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The Farm Business from 1929 to 1935 on One Hundred Forty-one Ohio Farms

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THE FARM BUSINESS FROM 1929 TO 1935 ON ONE HUNDRED FORTY-ONE OHIO FARMS[1]

J. H. SITTERLEY AND J. I. FALCONER

INTRODUCTION

The income of the agricultural industry remained in an unfavorable position in comparison with nonagricultural industries for approximately 9 years before the general break in the price level in 1929. Farm product prices were low, and the farmer's purchasing power was unfavorable. During this period there were some years when farmers fared better than in other years. The year 1929 was only slightly better for the farmer in Ohio than the average for the 9-year period, 1921-1929. During the next 3 years prices fell rapidly and to an extremely low level. Some recovery occurred in 1933. In 1934 and 1935 the favorable relationship existing between cash receipts and cash expenses brought the cash income of the farmer up rapidly. (See Table 1)

TABLE 1.—The Indexes of the Gross Cash Agricultural Income in Ohio, the Gross Cash Income on the Farms Included in this Study, Ohio Farm Prices, and Prices Paid by Farmers for Factors of Production

1929=100

Year	Index numbers of			
	Gross cash agricultural income in Ohio*	Gross cash income on farms included in this study	Price received by Ohio farmers for their products†	Prices paid by farmers for factors of production‡
1921	85.9	....	87.4	95.9
1922	85.4	....	84.1	94.5
1923	94.9	....	88.7	95.9
1924	95.1	....	88.1	97.3
1925	102.1	....	105.3	100.0
1926	108.5	....	102.6	99.3
1927	101.8	....	97.3	98.6
1928	92.9	....	102.0	100.7
1929	100.0	100.0	100.0	100.0
1930	81.6	87.5	84.7	95.2
1931	58.9	65.9	58.9	82.9
1932	43.7	48.3	41.7	72.8
1933	48.4	53.9	45.7	73.4
1934	58.9	68.0	56.2	85.0
1935	76.4	80.7	72.8	85.7

*Source: Estimated Agricultural Income in Ohio, as compiled by V. R. Wertz.
†Source: Ohio Agricultural Experiment Station Bimonthly Bulletin.
‡Index of the cost of factor of production is for the entire United States.
Source: Ohio Agricultural Experiment Station Bimonthly Bulletin.

The primary purpose of this analysis is to observe some of the effects of the radically changing conditions between 1929 and 1935 on net cash income, to record the recognizable adjustments made, and to determine, in so far as possible from the records, some of the characteristics of those farms that obtained the largest and those that obtained the smallest incomes during this period.

[1]The labor for a part of the assembling and tabulation of these data was provided by Works Progress Administration, Project 558.

The farms included in this analysis were selected on the basis of having had continuous farm accounts from 1929 through 1933. They were chosen early in 1934 from among farms on which farm accounts had been kept under the supervision of the Agricultural Extension Service. The 141 farms with which we began the study included many different types and sizes of farms. These farms are distributed widely over the State of Ohio, and 40 different counties are represented in the group. All but 10 of the group submitted complete farm accounts at the close of 1934; at the end of the next year six more farmers failed to submit completed accounts. In both years other farms were substituted for those that dropped out, and an effort was made to replace them with farms as comparable as possible from among other farms that kept farm accounts in those years.

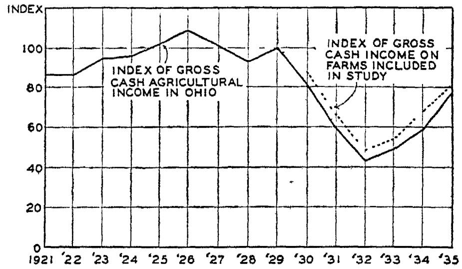

Fig. 1.—The indexes of the gross cash agricultural income in Ohio and the gross cash income on the farms included in this study. 1929=100

A comparison of the cash receipts of the farms included in this analysis with the total cash receipts derived from the sales of all farm products in Ohio indicates that these farms experienced slightly less decline than did the farming industry as a whole in Ohio. Their recovery from the bottom has been somewhat more rapid, and at the close of the year 1935, farms in this group had increased their cash receipts to 80.7 per cent of the 1929 level; whereas the State as a whole was 76.4 per cent of 1929. (See Fig. 1).

NET CASH INCOME

The excess of cash receipts over cash farm expenses, or the cash balance, is one of the things in which all farmers are interested[2]. It is out of this net income that the farmer and his family must live and, if in debt, make interest and principal payments. In 1929 these 141 farmers obtained an average net cash income of $1778; by the end of 1932 it had fallen to $887, a drop of 50.1 per cent. In 1933 the net cash income was a little larger, and in both of the next 2 years further increases occurred. By the end of 1935 the average net cash income of these 141 farms was $1550, $228 less than in 1929. (See Table 2). During the 7 years, 14 of the 141 farms failed in 1 or more years of

[2]Cash farm expense as used here includes all operating costs and actual expenditures for replacements and improvements in lieu of depreciation. Principal and interest payments on farm indebtedness and expenditures for new land and major real estate improvements, such as a new barn, house, drainage system, or irrigation system, were not included. Farm family living costs are not included in cash farm expenses in this analysis.

obtaining sufficient cash receipts to meet cash expenses. Forty-two farms had 1 or more years in which their net cash income fell below $300, and 75 farms experienced 1 or more years with net cash incomes under $600. Thirty-two farms succeeded in securing net cash incomes of $900 or above every year, and eight farms had no year in which their net cash income was less than $1200.

TABLE 2.—Cash Receipts, Cash Expenses, Net Cash Income, by Years, 1929-1935

Dollars per Farm

Year	Cash receipts	Cash expenses	Net cash income
1929	4127	2349	1778
1930	3611	2122	1489
1931	2721	1681	1040
1932	1993	1106	887
1933	2224	1182	1042
1934	2805	1419	1386
1935	3330	1780	1550
Average	2973	1663	1310

Neither of the two common measures, farm income and labor income, is satisfactory in analyzing the effect of drop into and rise out of the depression. Both differ from net cash income in that they include adjustments for inventory change which during this period were primarily paper losses, since the working capital was seldom liquidated. Likewise, as prices recovered following 1932, part of the increase recorded in farm income was paper profit due to increasing inventory values. Some farmers, in invoicing, drastically cut values; whereas others were more moderate, and still others reduced values but little, making it impossible to compare one farm with another when changes in inventory values were considered, as they were in the case of farm and labor incomes.

The physical inventory at the close of the 7-year period was in practically every case as large as, and on many farms larger than, at the beginning. Actual cash outlay for improvements and replacements, when considered as a group, lacked $114, or 9.5 per cent, per farm of equaling the farmer's own estimate of depreciation for the 7 years.

As farm prices declined and income dropped these farmers did not discontinue production but rather tended to increase it. In the first 2 years of the study this group of 141 farms averaged 132 acres in size. In 1931 and 1932 they averaged 138 and 137 acres; in 1933 and 1934 they averaged 141; and in 1935, 144 acres. This increase was the result of renting or purchasing additional acres. Only 16 farms reduced acreage as compared with 40 increasing acreage between 1929 and 1932. Not only was the farm area increased but the acreage of crops was also increased on more than one-half of the farms. In the low-income years of 1931, 1932, and 1933, corn acreage on these farms was increased above that of the previous 2 years.

Numbers of livestock on these farms also tended to increase as prices declined. In 1932 only 41 of the 141 farmers reported the same number of dairy cows as or less than in 1929; whereas 100 farms increased their herds. The number of head in the breeding and producing flocks averaged larger in 1932 than in 1929 for all types of livestock on these farms. (See Table 12).

From 1929 through 1932 the actual amount of both cash receipts and cash expenses declined, and for the group as a whole, 1932 was the year of the smallest cash receipts, cash expenses, and net cash income. On the basis of 1929 equaling 100, the index of receipts was 87.5, and cash expenses were 90.3, in 1930. In 1931 the index of cash receipts fell to 65.9 and expenses, to 71.6. In 1932, when both reached a bottom, the index of receipts stood at 48.3, and expenses, at 47.1. The next 3 years experienced a reversal, with receipts increasing slightly more rapidly than cash expenses. By 1935 the index of receipts had reached 80.7; whereas operating expenses had increased to but 75.8.

In 1930 and 1931 cash expenses represented a larger proportionate share of the receipts than in 1929 because of the somewhat slower decline in expenses than in receipts. After 1932 a part of the increase that occurred in net cash income was the result of a less rapid rise in expenses than in receipts.

CASH RECEIPTS

Cash receipts of the 141 farms were derived during the period, 1929 to 1935, from the following enterprises in the order named: dairying, all crops, hogs, poultry, miscellaneous sources[3], beef cattle, sheep, and all other livestock. (See Table 3). Dairy ranked first in all but 1933 and 1934, when the total

TABLE 3.—Cash Receipts by Sources of Income, by Years, 1929-1935

Dollars per Farm

Sources of income	Seven-year average	1929	1930	1931	1932	1933	1934	1935
Dairy								
Whole milk	453	590	552	423	331	332	446	497
Cream and butter	159	228	217	175	117	121	131	125
Dairy cattle	181	314	205	151	108	108	137	247
Total dairy	793	1132	974	749	556	561	714	869
Hogs	586	871	825	527	331	379	475	695
Poultry and eggs	533	690	625	527	440	394	460	594
Beef cattle	116	187	187	132	81	53	76	93
Sheep and wool	114	165	131	82	73	109	102	136
Miscellaneous livestock*	33	48	35	26	17	30	16	61
Total livestock	2175	3093	2777	2043	1498	1526	1843	2448
Crops:								
Corn	75	81	79	57	32	64	123	122
Oats	19	37	21	16	13	14	15	19
Wheat	207	325	134	101	106	272	275	267
Hay	31	40	45	25	14	16	39	35
Potatoes	142	201	206	140	96	117	129	103
Fruit	31	39	23	31	25	28	33	36
Intensive crops†	82	89	97	109	62	44	88	97
Miscellaneous crops‡	44	29	27	18	19	25	69	52
Total crops	631	841	632	497	367	580	771	731
Miscellaneous sources§	167	193	202	181	128	118	191	151
Total receipts	2973	4127	3611	2721	1993	2224	2805	3330

*Includes income from horses, meats, hides, and breeding fees.
†Includes truck crops, canning crops, tobacco, and sugar beets.
‡Includes income from sale of fodder, straw, seeds, soybeans, barley, rye, buckwheat, and others.
§Includes income from sale of lumber, gravel, gas and oil leases, machine hire, rebates, honey, outside labor, and the like.

[3]Includes income from sale of lumber, gravel, gas and oil leases, machine hire, rebates, honey, outside labor, and the like.

receipts from crops ranked highest. The large receipts from crops in those 2 years may be accounted for by the fact that crop prices recovered more rapidly than livestock prices following the low point in 1932. Likewise, the more rapid decline in crop prices from 1929 through 1932 resulted in the receipts from all crops dropping from second place in 1929 to fourth place in 1931. Receipts from poultry were as great as the receipts from hogs in 1931 and exceeded the total receipts from all crops. In 1932 poultry exceeded both hogs and total crops. This rise in importance of poultry during the low years on these farms may be credited largely to a more favorable farm price for poultry and eggs than prevailed for many of the other farm products and to some increase in the size of poultry flocks on these farms. By 1935 the same order of importance prevailed among the major sources of receipts as existed in 1929.

TABLE 4.—Percentage Distribution of Cash Receipts by Sources of Income, by Years, 1929-1935

Total Receipts=100 Per Cent

Sources of income	Seven-year average	1929	1930	1931	1932	1933	1934	1935
Dairy								
Whole milk	15.2	14.3	15.3	15.5	16.6	14.9	15.9	14.9
Cream and butter	5.4	5.5	6.0	6.4	5.9	5.4	4.7	3.8
Dairy cattle	6.1	7.6	5.7	5.6	5.4	4.9	4.9	7.4
Total dairy	26.7	27.4	27.0	27.5	27.9	25.2	25.5	26.1
Hogs	19.7	21.1	22.8	19.3	16.6	17.0	16.9	20.9
Poultry and eggs	17.9	16.7	17.3	19.3	22.1	17.7	16.4	17.8
Beef cattle	3.9	4.5	5.2	4.8	4.0	2.4	2.7	2.8
Sheep and wool	3.8	4.0	3.6	3.0	3.7	4.9	3.6	4.1
Miscellaneous livestock*	1.1	1.2	1.0	1.2	0.9	1.4	0.6	1.8
Total livestock	73.1	74.9	76.9	75.1	75.2	68.6	65.7	73.5
Crops								
Corn	2.5	2.0	2.2	2.1	1.6	2.9	4.4	3.7
Oats	0.6	0.9	0.6	0.6	0.7	0.6	0.5	0.6
Wheat	7.0	7.9	3.7	3.7	5.3	12.2	9.8	8.0
Hay	1.0	1.0	1.2	0.9	0.7	0.7	1.4	1.0
Potatoes	4.8	4.9	5.7	5.1	4.8	5.3	4.6	3.1
Fruit	1.0	0.9	0.6	1.1	1.2	1.3	1.2	1.1
Intensive crops†	2.8	2.1	2.7	4.0	3.1	2.0	3.1	2.9
Miscellaneous crops‡	1.5	0.7	0.8	0.7	1.0	1.1	2.5	1.6
Total crops	21.2	20.4	17.5	18.2	18.4	26.1	27.5	22.0
Miscellaneous sources§	5.6	4.7	5.6	6.7	6.4	5.3	6.8	4.5
Total receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Includes income from horses, meats, hides, and breeding fees.
†Includes truck crops, canning crops, tobacco, and sugar beets.
‡Includes income from sale of fodder, straw, seeds, soybeans, barley, rye, buckwheat, and others.
§Includes income from sale of lumber, gravel, gas and oil leases, machine hire, rebates, honey, outside labor, and the like.

By the end of 1932 the index of dairy receipts had fallen to 49.1 (1929=100); all crop receipts, to 43.6; hogs, to 38.0; and poultry, to 63.8. As was previously observed, during this period (1929 to 1932) the total farm area and acres in crops increased somewhat, and there were more dairy cows, brood sows, poultry, and sheep on these farms in 1932 than in 1929. In view of this situation with regard to physical production, the declines in receipts must be credited almost entirely to price rather than to reduction in the physical output on these farms.

CASH EXPENSES

Materials, supplies, and services used in the operation of these farms, such as feed, labor, fertilizer, lime, fuel, oil, seed, machine hire, feeder stock, blacksmith work, veterinary, spray materials, and twine, accounted for two-thirds of the total cash expenditure during the 7 years. Repairs, replacements, and improvements accounted for 12.9 per cent of all cash farm expense; taxes and insurance, for 12.7 per cent; and purchases of productive livestock and horses, for the remainder. (See Table 5). Neither family living costs nor interest and principal payments on long-term farm debt were included as a cash expense, but interest payments on short-term debt contracted for feed, fertilizer, seed, and the like were included.

TABLE 5.—Cash Expenditures, by Years, 1929-1935

Dollars per Farm

Source of expense	Average	1929	1930	1931	1932	1933	1934	1935
Feed purchased	410	637	612	382	206	287	357	387
Taxes	186	244	244	239	174	152	138	112
Labor hired	166	211	203	147	126	128	146	204
Fertilizer and lime	113	175	161	116	71	71	95	102
Fuel and oil	81	82	88	74	84	74	77	87
Repairs*	60	74	69	61	47	43	54	69
Seeds	57	77	72	62	39	34	67	51
Machine hire	46	55	52	50	35	37	41	49
Insurance	25	27	27	23	27	26	25	23
Breeding stock	58	127	54	50	27	32	45	77
Feeder stock	100	188	152	110	39	35	53	121
Poultry	43	53	57	45	37	31	36	40
Horses	35	23	23	32	41	21	38	67
Miscellaneous†	128	169	143	165	94	103	100	119
Replacements and improvements in lieu of depreciation	155	207	165	125	59	108	147	272
Total cash expense	1663	2349	2122	1681	1106	1182	1419	1780

*Farm machinery, fence, and buildings.
†Blacksmith, veterinary, spray materials, twine, telephone, electricity, and others.

TABLE 6.—Percentage Distribution of the Cash Expense by Types of Expenditure, by Years, 1929-1935

Cash Expense=100 Per Cent

Source of expense	Average	1929	1930	1931	1932	1933	1934	1935
Feed purchased	24.6	27.1	28.8	22.7	18.6	24.3	25.2	21.7
Taxes	11.2	10.4	11.5	14.2	15.7	12.9	9.7	6.3
Labor hired	10.0	9.0	9.6	8.7	11.4	10.8	10.3	11.5
Fertilizer and lime	6.8	7.4	7.6	6.9	6.4	6.0	6.7	5.7
Fuel and oil	4.9	3.5	4.1	4.4	7.6	6.3	5.4	4.9
Repairs*	3.6	3.2	3.3	3.7	4.2	3.6	3.8	3.9
Seeds	3.4	3.3	3.4	3.7	3.5	2.9	4.7	2.9
Machine hire	2.8	2.3	2.4	3.0	3.2	3.1	2.9	2.7
Insurance	1.5	1.1	1.3	1.4	2.5	2.2	1.8	1.3
Breeding stock	3.5	5.4	2.5	3.0	2.5	2.7	3.2	4.3
Feeder stock	6.0	8.0	7.2	6.5	3.5	3.0	3.7	6.8
Poultry	2.6	2.3	2.7	2.7	3.4	2.6	2.5	2.2
Horses	2.1	1.0	1.1	1.9	3.7	1.8	2.7	3.8
Miscellaneous†	7.7	7.2	6.7	9.8	8.5	8.7	7.0	6.7
Replacements and improvements in lieu of depreciation	9.3	8.8	7.8	7.4	5.3	9.1	10.4	15.3
Total cash expense	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Farm machinery, fence, and buildings.
†Blacksmith, veterinary, spray materials, twine, telephone, electricity, and others.

Cash outlay for feeds was 24.6 per cent of the total operating expense during the 7 years on these farms. In 1929 and 1930 feed costs made up 27.1 and 28.8 per cent of the total operating expenses, but during the next 2 years the outlay for feeds fell to 18.6 per cent, at which time these farmers were spending less than one-third as many dollars for feed as in 1929. By 1935 expenditures for feeds had risen somewhat from their low level in 1932 but were still below the 1929 level. Feed prices in the United States were 52 per cent less in 1932 than in 1929. This great drop in prices accounted for a large part of the decline in cash outlay for feed by the farmers. However, there also occurred a reduction in the quantity of feed purchased. Because of the dry weather in Ohio in 1930 the quantity of feed purchased was 6 per cent higher in that year than in 1929 on these farms. The feed bought on these farms was 7 per cent less in 1931, 32 per cent less in 1932, 17 per cent less in 1933, 26 per cent less in 1934, and 25 per cent less in 1935, than in 1929.

Farm taxes were the second largest cash expenditure on these farms; 11.2 per cent of the total went for real estate and personal tax (all of which was tax on farm supplies and equipment). Taxes, unlike many of the other farm expenses, are beyond the immediate control of the farmer to reduce. The result was that the proportion of the cash expenses that went for taxes increased from 10.4 per cent in 1929 to 15.7 per cent in 1932 and then declined to 6.3 per cent in 1935. The total dollar outlay for taxes was the same in both 1929 and 1930 and then gradually declined during each of the next 5 years until at the close of 1935 it was 54.1 per cent below the 1929 level[4].

Payments for hired labor required slightly less of the farmer's operating funds than did taxes. The dollar outlay for labor declined to 59.7 per cent of the 1929 level and has since increased to 96.6 per cent. In 1929 and 1930 the number of men engaged in the operation of these farms averaged one and one-half men per farm; in 1931 it increased to one and six-tenths; and it remained at the same level the next year. In 1933 it increased to one and seven-tenths; in 1934, to one and eight-tenths; in 1935, to almost one and nine-tenths. Most of the increase was in the nature of unpaid family labor, and when proper adjustments for this are made, that proportion which was hired labor remains fairly constant, but with a slight tendency to increase rather than decrease.

The amount spent for fertilizer and lime by this group of farmers declined each year until in 1932 it was only 40.6 per cent of the 1929 outlay. By 1935 the cash expended for fertilizer and lime had increased to 58.3 per cent of the 1929 outlay. Expenditures for this purpose in 1929 were 7.4 per cent of the total operating cost, in 1935, only 5.7 per cent. Fertilizer prices declined 26 per cent in the United States by the end of 1932. The next 2 years they were 20 per cent below 1929. This reduction in price accounts for a part of the dollar decline in amount spent by these farmers for fertilizer and lime, but in 1932 and 1933 the quantity of fertilizer and lime purchased was only a little more than one-half of what it was in 1929, and in 1935 the quantity used was still 27 per cent below 1929.

During the first year of the period covered by this analysis, fuel and oil purchases for farm operation amounted to 3.5 per cent of the total cash expenses. There was practically no reduction in the total dollar outlay for these items during the entire period, and in 1935 it was 6.1 per cent higher than in 1929. In 1932, 7.6 per cent of all operating expense was for fuel and oil. At the start of the 7-year period, 70 of the farmers in the group owned tractors.

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[4]Sales tax not included.

In 1931 one farmer disposed of his tractor. During the next 2 years two farmers who had previously owned none purchased tractors. In 1935 the number of farmers owning tractors was increased to 78.

Repair costs, which include machinery, buildings, and fences, required an average of 3.6 per cent of the total operating expense during the period. The dollar outlay for machine repairs remained fairly constant throughout the period and tended to require an increasing proportion of the total cash outlay. Funds expended for building and fence repairs dropped to less than one-third of the amount spent in 1929, and only in 1935 was there any increase in the expenditure for these items.

Cash outlay for breeding stock had declined by 1932 to about one-fifth of the amount spent in 1929. The proportion of the total operating expense represented by purchases of breeding stock declined from 5.4 per cent in 1929 to 2.5 per cent in 1932. During this period prices of dairy cows dropped to one-third of the 1929 price and other types of breeding and producing stock declined similarly. Declines in the price of breeding animals accounted for much of the drop in the farmer's cash outlay for breeding stock, but in 1932 the number purchased was but slightly more than one-half that bought in 1929. In 1935 these farmers purchased more head of breeding stock with fewer dollars than in the first year of this analysis. This was made possible by the continued low price of dairy cows, the principal type purchased.

Although the expenditure for feeder stock dropped in 1930 and 1931, the decline in prices of feeders was at about the same rate, and the result was that the amount of feeder stock purchased remained fairly constant until 1932. In that year, however, only one-half as many feeders were purchased, and not until 1934 was there an increase in the number. The following year the quantity bought by these farmers was only 15 per cent below that of 1929.

Expenditures for poultry, which were primarily for the purchase of baby chicks, made up a rather uniform proportion of the total operating expense. The increasing amount of poultry on these farms during the 7 years required that more baby chicks be purchased than in 1929. This increase in number of chicks purchased, although at a lower price, resulted in a smaller decline in actual cash expenditures for poultry than occurred for other types of livestock.

There was practically no change in the number of horses on this group of farms but purchases of horses for replacement during these 7 years increased approximately three times. (See Table 12). At the beginning of this period only 1 per cent of the total operating cost was required for purchase of horses; in 1932, 3.7 per cent; and in 1935, 3.8 per cent. In these 2 years, which were peak years, more than twice as many horses were purchased as in 1929.

The major portion of the farmer's cash expense is for direct operation, but sooner or later it becomes necessary to put a new roof on some building, replace a fence, or buy a new binder. In 1929 the average expenditure for replacements and improvements was $207. A sharp drop occurred during the next 3 years, and in 1932 only $59, or 28.5 per cent as much money, was expended for these items as in 1929. Some increase occurred in the next 2 years, but in 1935 money spent almost doubled over the previous year and amounted to 31.4 per cent more than in 1929.

The cost of tile drains accounted for 15 per cent of the total spent for improvements in the beginning, but by 1932, and for the next 2 years, expenditures for this purpose were practically nonexisting. Building improvements also fell to a very low level. Fence and machinery purchases declined the least, although in 1932 approximately two-thirds fewer farm implements were purchased than in 1929 on these farms. Long-delayed replacement of machinery, together with increased farm income, during 1934 and 1935 resulted in a rapid rise in the dollars spent for farm equipment. In 1935, almost four times as much was spent as in 1932, and 44 per cent more than in 1929. (See Table 7).

TABLE 7.—Expenses for Replacements and Improvements, by Years, 1929-1935

Dollars per Farm

Expenditure	1929	1930	1931	1932	1933	1934	1935
Buildings	56	47	20	8	35	52	88
Fences	11	15	11	5	9	10	16
Drains	31	19	16	6	4	2	11
Machinery	109	84	78	40	60	83	157
Total	207	165	125	59	108	147	272

CAPITAL ACCOUNT

Four items are included in the farmer's capital account, namely, real estate, which includes his land, buildings, and fences; livestock, which includes work animals and animals kept for production; crops and supplies; and farm machinery. On January 1, 1929, the farmer placed a total value of $15,984 on these items. A year later his estimate of total capital was slightly higher than the preceding inventory. Each succeeding year thereafter for the next 4 years, farmers wrote down their capital, and by January 1, 1934, it stood at 76.5 per cent of their 1929 estimate.

Real estate, consisting of land, buildings, and fences, made up approximately three-fourths of the total estimated capital. Many of the farmers in this group used tax assessors' values as a guide to their real estate values, and consequently less drop occurred in their land and building inventory than actually occurred as indicated by the index of real estate sales.

On January 1, 1929, the value of all types of livestock and work animals made up 12.5 per cent of the total capital. By the beginning of 1935, owing to the writing down of inventories, livestock had declined to 9.8 per cent, and the inventory value as of this year was 42.4 per cent lower than that of January 1, 1929. In 1935, the value of all livestock increased from $1190 to $1746 per farm.

Crops and supplies, which consist largely of the farmer's feed grains and roughages, together with such products as potatoes, fruits, seeds, and commercial supplies, such as purchased feed, fertilizers, fuels, and the like, constituted 6.5 per cent of the farmer's capital in 1929, 4.3 per cent at the beginning of 1933, and 7.6 per cent at the close of 1935. At the bottom, the inventory value of crops and supplies was only 51.8 per cent of their original value. Higher prices after 1932 resulted in increased inventory values of crops and supplies, and by the end of the period their inventory value was only 3.5 per cent below the January 1, 1929, valuation.

The inventory value of farm machinery and equipment on January 1, 1929, was 8.4 per cent of the total capital. Inventory values of farm machinery declined less than did either livestock or crops and supplies, largely because of continued high machinery prices. In each year from 1929 to January 1, 1935, farmers reduced their inventory values of farm machinery. This continued reduction was largely the result of depreciation and failure to replace old equipment. Heavy purchase of farm equipment during 1935 resulted in some increase in the total value of machinery, but at the close of this year it was still 32.4 per cent below the value on January 1, 1929

TABLE 8.—Inventory Value of Real Estate, Livestock, Crops and Supplies, and Machinery on January 1, 1929-1936

Dollars per Farm

	1929	1930	1931	1932	1933	1934	1935	1936
Real estate	11,583	11,617	10,987	9,807	9,657	9,322	9,521	9,612
Livestock	2,002	2,066	1,803	1,502	1,281	1,200	1,190	1,746
Crops and supplies	1,050	1,106	886	775	544	755	1,005	1,014
Machinery	1,349	1,285	1,215	1,085	981	952	887	912
Total capital	15,984	16,074	14,891	13,169	12,463	12,229	12,603	13,284

CROP PRODUCTION

Corn was the most important crop raised on these farms. (See Table 9). The smallest average acreage was in 1934, at which time only 23 acres per farm, or 29.9 per cent of the harvested cropland, was planted to corn. In 1933, 28.1 acres, or 34.7 per cent of the cropland, was in corn; this was the largest acreage planted per farm during the 7 years. With the exception of the 2 years, 1934 and 1935, in which some reduction was made in corn acreage, owing largely to the Agricultural Adjustment Program, corn occupied approximately one-third of the total land planted to crops for harvest. An average of 11.5 per cent of the corn acreage was harvested for silage during the 7 years. In 1930, because of the dry weather, it took 16.7 per cent of the crop to fill the silos. Actual production of grain was greatest in 1931 and 1935; 1930 and 1934 were the most unproductive corn years during the period.

TABLE 9.—Utilization of the Land, by Years, 1929-1935

Acres per Farm

Utilization of land	Average	1929	1930	1931	1932	1933	1934	1935
Total farm area	137.8	132.0	132.0	138.0	137.0	141.0	141.0	144.0
Non-crop land and rotation pasture	60.0	59.0	57.0	59.0	59.0	60.0	64.0	62.0
Cropland, total	77.8	73.0	75.0	79.0	78.0	81.0	77.0	82.0
Corn for grain	22.2	21.4	19.4	23.3	23.6	25.0	20.3	22.6
Corn for silage	2.9	2.5	3.9	2.6	2.7	3.1	2.7	2.5
Total corn	25.1	23.9	23.3	25.9	26.3	28.1	23.0	25.1
Oats	9.8	9.7	10.5	10.6	10.9	8.4	8.0	10.5
Wheat	18.6	17.0	18.6	18.6	17.9	20.2	18.8	19.0
Hay	17.8	16.9	17.0	17.6	16.4	17.2	20.6	19.0
Intensive crops*	4.0	3.6	4.2	4.4	3.9	4.2	4.0	4.0
All other crops†	2.5	1.9	1.4	1.9	2.6	2.9	2.6	4.4

*Tobacco, canning crops, truck crops, sugar beets, potatoes, orchard, berries, and farm gardens.

†Rye, barley, buckwheat, and soybeans for grain.

Wheat ranked second among the major crops, with the percentage of the cropland sown to wheat varying between 22.9 per cent in 1933 and 24.9 per cent in the following year. The 1931 wheat crop harvested by these farmers averaged 33.9 bushels per acre, or a total of 630 bushels per farm. The poorest wheat crop during the 7 years occurred in 1930 with an average acre yield of 20.5 bushels and a total per farm of 382 bushels[5].

TABLE 10.—Crop Production, by Years, 1929-1935

Production per Farm

Crop	Average	1929	1930	1931	1932	1933	1934	1935
Corn (silage), tons	20	18	17	22	20	20	23	22
Corn (grain), bu.	985	931	652	1208	1040	1114	771	1177
Oats, bu.	337	323	404	451	335	195	223	425
Wheat, bu	454	412	382	630	405	463	405	479
Hay, tons	27	28	18	31	26	27	25	37

An average of approximately 10 acres per farm, or 13 per cent of the land in harvested acreage, was used for oats by these farmers. From 1929 to 1932 the acreage per farm remained very constant; in both of the next 2 years the acreage decreased materially. In 1935 the acreage seeded to oats was restored to the same level as existed in the earlier years of the period. The annual production of oats per farm was highest in 1931 and 1935 (both being favorable oats years) and lowest in 1933 and 1934, the 2 years when acreage seeded was also smallest.

TABLE 11.—Crop Yields per Acre, by Years, 1929-1935

Crop	Average	1929	1930	1931	1932	1933	1934	1935
Corn (silage), tons	6.9	7.6	4.4	8.5	7.4	6.4	8.5	8.8
Corn (grain), bu.	44.4	43.5	33.6	51.8	44.1	44.6	38.0	52.1
Oats, bu.	34.4	33.3	38.5	42.5	30.7	23.2	27.9	40.5
Wheat, bu.	24.4	24.2	20.5	33.9	22.6	22.9	21.5	25.2
Hay, tons	1.5	1.6	1.0	1.7	1.6	1.5	1.2	1.9

Several different types of hay crops, including alfalfa, clovers, timothy, soybeans, and mixtures of timothy and legumes, were produced on these farms. During the first 5 years the acreage of all hay harvested was approximately 17 acres per farm per year. In 1934 and 1935 the hay acreage increased to approximately 20 acres per year. Much of this increase may be credited to the shift from corn and wheat to grass brought about by the government adjustment program. In 1929 there was an average of 1.6 acres of alfalfa per farm on these farms; by the end of the period the average was 7 acres per farm, an increase in 7 years of over 400 per cent.

Other crops, such as barley, rye, soybeans for grain, buckwheat, and others, utilized an average of 2.5 acres per farm per year. There was some increase in the total acreage of these miscellaneous field crops over the 7-year period. Soybeans harvested for seed accounted for a large part of this increase. The

[5]The average wheat yield for the State in 1931 was 29.5 bushels per acre, and in 1930, 17.8 bushels per acre.

more intensive crops, potatoes, tobacco, sugar beets, canning crops, field truck, fruits, and berries, utilized an average of 4 acres per year per farm. Plantings of these crops increased slightly during the first 3 years and after that changed little.

TABLE 12.—Livestock, by Years, 1929-1935

Head per Farm

Type of livestock	Average	1929	1930	1931	1932	1933	1934	1935
Dairy cows	7.2	6.2	6.6	7.1	7.5	7.9	8.0	7.4
Heifers and calves	5.1	4.3	4 5	4.9	5.0	5.6	5.6	5.5
Ewes	13.9	12.2	12.4	13.5	14.5	14.4	15.2	15.3
Brood sows	3.5	3.5	3.5	3.5	3.9	4.4	2.8	2.9
Hens	163.0	157.0	157.0	160.0	169.0	166.0	167.0	165.0
Market hogs sold*	39.0	41.0	42.0	39.0	39.0	46.0	36.0	33.0
Horses	3.1	3.2	3.1	3.0	3.1	3.0	3.0	3.0

*A few feeder pigs were sold on some farms, and in those cases they were converted into an equivalent number of 200-pound market hogs.

LIVESTOCK PRODUCTION

Out of the entire number of farms included in this group, only one reported no milk cows; a few reported as many as 20 or more; and the average number milked per farm was approximately seven and two-tenths. In 1929 there were six and two-tenths dairy cows per farm; in 1934 there were eight head. The young stock for replacement purposes numbered four and three-tenths head in 1929 and five and six-tenths head in 1934. Between these years the number of cows milked registered a slight increase each year.

The average flock of breeding ewes per farm for all farms in the study in 1929 was 12.2 head; by 1935 it had increased to 15.3 head. In only one of the 7 years did the number of breeding ewes fail to show some increase in number. Sixty of the farms in the group reported ewes at the beginning of the study, and 57, at the end.

During the first 3 years the brood sow population on these farms averaged three and five-tenths sows per farm each year. During that period these farmers marketed per farm 41 head of market hogs in 1929, 42 in 1930, and 39 in 1931[6]. An increase in the average number of brood sows per farm from three and five-tenths to three and nine-tenths in 1932 was unaccompanied by any increase in the number marketed. The next year further increases in the number of sows per farm took place, and 46 head of hogs were marketed. In 1934, as a result of the Agricultural Adjustment Administration and the poor crop yields caused by the drouth, farmers reduced the number of brood sows to two and eight-tenths per farm and marketings to 36 head. Two and nine-tenths sows were kept per farm in 1935, a slight increase over the preceding year, but marketings declined to 33 head. Of the 141 farmers, all but 35 maintained one or more brood sows throughout the entire period. On a few of the farms that kept only a few or no brood sows, all or a part of the hogs marketed were purchased as feeder pigs.

[6]In the cases where a few feeder pigs were sold, they were converted into an equivalent number of 200-pound market hogs.

The average size of poultry flocks increased from 157 birds at the beginning to 169 in 1932. In 1935 the number was down to 165 birds. Poultry existed on almost every farm in the group. Several of the farmers kept a flock largely for home consumption. but most of the others had flocks ranging from 100 to 1000 or more birds.

RETURN PER DOLLAR'S WORTH OF FEED FED TO PRODUCTIVE LIVESTOCK

Feed prices declined sharply after 1929 and for the next 3 years, but not sufficiently fast or far enough to maintain as favorable a ratio between feed cost and the return from productive livestock as existed in 1929. In that year the return per dollar's worth of feed fed was $1.64, a return of 64 cents above the cost of feed with which to pay the labor and all other costs incident to livestock production. In 1930 and for each of the next 5 years the return per dollar's worth of feed fed was approximately $1.35. Better prices for livestock and livestock products, together with increased inventory values of breeding stock, good crop yield, and good pasture, made possible a return of $1.83 for each dollar's worth of feed fed in 1935.

The low return above the cost of feed fed from 1929 to 1935 is in large measure attributable to low prices for livestock and livestock products and declining inventory values, but a part of it is undoubtedly due to the use of poorer rations growing out of the reduced quantities of concentrated feed purchased during those years by many of these farmers.

A COMPARISON OF THE FARMS WITH THE HIGHEST NET CASH INCOME WITH THOSE WITH THE LOWEST

Fifty per cent of the farmers had average net cash incomes under $1251, and 50 per cent had average net cash incomes above this amount. Thirty-five farmers, or the 25 per cent of the farms which constituted what may be called the high-income group, succeeded in obtaining an average net cash income above $1659; and 35 farmers, or the 25 per cent of the farms which constituted what may be called the low-income group, secured average net cash incomes of $881 or less for the entire period. The 35 farms with average incomes above $1659 for the 7 years had in almost every case more than double the amount of cash with which to pay family living expenses, principal, and interest that the 35 farms with incomes of $881 and under had. It is not, however, correct to assume that the higher income of the one group was the result of more effective adjustments during the period of declining price or that the small average income of the other group was the result of failure to adjust. A part of the difference between the two groups may be attributable to good or poor adjustments, but the records available on these farms are not in sufficient detail, nor is the sample sufficiently adequate in number or duration to make it possible to determine the effectiveness of the apparent adjustments. Most of the farms with high average incomes for the 7 years were also among the farms with high incomes in 1929 (25 of the high-income group were among the high 35 farms in 1929, and all but three were in the upper 50 per cent). Most of the farms with low average incomes for the 7 years were among the low-income farms in 1929 (22 of the low-income group were among the low 35 farms in 1929, and all but three were in the lower 50 per cent). This indicates that much of the difference between the two groups prevailed previous to the unsettled conditions which developed after 1929.

Twenty-eight of the 35 farms in the high-income group were located in western Ohio, and seven, in eastern Ohio. In the low-income group, 22 were located in eastern, and 13, in western Ohio[7]. No single type of farming was predominant among either group; only a few farms among them tended to concentrate on one enterprise[8].

TABLE 13.—Variation in Net Cash Income among the Farms, by Years, 1929-1935

Year	Seventy-five per cent of farmers had net cash incomes of more than	Fifty per cent of farmers had net cash incomes of more than	Twenty-five per cent of farmers had net cash incomes of more than	Highest net cash income	Lowest net cash income
	Dol.	*Dol.*	*Dol.*	*Dol.*	*Dol.*
1929	1053	1619	2463	4897	— 725
1930	946	1356	1954	3745	— 408
1931	581	1003	1427	3335	— 953
1932	594	858	1121	2595	— 177
1933	648	971	1485	2999	—1296
1934	920	1250	1762	3810	33
1935	975	1480	1938	6126	— 940
Seven-year average	881	1251	1659	3163	142

The high-income group averaged for the period 154 acres per farm, of which 101 acres were in harvested crops, as compared with the low-income group, with 118 acres per farm and 57 acres of harvested crops. Among the high group, five of the farms were less than 100 acres and six were slightly over 200 acres in size. Of the 35 farms in the low group, 16 were under 100 acres in size and only two were above 200 acres. The farms in the high-income group provided 552 days of productive labor or productive man-work units per farm and the low-income group, 293 per farm[9]. Significant differences also existed in the amount of labor employed in operating the farms in the two groups. On 20 of the high-income farms work was provided for two or more men full time. Thirteen farms utilized the labor of one man full time and one man for 6 to 9 months each year. Two farms required but 3 months of labor in addition to the full time of the operator. Four farms among the low-income group were manned by two full-time men; on 10 farms, 6 to 9 months of labor were used in addition to that of the operator. On 14 of the low-income farms the operator's labor was supplemented with 2 to 4 months of seasonal labor, and on the remaining seven farms the operator provided all of the labor.

The difference in the acreage between the two income groups and the predominance of eastern Ohio farms in the low group and of western Ohio farms in the high group are significant factors[10]. Except for the presence of a few more producer-distributors of milk among the high than the low group there was no significant difference in the type of farming between the two. Both were made up primarily of general farms receiving in most cases some income from dairy, hogs, poultry, and crops.

[7]Seventy-nine of the 141 farms included in the study were located in western Ohio, and 62, in eastern Ohio.

[8]Five farms in the high-income group distributed at retail all or part of their dairy products, and in the low-income group one farmer retailed a large part of his dairy and poultry products.

[9]A productive man-work unit is 10 hours of work performed on crops and productive livestock under conditions of average efficiency. In the determination of the number of productive man-work units performed on a particular farm, the average time required to care for the different crops and livestock on 71 cost-account farms located in Medina, Putnam, and Greene Counties, Ohio, was used as a standard.

[10]Approximately one-fifth less net cash income was obtained on the eastern Ohio farms than on the western Ohio farms.

The difference in acreage undoubtedly influenced the spread in net cash income. However, when the farms are compared on a unit basis, as receipts per farm acre, the high-income group had receipts of $29.02 compared to $14.30 per acre for the low group. If compared on the basis of receipts per man-work unit, the high group received $8.09 and the low group, $5.76. Obviously, other factors than size were important in influencing income.

Cash receipts of the high group for the 7 years averaged $4469; the farm with the lowest cash receipts in this group averaged $2501 and the farm with the highest, $10,242. The low-income group had cash receipts averaging $1688 and all but two of the farms had cash receipts below any farm in the high-income group. Within the low-income group were one farm with a 7-year average cash receipt as low as $736 and one farm with an average cash receipt as high as $3257. Cash receipts in both groups were more than 50 per cent below the 1929 level by the end of 1932. The average cash receipts of the high-income group fell slightly more than those of the low-income group.

Receipts from cattle (dairy products included) ranked first and crop sales, second on both groups of farms. In the high group hog receipts were more important than poultry receipts, but the latter were slightly more important in the low group. Among the high farms, 12 disposed of the bulk of their dairy products as cream; whereas 26 of the low group sold more of their dairy products as cream than as whole milk.

Cash expenses in the high group for the entire period were $2430, or 54.3 per cent of the cash receipts. Within the group there was less uniformity of expenditure than of receipts (see Fig. 2). Ten farms had annual cash expenses below $1500; the lowest was $732; five farms had average yearly expenses above $4000; the highest was $7078. Cash expenses on the low-income group averaged $1039, 61.5 per cent of the cash receipts. Four of the 35 low-income farms had annual cash expenses above $1500; the highest was $2400. Only nine of this group had cash expenses less than the lowest annual individual expenditure in the high group. Cash expenses in both groups declined following 1929, those of the high group to 46 per cent of the 1929 level, and those of the low group to 49 per cent, by the end of 1932. In 1932 cash expenses were equal to 54 per cent of the total cash receipts on the high farms and to 60 per cent on the low farms. In both groups feed purchased was the largest item of expense. Expenditures for hired labor were second and taxes, third in the high group, but for the low group these expenditures were reversed. Taxes amounted to 13.3 per cent of the total expenditures in the low group and to but 9.5 per cent in the high group.

The average net cash income of the high farms for the entire period was $2054. Thirteen of the group received this amount or more; the highest received $3163, and 22 received from $1661 to $2054. The low-income group had an average net cash income of $648. Twenty-two farms had incomes greater, and 13, less than this amount; the largest was $881 and the smallest, $142.

In both groups, net cash income on individual farms varied from year to year, and in most cases this fluctuation was rather great. On individual farms in the high-income group the variation in yearly income from the farm average ranged from 17 per cent on the farm with the most stable income to 57 per cent on the farm with the most variable income. On most of the farms in this group the variation in the yearly income from their 7-year average was approximately 30 per cent. Fluctuations in income on individual farms among the

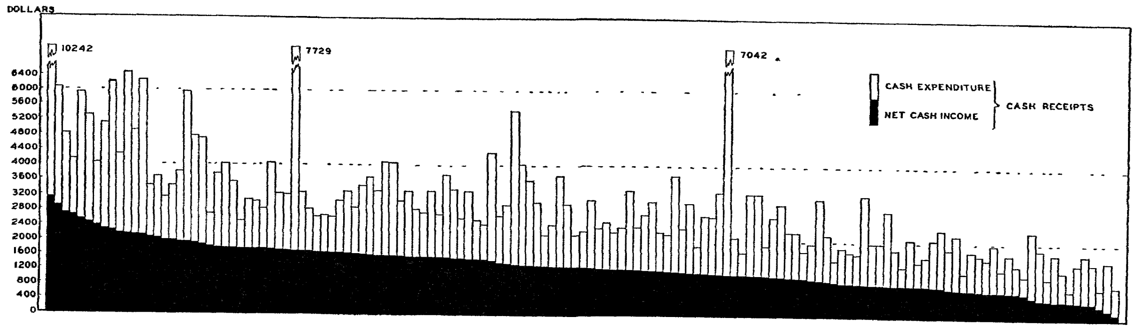

Fig. 2.—Seven-year average cash receipts, cash expenses, and net cash income per farm, on the 141 farms included in this study. (Farms arranged in order of net cash income)

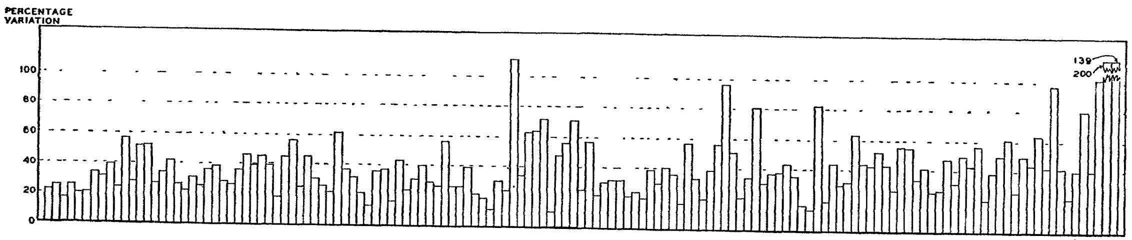

Fig. 3.—Percentage variation in the yearly net cash income on the individual farms included in this study. (Farms arranged in order of net cash income)

low group were much greater than in the high group. The farm in the low group with the most uniform yearly income over the 7 years had a variation equal to 21 per cent of the average net income on that farm. Three farms in the group had such widely fluctuating yearly incomes that their variation exceeded 100 per cent of their 7-year average net incomes. The farms in the low group had less stable incomes than those in the high group. (See Fig. 3). Twenty-six of the 35 low-income farms had a percentage variation in income above 40 per cent, as compared with but nine farms above 40 per cent in the high group. Stability of income alone was no assurance of high income. There were some farms among the low group that had more stable incomes than farms in the high group.

The larger receipts per acre or man-work unit and the smaller proportionate part of the total receipts required to meet the cash expense on the high- than on the low-income farms may largely be accounted for by a greater degree of efficiency. Much of this greater efficiency may be credited to management, but some of it may be attributed to characteristics associated with geographic location, such as high cost of operation on less productive soils, irregular topography, and smaller acreages of tillable land per farm. The effect of efficiency that may be attributed to natural cause accounts in part for the predominance of western Ohio farms in the high group. Natural conditions are generally more favorable to low-cost production in western Ohio than in many parts of eastern Ohio.

In the use of labor, the high group provided 268 days per year of productive labor per man in contrast to 203 days on the farms with low incomes. A well-organized farm is necessary if labor is to be employed productively a large part of the time. Farm arrangement and size of field affect the quantity of labor required to perform many tasks. On the high-income farms, fields devoted to crop production averaged 14.3 acres in size, and all but 22 per cent of the fields could be considered as regular in shape, compared with 9.8 acres per field and 35 per cent irregular shape for the low group. Thirty per cent of the crop fields were under 6 acres on the farms of the low-income group, as compared with only 17 per cent in the high group. Neither group contained many farms that would be considered well arranged from the standpoint of labor efficiency. Field size and farm arrangement are only two of many factors that affect labor efficiency. Other factors that make for good or poor use of labor, such as the distribution of labor requirements, proper equipment, and the like, were not ascertainable from the data available on these farms.

The return on feed fed to productive livestock may be influenced by several factors. The three most important are: the production obtained, the price received for that production, and the cost of feed fed. The return for each dollar's worth of feed fed by the high-income group was $1.53, and for the low-income group, $1.33 for the entire period. To what extent this difference is due to price of product, cost of feed, or to higher production is not distinguishable.

Crop yields are the result of both management and natural factors. For the high group the 7-year average yields were: corn, 49 bushels; oats, 36 bushels; wheat, 26 bushels; and all hay, 1.75 tons per acre. For the low group the yields were: corn, 39 bushels; oats, 29 bushels; wheat, 21 bushels; and all hay, 1.4 tons per acre. Only five of the high-income farms had a 7-year corn yield under 40 bushels per acre, as compared with 20 farms in the low group. Fourteen of the low-income farms out of the 31 raising wheat had 7-year wheat yields under 20 bushels per acre.

TABLE 14.—The Average Farm Price of Hogs by Months in Ohio, 1929-1935, and the Percentage of Total Hogs Marketed by Months on the High- and Low-income Farms

Month	Seven-year average monthly farm price*	Percentage of total hogs marketed	
		High farms	Low farms
	Dol.	*Pct.*	*Pct.*
January	6.26	7.12	4.54
February	6.70	9.25	7.74
March	7.16	12.40	8.82
April	6.90	8.57	12.46
May	6.69	7.40	7.72
June	6.71	4.34	6.68
July	7.16	3.21	3.67
August	7.53	6.45	8.34
September	7.46	12.58	11.02
October	6.90	11.77	10.21
November	6.23	8.91	9.50
December	5.96	8.00	9.30
Total	6.81	100.00	100.00

*Source: Ohio Cooperative Crop Reporting Service.

Methods and timeliness of marketing accounted for some of the difference in the net income of the two groups. The method of marketing milk, as previously pointed out, differed greatly between the two groups. Also, more farmers in the high group disposed of all or part of their dairy and poultry products at retail than in the low-income group. About one-half of the farmers in each group purchased a part of their farm supplies and marketed all or part of their products cooperatively. The high-income farms as a group received an average of 23 cents more per hundredweight for all the hogs marketed during the 7 years than did the low-income farms. This higher average price was a result of the high group's having more of their hogs ready for market during the months in which hog prices are normally highest. (See Table 14).

CONCLUSIONS

None of the farmers included in this analysis succeeded in maintaining their cash receipts at the 1929 level during the precipitous decline in prices. In most instances the drop in cash receipts was about 50 per cent. All of the farmers except two reduced their cash expenses, but the degree of reduction varied more than the reduction in cash receipts. Net cash income declined from 1929 through 1932 on all of the farms but four; on these farms unusually heavy expenditures for replacements and improvements in 1929 and 1930, and then almost complete absence of such expenditures the next 2 years account for the uniform net cash income. Other adjustments, such as the reduction of fertilizer and lime purchased, may not have had any apparent ill effects at the time, but if they had been continued for more than a year or two, they would have lowered the productivity of the soil and the income eventually. Curtailment of cash expenditures for improvements and replacements, which was an almost universal adjustment on the 141 farms, undoubtedly had, in most cases, a favorable effect on checking the decline of net cash income. In a few cases the failure to purchase, repair, or replace certain necessary equipment may have been more detrimental than beneficial.

Inasmuch as some farmers made temporary changes that were probably effective and, on the same farm, others that may have been injurious, the end result of each was not obvious from the net income of that farm, for the one may have offset the other. The effect of other adjustments, such as failures to make the necessary improvements and replacements in lieu of depreciation, are not evident in many cases, inasmuch as the farmer made his own appraisal of value in taking inventories and he may not have been conscious of the gradual depreciation occurring from year to year.

It must be recognized, now that the extremely unfavorable prices of the early 1930's have passed, that what was ahead of the farmer in 1929 was not then known and that farmers' operations in these years following 1929 were governed almost entirely by the immediate situation that then prevailed, both on the individual farm and in general. What lay ahead was sufficiently uncertain at the time and conditions were so unsettled that major changes in farm organization were hazardous.

SUMMARY

1. There was no tendency between 1929 and 1935 on these farms to make major changes in farm organization, other than to increase or decrease the scale of operation.

2. Net cash income declined 50.1 per cent; cash receipts, 51.7 per cent; and cash expenses, 52.9 per cent, from 1929 to the end of 1932.

3. In 1935 net cash income was 12.8 per cent, cash receipts were 19.3 per cent, and cash expenses, 24.2 per cent below the 1929 level.

4. The total farm acreage and acreage of crops of the 141 farms tended to increase as prices declined.

5. More head of breeding and producing stock were on these farms at the end of 1932 than at the beginning of 1929.

6. For the group as a whole, curtailments in expenditures by 1932 resulted in but two-thirds the quantity of feed being purchased, only slightly more than one-half the tonnage of fertilizer and lime being used, one-half the number of head of breeding and feeding stock being bought, and approximately one-third the number of farm implements being purchased, in comparison with 1929.

7. Receipts from poultry declined the least of the major sources of livestock income and receipts from hogs, the most.

8. Total receipts from crop sales declined the most rapidly and recovered first.

9. The amount of hired labor remained fairly constant, but owing to the use of more family labor, the total number of men employed on these farms increased from one and five-tenths men per farm in 1929 to one and nine-tenths men in 1935.

10. The number of dollars spent for fuel and oil remained almost stationary during the 7 years.

11. The farms that had the highest average net cash income for the period were among the high farms in 1929.

12. The farms that had the lowest average net cash income for the period were among the low farms in 1929.

13. Size, volume of business, geographic location, and efficiency were the chief factors that contributed to the difference in income between the two groups.

14. Although there were no farms among the 141 that did not have some fluctuation in yearly income, the farms in the high group had less fluctuation during the 7 years than did the farms in the low-income group.