| Livestock returns above feed | 4.60 | 4.02 | 2.19 | 5.52 |  | 4.70 | 5.36 | 2.28 |
| Custom work, other receipts | 12.00 | 12.56 | 12.10 | 17.32 |  | 15.71 | 13.05 | 13.96 |
| Value of farm production | 667.95 | 679.52 | 695.82 | 701.97 |  | 697.72 | 594.82 | 801.75 |
| Soil fertility | 79.28 | 86.13 | 82.19 | 87.28 |  | 85.86 | 87.59 | 80.27 |
| Pesticides | 29.96 | 34.43 | 29.84 | 32.88 |  | 32.27 | 36.46 | 26.38 |
| Seed and other crop expense | 60.42 | 63.85 | 63.54 | 63.33 |  | 63.30 | 62.13 | 63.57 |
| Crop total | 169.66 | 184.41 | 175.57 | 183.49 |  | 181.43 | 186.18 | 170.22 |
| Light vehicle and utilities | 12.44 | 10.12 | 9.09 | 7.18 |  | 7.99 | 9.35 | 7.89 |
| Machinery repairs, supplies | 29.33 | 30.08 | 27.63 | 25.81 |  | 26.63 | 27.66 | 29.55 |
| Machinery hire, lease | 19.59 | 11.30 | 8.79 | 10.32 |  | 10.45 | 12.54 | 6.19 |
| Fuel and oil | 21.80 | 22.99 | 24.19 | 23.48 |  | 23.52 | 25.62 | 24.38 |
| Machinery depreciation | 35.81 | 37.81 | 42.15 | 44.41 |  | 43.12 | 39.01 | 41.97 |
| Power and equipment total | 118.97 | 112.30 | 111.84 | 111.21 |  | 111.72 | 114.19 | 109.98 |
| Drying and storage | 7.42 | 6.54 | 8.75 | 6.27 |  | 6.84 | 11.60 | 6.53 |
| Building repair and rent | 8.78 | 7.54 | 6.93 | 6.02 |  | 6.42 | 7.31 | 6.91 |
| Building depreciation | 4.83 | 5.36 | 6.17 | 7.09 |  | 6.68 | 4.74 | 6.32 |
| Building total | 21.03 | 19.44 | 21.85 | 19.38 |  | 19.94 | 23.65 | 19.77 |
| Labor, unpaid | 76.60 | 51.03 | 37.79 | 24.81 |  | 31.42 | 39.73 | 35.68 |
| Labor, paid | 4.10 | 20.69 | 12.24 | 19.15 |  | 17.28 | 12.54 | 10.99 |
| Labor total | 80.70 | 71.71 | 50.02 | 43.96 |  | 48.70 | 52.27 | 46.67 |
| Insurance and miscellaneous | 35.56 | 42.08 | 38.89 | 41.73 |  | 40.94 | 42.34 | 31.27 |
| Livestock services and supplies | 1.30 | 0.97 | 2.33 | 1.26 |  | 1.45 | 4.30 | 1.33 |
| Interest on nonland capital | 33.86 | 35.67 | 40.11 | 39.72 |  | 39.27 | 35.93 | 42.07 |
| Other costs total | 70.73 | 78.72 | 81.33 | 82.71 |  | 81.66 | 82.58 | 74.66 |
| Land charge | 120.47 | 115.29 | 119.67 | 124.16 |  | 122.45 | 122.31 | 116.21 |
| Total nonfeed costs | 581.55 | 581.87 | 560.29 | 564.91 |  | 565.91 | 581.18 | 537.51 |
| Capital account adjustment | 3.58 | 2.59 | 5.41 | 2.89 |  | 3.40 | 6.88 | 5.45 |
| Management returns | 89.98 | 100.24 | 140.94 | 139.95 |  | 135.21 | 20.52 | 269.69 |
| Percent crop returns fed | 2.92 | 1.25 | 2.44 | 2.15 |  | 2.21 | 4.74 | 1.07 |
| Capital purchases | 25,555 | 39,260 | 86,696 | 213,340 |  | 128,119 | 66,772 | 94,933 |
| Interest paid | 8,999 | 11,844 | 17,615 | 35,812 |  | 23,741 | 17,200 | 15,797 |
| Percent tillable land in |  |  |  |  |  |  |  |  |
| Corn and corn silage | 37.3 | 45.6 | 43.9 | 47.7 |  | 46.4 | 40.8 | 48.2 |
| Soybeans | 46.5 | 48.2 | 45.6 | 45.5 |  | 45.7 | 45.4 | 45.9 |
| Wheat | 5.5 | 2.6 | 3.6 | 2.8 |  | 3.1 | 3.5 | 4.0 |
| Other small grains | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |
| CRP acres | 1.0 | 0.7 | 0.7 | 0.7 |  | 0.7 | 1.0 | 0.5 |
| All hay and pasture | 7.0 | 1.5 | 1.3 | 1.1 |  | 1.4 | 2.1 | 0.5 |
| Crop yields, bushels per acre |  |  |  |  |  |  |  |  |
| Corn | 147 | 141 | 148 | 146 |  | 146 | 135 | 154 |
| Soybeans | 49 | 47 | 49 | 48 |  | 48 | 45 | 53 |
| Wheat | 55 | 55 | 52 | 58 |  | 56 | 53 | 58 |
| Prices received |  |  |  |  |  |  |  |  |
| Corn (old crop) | 3.55 | 3.64 | 3.74 | 3.86 |  | 3.81 | 3.78 | 3.71 |
| Corn (new crop) | 4.08 | 4.31 | 4.24 | 4.20 |  | 4.21 | 4.18 | 4.37 |
| Soybeans (old crop) | 10.14 | 9.95 | 10.04 | 10.13 |  | 10.10 | 10.20 | 9.99 |
| Soybeans (new crop) | 10.98 | 10.50 | 10.69 | 10.40 |  | 10.49 | 10.67 | 10.91 |

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

Table 22. 2010 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 |  |  |  |  |  |  |  |

Table 22a. 2010 Operator Average Operating Costs, Land Use, Yields, and Prices Received by Size and by Cwt of Pork Produced for lllinois Hog Farms

| Range in size (total acres) Cwt of pork produced Number of farms | $\begin{array}{r} \hline 60-799 \\ 31 \\ \hline \hline \end{array}$ | $\begin{array}{r} >799 \\ 23 \\ \hline \end{array}$ | Your farm | All farms $\qquad$ | Cwt of pork produced |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | <6,000 cwt | > 6,000 cwt |
|  |  |  |  |  | 7 | 12 |
| Selected returns and costs per operator tillable acre |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Crop returns | 785.06 | 811.76 |  | 803.84 | 690.43 | 810.04 |
| Livestock returns above feed | 454.90 | 459.46 |  | 458.11 | 237.17 | 414.67 |
| Custom work, other receipts | 32.77 | 28.30 |  | 29.62 | 3.47 | 24.91 |
| Value of farm production | 1272.73 | 1299.52 |  | 1291.58 | 931.07 | 1249.63 |
| Soil fertility | 47.46 | 89.14 |  | 76.78 | 54.29 | 89.41 |
| Pesticides | 32.75 | 35.79 |  | 34.89 | 28.45 | 29.34 |
| Seed and other crop expense | 74.81 | 87.33 |  | 83.61 | 63.38 | 88.89 |
| Crop total | 155.01 | 212.26 |  | 195.28 | 146.12 | 207.65 |
| Light vehicle and utilities | 32.79 | 27.98 |  | 29.41 | 37.83 | 29.87 |
| Machinery repairs, supplies | 44.28 | 42.92 |  | 43.33 | 41.23 | 47.76 |
| Machinery hire, lease | 39.28 | 56.81 |  | 51.61 | 22.47 | 48.25 |
| Fuel and oil | 38.11 | 41.39 |  | 40.42 | 33.94 | 40.76 |
| Machinery depreciation | 42.84 | 35.40 |  | 37.60 | 34.27 | 26.67 |
| Power and equipment total | 197.30 | 204.50 |  | 202.37 | 169.75 | 193.31 |
| Drying and storage | 14.72 | 21.68 |  | 19.62 | 5.86 | 13.24 |
| Building repair and rent | 73.39 | 109.33 |  | 98.67 | 19.09 | 45.55 |
| Building depreciation | 16.08 | 17.56 |  | 17.12 | 6.18 | 15.27 |
| Building total | 104.19 | 148.57 |  | 135.41 | 31.12 | 74.06 |
| Labor, unpaid | 83.87 | 29.48 |  | 45.61 | 131.44 | 48.40 |
| Labor, paid | 73.40 | 80.42 |  | 78.34 | 45.42 | 69.89 |
| Labor total | 157.27 | 109.90 |  | 123.95 | 176.85 | 118.29 |
| Insurance and miscellaneous | 63.38 | 57.86 |  | 59.50 | 33.42 | 51.67 |
| Livestock services and supplies | 71.43 | 66.87 |  | 68.22 | 39.26 | 72.90 |
| Interest on nonland capital | 74.13 | 78.14 |  | 76.95 | 49.44 | 66.24 |
| Other costs total | 208.95 | 202.87 |  | 204.67 | 122.11 | 190.81 |
| Land charge | 210.25 | 205.12 |  | 206.64 | 176.90 | 192.05 |
| Total nonfeed costs | 1032.97 | 1083.23 |  | 1068.32 | 822.87 | 976.18 |
| Capital account adjustment | 1.15 | 5.16 |  | 3.97 | 2.48 | 1.30 |
| Management returns | 240.91 | 221.46 |  | 227.23 | 110.68 | 274.75 |
| Percent crop returns fed | 124.45 | 102.25 |  | 114.99 | 62.93 | 86.85 |
| Capital purchases | 48,910 | 123,925 |  | 80,861 | 22,928 | 80,752 |
| Interest paid | 33,547 | 75,039 |  | 51,220 | 6,835 | 32,013 |
| Percent tillable land in |  |  |  |  |  |  |
| Corn and corn silage | 59.3 | 72.2 |  | 68.3 | 48.6 | 69.7 |
| Soybeans | 35.1 | 23.6 |  | 27.1 | 35.8 | 28.0 |
| Wheat | 1.6 | 1.1 |  | 1.2 | 2.0 | 1.2 |
| Other small grains | 0.5 | 0.0 |  | 0.2 | 2.5 | 0.0 |
| CRP acres | 0.4 | 0.0 |  | 0.2 | 0.0 | 0.1 |
| All hay and pasture | 2.1 | 0.3 |  | 0.9 | 6.6 | 0.4 |
| Crop yields, bushels per acre |  |  |  |  |  |  |
| Corn | 165 | 165 |  | 165 | 167 | 176 |
| Soybeans | 58 | 60 |  | 59 | 52 | 61 |
| Wheat | 73 | 61 |  | 65 | 79 | 70 |
| Prices received |  |  |  |  |  |  |
| Corn (old crop) | 3.52 | 3.59 |  | 3.58 | 3.57 | 3.54 |
| Corn (new crop) | 4.07 | 4.24 |  | 4.20 | 3.78 | 4.06 |
| Soybeans (old crop) | 10.03 | 9.75 |  | 9.86 | 9.75 | 10.09 |
| Soybeans (new crop) | 10.49 | 10.47 |  | 10.48 | 10.27 | 10.32 |

Table 23. 2010 Operator Average Returns, Costs, and Financial Summary for Illinois Dairy and Beef Farms

| Area of state | Dairy (by Number of Cows in Herd) |  |  |  | Beef (by Size) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of cows in herd | 10-79 | $>79$ | Your farm | All farms | 180-799 | > 799 | Your farm | All farms |
| Number of farms | 28 | 32 |  | 60 | 15 | 5 |  | 20 |
| Total acres in farm | 289 | 575 |  | 441 | 494 | 1,167 |  | 662 |
| Acres of tillable land | 249 | 492 |  | 379 | 430 | 980 |  | 568 |
| Operator tillable acres | 233 | 481 |  | 365 | 395 | 856 |  | 510 |
| Soil rating on tillable land | 68 | 67 |  | 67 | 68 | 85 |  | 73 |
| Percent land owned | 57 | 40 |  | 48 | 43 | 32 |  | 40 |
| Percent land crop shared | 11 | 6 |  | 8 | 16 | 29 |  | 19 |
| Percent land cash rented | 32 | 54 |  | 44 | 41 | 40 |  | 41 |
| Months of hired labor | 1.7 | 22.2 |  | 12.6 | 2.1 | 34.1 |  | 10.1 |
| Total months labor | 15.7 | 39.1 |  | 28.2 | 15.3 | 46.7 |  | 23.2 |
| Dollar returns |  |  |  |  |  |  |  |  |
| Crop returns | 162,388 | 352,553 |  | 263,810 | 260,675 | 687,077 |  | 367,275 |
| Livestock returns above feed | 49,662 | 248,546 |  | 155,733 | 69,580 | 359,119 |  | 141,965 |
| Custom work | 760 | 1,187 |  | 988 | 2,753 | 1,456 |  | 2,429 |
| Other farm receipts | 4,094 | 12,734 |  | 8,702 | 2,817 | 15,839 |  | 6,073 |
| Value of farm production | 216,904 | 615,021 |  | 429,233 | 335,825 | 1,063,491 |  | 517,742 |
| Dollar costs |  |  |  |  |  |  |  |  |
| Crop expenses | 35,447 | 71,919 |  | 54,899 | 64,631 | 162,616 |  | 89,127 |
| Power and equipment | 55,293 | 138,015 |  | 99,412 | 74,672 | 227,857 |  | 112,968 |
| Building and fence | 10,233 | 26,159 |  | 18,727 | 14,886 | 55,897 |  | 25,139 |
| Labor | 48,519 | 122,065 |  | 87,743 | 47,860 | 135,974 |  | 69,888 |
| Insurance and miscellaneous | 9,592 | 21,134 |  | 15,748 | 17,317 | 38,476 |  | 22,607 |
| Livestock services and supplies | 23,202 | 84,580 |  | 55,937 | 12,563 | 51,238 |  | 22,232 |
| Interest on nonland capital | 17,467 | 48,063 |  | 33,785 | 31,958 | 98,056 |  | 48,483 |
| Real estate taxes | 3,303 | 5,944 |  | 4,712 | 3,845 | 16,882 |  | 7,104 |
| Cash rent | 10,810 | 32,551 |  | 22,406 | 27,844 | 64,222 |  | 36,939 |
| Other land charges | 23,465 | 28,789 |  | 26,304 | 31,458 | 75,791 |  | 42,542 |
| Total nonfeed costs | 237,331 | 579,219 |  | 419,671 | 327,036 | 927,008 |  | 477,029 |
| Capital account adjustment | 1,973 | 1,934 |  | 1,952 | 1,576 | 12,666 |  | 4,349 |
| Management returns | -16,794 | 41,445 |  | 14,267 | 14,829 | 156,277 |  | 50,191 |
| Farm production per $\$ 1.00$ of nonfeed costs | 0.91 | 1.06 |  | 1.02 | 1.03 | 1.15 |  | 1.09 |
| Farm production per man | 179,371 | 204,697 |  | 192,878 | 277,012 | 381,141 |  | 303,044 |
| Financial summary |  |  |  |  |  |  |  |  |
| Cash operating income | 249,869 | 721,113 |  | 501,199 | 638,561 | 2,207,676 |  | 1,030,840 |
| Inventory change | 13,658 | 41,163 |  | 28,327 | 50,104 | 181,664 |  | 82,994 |
| Accts. receivable (net change) | -9 | -1,867 |  | -1,000 | -1,395 | 2,000 |  | -546 |
| Less purchased feed | 41,765 | 137,772 |  | 92,969 | 63,967 | 238,870 |  | 107,693 |
| Less purchased livestock | 4,848 | 7,751 |  | 6,396 | 287,542 | 1,088,978 |  | 487,901 |
| Gross farm returns | 216,904 | 614,886 |  | 429,161 | 335,761 | 1,063,491 |  | 517,694 |
| Cash operating expenses | 155,075 | 437,410 |  | 305,654 | 234,151 | 802,127 |  | 376,145 |
| Prepaid expenses (- if increased) | -3,349 | -9,710 |  | -6,742 | -8,486 | -69,738 |  | -23,799 |
| Accts. payable (+ if increased) | -2,431 | 510 |  | -862 | -4,776 | 1,774 |  | -3,138 |
| Total operating expenses | 149,295 | 428,210 |  | 298,050 | 220,889 | 734,162 |  | 349,208 |
| Income before depreciation | 67,609 | 186,676 |  | 131,111 | 114,872 | 329,329 |  | 168,486 |
| Less depreciation | 18,267 | 47,426 |  | 33,818 | 25,969 | 68,799 |  | 36,677 |
| Capital account adjustment | 1,973 | 1,934 |  | 1,952 | 1,576 | 12,666 |  | 4,349 |
| Net farm income | 51,315 | 141,184 |  | 99,245 | 90,479 | 273,196 |  | 136,158 |
| Net farm income per operator | 45,664 | 101,366 |  | 75,372 | 83,007 | 231,251 |  | 120,068 |
| Labor \& mgt. income per operator | 18,287 | 59,745 |  | 40,398 | 50,240 | 159,305 |  | 77,506 |

Table 23a. 2010 Operator Average Operating Costs, Land Use, Yields, and Prices Received for Illinois Dairy and Beef Farms

| Area of state | Dairy (by Number of Cows in Herd) |  |  |  | Beef (by Size) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of cows in herd | 10-79 | > 79 | Your farm | All farms | 180-799 | > 799 | Your farm | All farms |
| Number of farms | 28 | 32 |  | 60 | 15 | 5 | 0 | 20 |
| Selected returns and costs per operator tillable acre |  |  |  |  |  |  |  |  |
| Crop returns | 696.52 | 733.48 |  | 722.47 | 660.72 | 802.29 |  | 720.15 |
| Livestock returns above feed | 213.01 | 517.10 |  | 426.49 | 176.36 | 419.34 |  | 278.36 |
| Custom work, other receipts | 20.82 | 28.96 |  | 26.54 | 14.12 | 20.19 |  | 16.67 |
| Value of farm production | 930.35 | 1,279.54 |  | 1,175.50 | 851.20 | 1,241.82 |  | 1,015.18 |
| Soil fertility | 63.24 | 65.45 |  | 64.79 | 71.35 | 70.65 |  | 71.05 |
| Pesticides | 32.20 | 25.28 |  | 27.34 | 25.46 | 28.69 |  | 26.82 |
| Seed and other crop expense | 56.60 | 58.89 |  | 58.21 | 67.01 | 90.54 |  | 76.89 |
| Crop total | 152.04 | 149.63 |  | 150.35 | 163.82 | 189.88 |  | 174.76 |
| Light vehicle and utilities | 39.60 | 41.10 |  | 40.65 | 18.13 | 19.98 |  | 18.91 |
| Machinery repairs, supplies | 69.31 | 70.16 |  | 69.91 | 55.16 | 58.53 |  | 56.57 |
| Machinery hire, lease | 31.25 | 51.87 |  | 45.73 | 35.85 | 76.16 |  | 52.77 |
| Fuel and oil | 41.56 | 52.90 |  | 49.52 | 32.39 | 53.74 |  | 41.35 |
| Machinery depreciation | 55.44 | 71.11 |  | 66.44 | 47.73 | 57.66 |  | 51.90 |
| Power and equipment total | 237.16 | 287.14 |  | 272.25 | 189.27 | 266.06 |  | 221.51 |
| Drying and storage | 7.13 | 8.04 |  | 7.77 | 8.76 | 7.07 |  | 8.06 |
| Building repair and rent | 15.95 | 19.68 |  | 18.57 | 14.28 | 40.28 |  | 25.20 |
| Building depreciation | 20.82 | 26.70 |  | 24.95 | 14.68 | 17.92 |  | 16.04 |
| Building total | 43.89 | 54.42 |  | 51.28 | 37.73 | 65.27 |  | 49.29 |
| Labor, unpaid | 184.96 | 112.74 |  | 134.26 | 102.80 | 44.74 |  | 78.43 |
| Labor, paid | 23.15 | 141.21 |  | 106.03 | 18.51 | 114.04 |  | 58.61 |
| Labor total | 208.11 | 253.95 |  | 240.29 | 121.31 | 158.77 |  | 137.04 |
| Insurance and miscellaneous | 41.14 | 43.97 |  | 43.13 | 43.89 | 44.93 |  | 44.33 |
| Livestock services and supplies | 99.52 | 175.97 |  | 153.19 | 31.84 | 59.83 |  | 43.59 |
| Interest on nonland capital | 74.92 | 100.00 |  | 92.52 | 81.00 | 114.50 |  | 95.06 |
| Other costs total | 215.58 | 319.93 |  | 288.84 | 156.74 | 219.25 |  | 182.98 |
| Land charge | 161.18 | 139.98 |  | 146.30 | 160.06 | 183.20 |  | 169.77 |
| Total nonfeed costs | 1017.96 | 1205.06 |  | 1149.31 | 828.92 | 1082.45 |  | 935.35 |
| Capital account adjustment | 8.46 | 4.02 |  | 5.35 | 4.00 | 14.79 |  | 8.53 |
| Management returns | -79.15 | 78.51 |  | 31.53 | 26.27 | 174.16 |  | 88.36 |
| Percent crop returns fed | 85.89 | 103.82 |  | 95.45 | 70.71 | 57.84 |  | 67.49 |
| Capital purchases | 29,509 | 77,057 |  | 54,868 | 27,747 | 203,144 |  | 71,596 |
| Interest paid | 14,057 | 27,967 |  | 21,475 | 23,664 | 72,852 |  | 35,961 |
| Percent tillable land in |  |  |  |  |  |  |  |  |
| Corn and corn silage | 50.0 | 48.7 |  | 49.1 | 54.1 | 70.5 |  | 61.2 |
| Soybeans | 16.0 | 18.3 |  | 17.6 | 18.3 | 23.8 |  | 20.7 |
| Wheat | 1.1 | 3.4 |  | 2.7 | 2.4 | 0.0 |  | 1.4 |
| Other small grains | 3.4 | 0.8 |  | 1.6 | 0.9 | 0.0 |  | 0.5 |
| CRP acres | 0.8 | 0.3 |  | 0.4 | 0.4 | 0.0 |  | 0.2 |
| All hay and pasture | 22.5 | 13.7 |  | 16.4 | 23.8 | 4.5 |  | 15.5 |
| Crop yields, bushels per acre |  |  |  |  |  |  |  |  |
| Corn | 156 | 161 |  | 159 | 156 | 156 |  | 156 |
| Soybeans | 56 | 54 |  | 55 | 52 | 62 |  | 57 |
| Wheat | 45 | 63 |  | 61 | 75 | 0 |  | 75 |
| Prices received |  |  |  |  |  |  |  |  |
| Corn (old crop) | 3.54 | 3.45 |  | 3.48 | 3.70 | 3.39 |  | 3.51 |
| Corn (new crop) | 4.58 | 4.40 |  | 4.45 | 4.23 | 3.38 |  | 3.76 |
| Soybeans (old crop) | 9.79 | 9.74 |  | 9.75 | 10.13 | 9.99 |  | 10.03 |
| Soybeans (new crop) | 10.62 | 10.57 |  | 10.59 | 10.30 | 0.00 |  | 10.30 |

Financial Characteristics of Illinois FBFM Grain Farms

|  | 2010 | 2009 | 2008 | 2007 | 4-Year Average | $\begin{gathered} \text { My } \\ \text { Farm } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Farms | 2,383 | 2,410 | 2,421 | 2,443 | 2,414 |  |
| Liquidity |  |  |  |  |  |  |
| Working Capital | \$277,779 | \$317,726 | \$351,299 | \$288,994 | \$308,950 |  |
| Current Ratio |  |  |  |  |  |  |
| Upper Quartile | NA | 5.63 | 5.85 | 5.79 | 5.76 |  |
| Median | 2.58 | 2.31 | 2.51 | 2.38 | 2.45 |  |
| Solvency |  |  |  |  |  |  |
| Net Worth (Market) | \$1,968,908 | \$1,759,082 | \$1,651,985 | \$1,474,834 | \$1,713,702 |  |
| Debt/Equity Ratio (\%) |  |  |  |  |  |  |
| Upper Quartile | NA | 11.5 | 11.5 | 12.0 | 11.7 |  |
| Median | 26.5 | 28.7 | 29.0 | 30.4 | 28.7 |  |
| Debt/Total Asset Ratio (\%) |  |  |  |  |  |  |
| Upper Quartile | NA | 10.4 | 10.4 | 10.8 | 10.5 |  |
| Median | 21.0 | 22.4 | 22.7 | 23.6 | 22.4 |  |
| Profitability |  |  |  |  |  |  |
| Net Farm Income | \$175,274 | \$80,760 | \$196,347 | \$189,000 | \$160,345 |  |
| Return on Farm Assets (\%) |  |  |  |  |  |  |
| Upper Quartile | NA | 6.7 | 17.1 | 21.0 | 14.9 |  |
| Median | 8.3 | 3.3 | 10.8 | 13.2 | 8.9 |  |
| Return on Farm Equity (\%) |  |  |  |  |  |  |
| Upper Quartile | NA | 7.9 | 24.7 | 30.8 | 21.1 |  |
| Median | 9.9 | 3.0 | 12.9 | 16.2 | 10.5 |  |
| Repayment Capacity |  |  |  |  |  |  |
| Debt/Farm Operating Income | 3.10 | 5.25 | 2.25 | 2.05 | 3.16 |  |
| Financial Efficiency (as a \% of Gross Farm Returns) |  |  |  |  |  |  |
| Interest Expense Ratio |  |  |  |  |  |  |
| Upper Quartile | NA | 1.1 | 1.1 | 1.7 | 1.3 |  |
| Median | 2.5 | 3.1 | 2.9 | 3.8 | 3.1 |  |
| Operating Expense Ratio |  |  |  |  |  |  |
| Upper Quartile | NA | 62.1 | 49.3 | 44.6 | 52.0 |  |
| Median | 57.0 | 71.2 | 57.0 | 51.5 | 59.2 |  |
| Depreciation Expense Ratio |  |  |  |  |  |  |
| Upper Quartile | NA | 4.9 | 3.4 | 3.0 | 3.8 |  |
| Median | 6.8 | 7.1 | 5.0 | 4.6 | 5.9 |  |
| Farm Operating Income Ratio |  |  |  |  |  |  |
| Upper Quartile | NA | 28.5 | 43.1 | 48.0 | 39.9 |  |
| Median | 32.8 | 18.0 | 34.5 | 39.7 | 31.3 |  |
| Asset Turnover Ratio |  |  |  |  |  |  |
| Upper Quartile | NA | 0.44 | 0.55 | 0.59 | 0.53 |  |
| Median | 0.31 | 0.30 | 0.37 | 0.38 | 0.34 |  |

NA = not available yet.

## Illinois FBFM Association <br> Operators' Share of Labor and Management Income per Farm—2008, 2009, and 2010

 (Sum of All Operators/Farm)

## In Memoriam

Gary Freeman was raised on a dairy and grain farm near Waynesville. After finishing high school, he enrolled in Lincoln College, graduating in 1969 with an associate's degree. He then transferred to Southern Illinois University, where he earned a bachelor's degree in agronomy in 1972. Gary returned to school at Illinois State University in 1980 and received a teaching certificate in agricultural education the following year.

Gary then became a vocational agricultural teacher at Paxton High School. While he was teaching, he earned a master's degree in agricultural education from the University of Illinois in 1983. In the summer of 1986, Gary became an agricultural instructor at Lincoln College.

Gary was employed by the Pioneer FBFM Association in June 1991.
 His area included eastern Tazewell County. In 2006, Gary became the administrative coordinator for the Pioneer Association.

Gary was very active in his church and community, and he enjoyed camping and gardening. He was in his 20th year of dedicated service to FBFM at his untimely death in March 2011. Gary’s desire to be of service to others together with his knowledge made him a valuable asset to his cooperators and fellow field staff. He will long be remembered for his contributions to the FBFM program and the Pioneer Association.

## FBFM

## 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.


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


[^0]:    ${ }^{\text {aHiHighly p productive soils with soil productivity ratings from } 86 \text { to } 100 . . . . ~ . ~}$
    ${ }^{\text {b }}$ Heavy-till and transition soils with soil productivity ratings from 56 to 85 .
    ${ }^{\text {c }}$ Data not available.

[^1]:    ${ }^{\text {a }}$ Records were sorted into thirds according to total noncapital living expenses.

[^2]:    aLess than 1 percent.

[^3]:    ${ }^{\text {I Includes sales or purchases of capital items. }}$

[^4]:    ${ }^{\mathrm{a}}$ Includes sales or purchases of capital items.

[^5]:    ${ }^{\mathrm{a}}$ Data not available.

[^6]:    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 $8.0 \%$ for $2007,5.5 \%$ for 2008 , and $5.0 \%$ for 2009 and 2010.
    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.

[^7]:    ${ }^{\text {a }}$ Includes utilities, machinery, equipment and building repairs, machine hire, and fuel.
    ${ }^{\mathrm{b}}$ Includes machinery, equipment, and building depreciation.

