University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Historical Materials from University of Nebraska-Lincoln Extension

Extension

7-1937

EC845 Annual Farm Business Report : 24 Frontier, Furnas, Gosper and Red Willow County Farms 1936

Follow this and additional works at: http://digitalcommons.unl.edu/extensionhist

"EC845 Annual Farm Business Report : 24 Frontier, Furnas, Gosper and Red Willow County Farms 1936" (1937). *Historical Materials from University of Nebraska-Lincoln Extension*. 2314.
http://digitalcommons.unl.edu/extensionhist/2314

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

AGRI
S
85
E7
#845

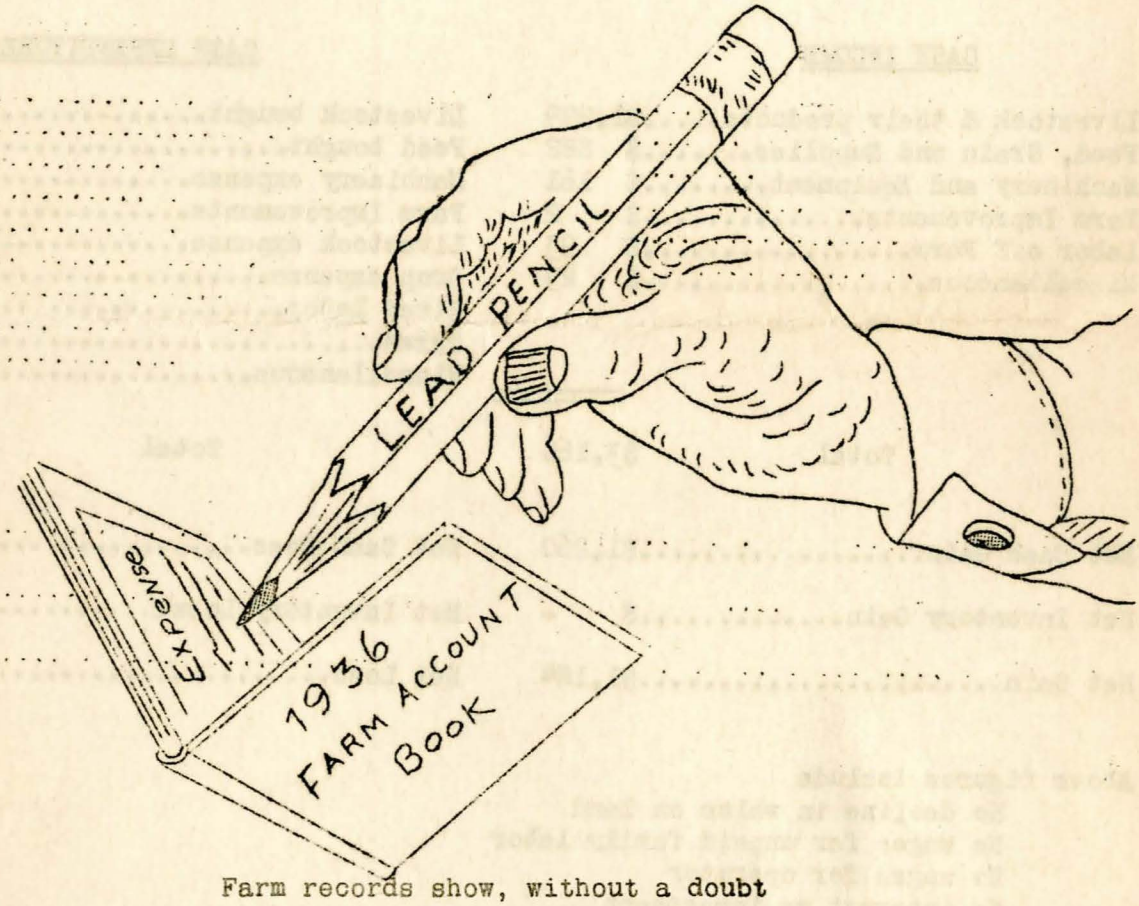
July, 1937

Extension Circular 845
1936

Annual Farm Business Report

Twenty-Four Frontier, Furnas, Gosper and Red Willow County Farms

1936



Farm records show, without a doubt
How your money has been paid out

Nebraska
COOPERATIVE EXTENSION WORK
IN AGRICULTURE AND HOME ECONOMICS
U. of N. Agr'l College & U. S. Dept. of Agr. Cooperating
W. H. Brokaw. Director, Lincoln

FRONTIER, FURNAS, GOSPER, AND RED WILLOW COUNTIES FINANCIAL STATEMENT

1936
Average of 24 Farms

INVENTORY GAINS		INVENTORY LOSSES	
Livestock	$ -	Livestock	$ 173
Feed, Grain and Supplies	$ -	Feed, grain and supplies	$ 103
Machinery and Equipment	$ 239	Machinery and Equipment	$ -
Farm Improvements	$ -	Farm Improvements	$ 39
Total	$ 239	Total	$ 315

CASH INCOME		CASH EXPENDITURES	
Livestock & their products	$1,999	Livestock bought	$ 288
Feed, Grain and Supplies	$ 882	Feed bought	$ 355
Machinery and Equipment	$ 161	Machinery expense	$ 798
Farm Improvements	$ 2	Farm Improvements	$ 53
Labor off Farm	$ 93	Livestock expense	$ 16
Miscellaneous	$ 29	Crop expense	$ 121
		Hired Labor	$ 102
		Taxes	$ 163
		Miscellaneous	$ 10
Total	$3,166	Total	$1,906

Net Cash Gain	$1,260	Net Cash Loss	$ -
Net Inventory Gain	$ -	Net Inventory Loss	$ 76
Net Gain	$1,184	Net Loss	$ -

Above figures include
- No decline in value on land
- No wages for unpaid family labor
- No wages for operator
- No interest on investment
- No interest actually paid

The above Financial Statement supplements this circular. It shows in summarized form the inventory gains and losses, the cash received and paid out, as well as the net gain or loss in inventories and cash. Figures are for the entire farm. One statement showing average figures for the entire group is shown. An additional statement appears in the circulars sent to cooperators showing figures for their individual farms.

10008r

TABLE I. SUMMARY OF 24 FARM BUSINESS RECORDS IN FRONTIER, FURNAS, GOSPER, AND RED WILLOW COUNTIES, 1936.

Factors useful in analyzing the farm business		Your farm	Average of 24 farms	8 Most profitable farms	8 Least profitable farms
Size of farm--Acres			514 a.	428 a.	474 a.
Acres in crops			249 a.	235 a.	244 a.
Per cent of land area tilled			56.0 %	63.6 %	58.3 %
Gross receipts per acre	$		$ 4.06	$ 7.35	$ 1.95
Total expenses per acre	$		2.88	3.71	2.88
Net receipts per acre	$		1.18	3.64	-.93
Land investment per acre	$		31	39	26
Total investment per acre	$		44	57	36
Acres in Corn			130 a.	124 a.	141 a.
Oats			12 a.	10 a.	15 a.
Wheat			44 a.	40 a.	26 a.
Barley			11 a.	12 a.	2 a.
Yields per acre--Wheat			12.3 bus.	14.6 bus.	10.0 bus.
Returns per $100 feed fed to productive livestock	$		$110	$145	$ 79
Returns per $100 invested in:					
All productive livestock	$		90	101	67
Cattle	$		61	76	48
Hogs	$		176	202	91
Poultry	$		181	120	162
Dairy sales per cow	$		41	73	31
Receipts from productive livestock per acre	$		2.97	5.15	1.42
Investment in productive livestock per acre	$		3.29	5.10	2.14
Man labor cost per $100 gross income	$		31	20	67
Man labor, power, & machinery cost per $100 gross income	$		58	40	118
Man labor cost per acre	$		1.24	1.49	1.32
Total feed cost for horses	$		178	158	141
Power and machinery cost per acre in crops	$		2.26	2.65	1.92
Expense per $100 gross income	$		71	50	148
Farms with tractors			20	7	6

TABLE I. Concluded Year: 1936 Counties: Frontier, Furnas, Gosper, and Red Willow

Item		Your farm	Average of 24 farms	8 Most profitable farms	8 Least profitable farms
Capital Investments					
Land	$		$ 15,815	$ 16,657	$ 12,372
Farm improvements	$		2,225	2,416	1,717
Horses	$		519	514	288
Cattle	$		1,252	1,661	664
Hogs	$		345	419	292
Sheep	$		6	19	–
Bees	$		3	8	–
Poultry	$		82	74	57
Livestock--total	$		2,207	2,695	1,301
Machinery and equipment	$		1,211	1,392	926
Feed, grain, and supplies	$		970	1,315	647
Total	$		22,428	24,475	16,963
Receipts--Net Increases					
Horses	$		$ 12	$ 11	$ –
Cattle	$		526	817	142
Hogs	$		608	848	265
Sheep	$		3	10	–
Bees	$		–	–	–
Poultry	$		46	25	19
Egg sales	$		102	64	72
Dairy sales	$		243	445	176
Livestock--total	$		1,540	2,220	674
Feed, grain, and supplies	$		425	783	182
Labor off farm	$		93	123	47
Miscellaneous receipts	$		29	21	23
Total	$		2,087	3,147	926
Expenses--Net Decreases					
Farm improvements	$		$ 91	$ 120	$ 77
Horses	$		–	–	31
Misc. Livestock decreases	$		2	4	–
Machinery and equipment	$		398	476	296
Feed, grain and supplies	$		–	–	–
Livestock expense	$		16	17	17
Crop expense	$		121	114	132
Hired labor	$		102	135	61
Taxes	$		163	170	153
Miscellaneous expenses	$		10	9	10
Total	$		903	1,045	777
Receipts Less Expenses	$		1,184	2,102	149
Total unpaid labor	$		574	543	589
Net income from investment and management	$		610	1,559	-440
RATE EARNED ON INVESTMENT	%		1.89%	6.09%	-2.62%
Return to capital and operator's labor & management	$		$ 1,083	$ 2,039	$ 30
5% Interest on investment	$		1,121	1,224	848
Labor and Management Wage	$		-38	815	-818

TABLE II. THERMOMETER CHART. The numbers between the lines across the middle of the page are the approximate averages in Frontier, Furnas, Gosper, and Red Willow counties of the factors named at the top of each column. The numbers set off by lines across the top of the page show the highest efficiency attained by cooperators in these factors. Those similarly indicated at the bottom of the page give the lowest efficiency shown by the records used in this study. The columns are independent of each other and each may be considered as a thermometer of efficiency. By drawing a line across each column at the number nearest approaching the figure for your farm in that factor (See Table I), you can compare your efficiency with that of other farms included in this study.

Rate earned on investment	Bushels per acre			Returns per $100 invested			Returns per $100 worth of feed fed	Power and machinery cost per acre in crops	Man labor cost per acre	Expense per $100 gross income	Gross receipts		Size of farm acres
		Wheat		Cattle	Hogs	Poultry					Per acre	Per farm	
HIGH													
11.16%		20		$130	$304	$308	$192	$ .76	$ .68	$ 38	$9.20	$4,210	850
8.89		19		-	-	-	180	.86	-	-	8.26	4,187	794
7.89		18		121	296	301	170	1.06	-	-	7.66	3,887	754
6.89		17		111	276	281	160	1.26	-	-	7.06	3,587	714
5.89		16		101	256	261	150	1.46	-	-	6.46	3,287	674
4.89		15		91	236	241	140	1.66	.79	41	5.86	2,987	634
3.89		14		81	216	221	130	1.86	.94	51	5.26	2,687	594
2.89		13		71	196	201	120	2.06	1.09	61	4.66	2,387	554
AVERAGE													
1.89		12		61	176	181	110	2.26	1.24	71	4.06	2,087	514
.89		11		51	156	161	100	2.46	1.39	81	3.46	1,787	474
- .11		10		41	136	141	90	2.66	1.54	91	2.86	1,487	434
- 1.11		9		31	116	121	80	2.86	1.69	101	2.26	1,187	394
- 2.11		8		21	96	101	70	3.06	1.84	111	1.66	887	354
- 3.11		7		-	76	81	60	3.26	1.99	121	1.06	587	314
- 4.11		-		-	56	61	50	3.46	2.14	131	-	-	274
-		-		-	-	-	40	3.66	2.29	141	-	-	-
LOW													
- 5.02		7		21	54	42	40	3.99	2.32	164	.94	449	240

10008r.

ANNUAL FARM BUSINESS REPORT
FRONTIER, FURNAS, GOSPER, RED WILLOW COUNTIES, NEBRASKA, 1936

Arthur G. George*

Farm incomes were low in Nebraska in 1936. Business records kept by over 1,000 Nebraska farmers indicated lower incomes in 1936 than those for 1935 and higher than those obtained in 1934. These differences in incomes cannot be attributed to differences in managing abilities of farmers, but they were largely due to changes in economic and weather conditions over which the farmer has no control.

One of the reasons for keeping farm business records is to provide information that can be used as a basis for determining those methods and practices which result in higher incomes. This report will attempt to point out some of these factors as determined from a study of the records submitted by farmers themselves. Farm earnings reflect the actions of farm operators. When management practices of different operators are compared, the relative earnings may give a strong indication as to which were the most efficient practices. This report will also bring out some comparisons between the average, the one-third most profitable, and the one-third least profitable farms. Individual cooperators will find their figures conveniently arranged for handy comparison with the above in the copy of this report which will be delivered to them.

Any conclusion indicated by the data in this report must be interpreted, having in mind the effects of the severe drouth of 1936 and other adverse conditions which were beyond the control of individual farm operators.

Business generally improved thruout 1936 and farm prices were higher at its close than at its beginning. Compared with the average purchasing power of the farmers' dollar from 1910 to 1914 the farm dollar was worth 89 cents in January, 1936, and $1.01 a year later. This gain in farm purchasing power, however, brought little advantage to Nebraska farmers since their crop production was very low in 1936.

A fair wheat crop was produced in the eastern part of the state and a light one in the western part. Corn was almost a complete failure except for a light crop in parts of the western and southwestern sections of the state. Hay and roughage crops were short over practically the entire area of the state except where irrigation was practiced. Other crops were not produced in appreciable quantities. Low 1936 production with scant reserves of feed carried over caused an acute feed shortage among livestock growers.

---

*Appreciation is extended to the farmers from this area who submitted the records for this report and to Agricultural Agents, W. C. Mackey, Frontier county; A. W. Niebaum, Furnas county; Donald C. Joy, Gosper county and F. N. Jordan, Red Willow county, who directed this work in their respective counties.

7-3-37
MRC-300c
10008r

Farm returns are influenced by many different things. This section of this area report shows some tabulations which indicate the influence of certain factors upon earnings. Each tabulation shows data for the efficiency factor considered, arranged in low, medium, and high groups with one-third of the records included in each group. The influences of these factors are largely subject to the control of individual farm operators and they are presented for whatever stimulation they may give to thought and action on the part of interested farmers. Six efficiency factors will be considered as follows: (1) size of business and farm returns, (2) wheat yields and farm returns, (3) man labor costs per acre and farm returns, (4) power and machinery costs and farm returns, (5) returns from feed fed and farm returns, and (6) returns from productive livestock and farm returns.

SIZE. Different methods of measuring size of business might be used, but as used here it refers to the number of acres in crops. In the tabulation below, the records have been divided into three groups on the basis of the number of acres in crops and the returns shown. An indication of the livestock business is also given as a possible aid in evaluating results. The purpose of the tabulation is to show the influence upon incomes of few to many acres in crops.

Size of Business and Farm Returns

Number of farms	Range in crop acres	Crop acres	Total acres	Number of cattle	Number of hogs	Rate earned	Labor and management wage
8 Low	Less than 190	161	422	31	20	1.45%	$-180
8 Medium	190 to 280	238	445	26	22	2.26	151
8 High	280 and over	350	674	49	26	1.96	-86

The above tabulation shows that as crop acres increased farm returns tended to increase. The medium group had highest returns of the three groups. The lower returns of the high group when compared with those of the medium group were probably due to many different factors. Lower wheat yields had some part in the result. A separate tabulation showed average wheat yields of 9.9 bushels per acre for the medium group and 7.7 bushels for the high group. The low group of 8 farms having less than 190 acres in crops or an average of 161 crop acres per farm had an earning of 1.45 per cent on the investment. When measured in terms of labor and management wage, there was a loss of $180. For the medium group of 8 farms where the range in crop acres was from 190 to 280, or an average of 238 crop acres, the average rate earned was 2.26 per cent or a gain of $151 for the labor and management wage. The 8 farms having 280 crop acres or more, where the average was 350, had returns of 1.96 per cent on the investment or a loss of $86 as a labor and management wage. It should be noted also that generally more livestock was kept on those farms having more crop acres. It is natural to expect more livestock to be kept on those farms having more crop acres, so it is probably more correct to attribute the higher earnings to the increase in number of crop acres rather than to the increased numbers of livestock.

WHEAT YIELDS. It is obvious that high crop yields will result in larger farm incomes than low yields if other things are equal. In actual practice, however, the highest returns are not always found on those farms where

yields per acre are greatest. A comparison of crop yields should generally include more than one kind of crop. In this case we will use wheat only since corn, the other important crop for this county, was practically a failure in 1936.

Wheat Yields and Farm Returns

Number of farms	Range in yields	Yields per acre	Acres in wheat	Per cent crop acres in wheat	Number of cattle	Number of hogs	Rate earned	Labor and management wage
8 Low	Less than 7.6	1.8	8	3.3%	26	27	.63%	$-105
8 Medium	7.6 to 12	9.3	77	27.4	47	18	2.20	-96
8 High	12 and over	15.3	47	17.8	33	22	2.84	86

The above tabulation shows the highest earnings to have been made by the high group and the lowest by the low group. The 8 farms having wheat yields less than 7.6 bushels per acre and an average yield per acre of 1.8 bushels had an average earning of .63 of one per cent or a loss of $105 when earnings were measured in terms of labor and management wage. The medium group of 8 farms with wheat yields ranging from 7.6 to 12 bushels per acre and averaging 9.3 bushels had an earning of 2.20 per cent on the investment or a loss in labor and management wage of $96. The high group with wheat yields of 12 bushels or more and averaging 15.3 bushels earned 2.84 per cent on the investment or an earning of $86 when measured in terms of labor and management wage. The data indicate a trend for farm returns to become greater when wheat yields per acre are larger. The group having lowest wheat yields also had the fewest acres in wheat. The medium group had both more acres in wheat than either of the other groups and also a higher per cent of the crop land in wheat. Yields of other crops were generally very low in this area in 1936. Oats yields were fair, corn was practically a failure, while hay and roughage crops showed very low production.

MAN LABOR COSTS. Farm returns are often high or low depending upon the relative efficiency with which labor is used. High labor costs per acre reduce farm returns to a marked degree. Labor costs, of course, will vary with the kind of crops grown and other situations. Thus, relative labor costs must be considered in determining whether or not labor has been used efficiently.

Man Labor Costs Per Acre and Farm Returns

Number of farms	Range in man labor costs	Man labor costs per acre	Total acres	Crop acres	Number of cattle	Number of hogs	Rate earned	Labor and management wage
8 Low	Less than $1.08	$ .90	673	254	43	20	.83%	$-334
8 Medium	$1.08 to $1.39	1.25	466	248	32	23	1.56	-55
8 High	$1.39 and over	1.86	402	247	31	25	3.28	274

The group of 8 farms having lowest labor costs per acre had the lowest earnings. The average rate earned for this group was .83 of one per cent on the investment or a labor and management wage loss of $334. The average labor cost per acre for this group was 90 cents, with the individual labor costs ranging downward from $1.08. The labor costs per acre for the medium group of 8 farms ranged from $1.08 to $1.39 and averaged $1.25. The returns showed a rate earned of 1.56 per cent or a loss of $55 in terms of labor and management wage. The returns of the 8 farms with high labor costs were higher than those of the other two groups. Labor costs for this group were $1.39 per acre and over with an average of $1.86 and the rate earned was 3.28 per cent on the investment or a gain of $274 in terms of labor and management wage. The data indicate a trend for farm returns to increase as labor costs per acre increase. The differences in average labor costs per acre between the different groups, however, were not great. In spite of a higher labor cost per acre the high group had larger earnings than did the other groups. This was due, in part at least to the greater returns received from livestock by the high group. Another tabulation showed returns of $124 for each $100 worth of feed fed by the high group and only $109 for the medium group. Again the returns for each $100 invested in productive livestock were $98 and $79, respectively, for the high and medium groups. The low group had returns of $101 for each $100 worth of feed fed and $96 for each $100 invested in productive livestock. The data also show that labor costs per acre tend to increase as crop acres decrease.

POWER AND MACHINERY COSTS. Twelve hundred Nebraska farm records in 1935 showed that power and machinery costs comprised nearly one-third of the total farm business costs when unpaid labor was included at $40 per month. This fact brings out the importance of this class of expenditure when making any study of farm returns.

Power and Machinery Costs and Farm Returns

Number of farms	Range in power and machinery costs per acre in crops	Power and machinery costs per acre in crops	Crop acres	Investment in power and machinery	Rate earned	Labor and management wage
8 Low	Less than $1.88	$1.51	286	$1,601	.36%	$-387
8 Medium	$1.88 to $2.41	2.11	235	1,742	2.80	133
8 High	$2.44 and over	3.46	226	1,849	2.51	139

The above tabulation shows a tendency for farm returns to increase as power and machinery costs per acre in crops increase. This tendency is unusual since other areas have shown the opposite tendency. It is evident that the groups with higher power and machinery costs per acre received returns of sufficient amount to justify the additional power and machinery cost. A separate tabulation showed that on returns per $100 worth of feed fed the low group received $96, the medium $125, and the high $117. The investments in productive livestock were, respectively, $1632, $1775, and $1655. The higher returns from feed fed offset in part, at least, the disadvantage of higher power and machinery costs for the medium and high groups. The item of power and machinery cost includes fuel, oil, repairs, and depreciation on all machinery and equipment as well as horse depreciation and cost of horse feed. The 8 farms with lowest costs for this item, ranging downward from $1.88 per crop acre and averaging $1.51, had an average rate earned of .36 of one per cent or a loss in labor and management wage of $387. The medium group of 8 farms ranging from $1.88 to $2.41 in power and machinery costs per acre in crops and

averaging $2.11 had a gain of 2.80 per cent or a gain of $133 in terms of labor and management wage. The high group of 8 farms where the power and machinery cost was $2.44 per crop acre or higher, and where the average cost was $3.46 had an earning of 2.51 per cent on the investment or a gain in terms of labor and management wage of $139.

RETURNS FROM FEED FED. About 70 per cent of the returns on Nebraska farms are derived from livestock or livestock products. This being true the importance of efficient use of feed is apparent.

Returns from Feed Fed and Farm Returns

Number of farms	Range in returns per $100 feed fed	Returns per $100 feed fed	Number of cattle	Number of hogs	Returns per acre from productive livestock	Rate earned	Labor and management wage
8 Low	Less than $96	$68	37	21	$1.95	-.88%	$-572
8 Medium	$96 to $135	109	35	25	3.34	1.83	-64
8 High	$135 and over	160	34	22	4.20	4.71	521

The above tabulation shows that as returns per $100 worth of feed fed to productive livestock increased the farm returns also increased. The high group had fewer cattle than either of the other two groups and more hogs than the low group but less than the medium group. The medium group had more hogs and fewer cattle than the low. A separate calculation showed the investment in all productive livestock for the three groups as follows: low, $1561; medium $1664, and high $1840. The low group of 8 farms which had an average return of $68 for each $100 worth of feed fed had a loss of .88 of one per cent on the investment or a labor and management wage loss of $572. The individual farmers of this group had returns of less than $96 for each $100 worth of feed fed to productive livestock. The range in returns per $100 worth of feed fed was from $96 to $135 or an average of $109 for the medium group of 8 farms. The average rate earned for this group was 1.83 per cent, and the labor and management wage loss was $64. The high group, however, had an earning of 4.71 per cent or a labor and management wage of $521. The average return for each $100 worth of feed fed for this group was $160. The 8 individuals of this group had returns of $135 or over for each $100 worth of feed fed.

RETURNS FROM INVESTMENT IN PRODUCTIVE LIVESTOCK. We have noted above the relative importance of livestock in contributing to the income of Nebraska farmers. Not only is it important to receive returns in excess of feed costs if profits are to be realized, but the returns in proportion to the amount of livestock handled also must be considered. Generally those farms which receive greatest returns for a given investment in productive livestock will have higher farm returns than those which receive lower returns on a similar investment. This is illustrated in the tabulation which follows:

10008r

Returns from Productive Livestock and Farm Returns

Number of farms	Range in returns per $100 invested in productive livestock	Returns per $100 invested in productive livestock	Per cent productive livestock of total investment	Per cent hog investment of productive livestock	Per cent cattle investment of productive livestock	Rate earned	Labor and management wage
8 Low	Less than $73	$56	5.75%	20.19%	72.40%	-.92%	$-535
8 Medium	$73 to $94	82	10.25	23.75	69.28	2.46	6
8 High	$94 and over	135	7.17	26.42	63.74	4.12	414

An average loss of .92 of one per cent or a loss in labor and management wage of $535 was suffered by the 8 farms lowest in returns for each $100 invested in productive livestock. These farms had returns of less than $73 for each $100 invested in productive livestock and averaged $56. The 8 farms of the medium group had an average earning of 2.46 per cent on the investment or a gain of $6 in terms of labor and management wage. The range in returns for each $100 invested in productive livestock was from $73 to $94 and averaged $82. The 8 farms of the high group had earnings of 4.12 per cent on the investment or a labor and management wage of $414. The returns per $100 invested in productive livestock were $94 and over and averaged $135. There was considerable variation between the groups in the proportion of productive livestock to total investment but a small variation in the proportion of cattle and hogs. These variations may have been significant in their relation to farm earnings. The group with highest returns per $100 invested in productive livestock had over 7 per cent of the total investment in productive livestock, the medium group had over 10 per cent so invested, and the low group more than 5 per cent. Highest farm returns were found on those farms where the returns for each $100 invested in productive livestock were largest in amount.

REASONS FOR INCOME DIFFERENCES

The average rate earned on the investment for the 24 farms considered in this report was 1.89 per cent and the labor and management wage was a negative $38. The average size of farm was 514 acres, the investment $22,428 divided as follows: land, $15,815; improvements, $2,225; livestock, $2,207; machinery and equipment, $1,211; and feed, grain, and supplies $970. The gross income averaged $2,087 and the expenses $903, leaving a net farm income of $1,184 aside from what the farm furnished toward the living.

The 8 most profitable farms of this group earned an average of 6.09 per cent on the investment or a labor and management wage of $815. The average size of these farms was 428 acres and the investment $24,475, somewhat more than the average of all farms. The 8 least profitable farms averaged 474 acres in size with an investment of $16,963. The average returns of this group showed a loss of 2.62 per cent on the investment or a loss of $818 as labor and management wage. The average net farm income of the most profitable group of farms was $2,102 and that of the least profitable group $149. Why this difference in earnings?

Some of the reasons for this difference will be discussed based upon the data appearing in Table I. All figures in the following discussion are averages. The most profitable and least profitable groups are respectively referred to as the high and low groups.

ACRES AND CROPS. The low group had more acres per farm and also more crop acres per farm. The farm acreage for the high group was 428 acres and for the low group 474 acres. The number of crop acres for the high group was 235 acres and 244 acres for the low. The acreages in wheat and barley were greater for the high group. The low group had larger acreages in corn and oats. The wheat acreage of the high group was 40 acres and 26 acres for the low group. The wheat yield for the high group was 14.6 bushels per acre and for the low group 10 bushels. Corn was almost a complete failure and the yields of other crops were negligible. The summary shows increases of $783 on crops for the high group and $182 for the low group. As far as crops were concerned the data show the advantage to have been with the high group.

LIVESTOCK. The gross returns on livestock were $2,216 for the high group and $643 for the low. Livestock investments were $2,695 and $1,301, respectively, for the above groups. It is seen that the livestock returns of the high group were much greater in proportion to the investment than was the case for the low group. The high group had productive livestock returns of $145 for each $100 worth of feed given to such livestock whereas similar returns for the low group were $79. Further inspection of Table I shows that the high group received $101 in returns for each $100 invested in productive livestock while the low group received $67. The high group received over $1500 more in gross income from productive livestock than did the low group, due in large part at least, to receiving greater returns from feed fed and to having a larger livestock investment. The high group had more cattle, hogs, sheep, and poultry than did the low group.

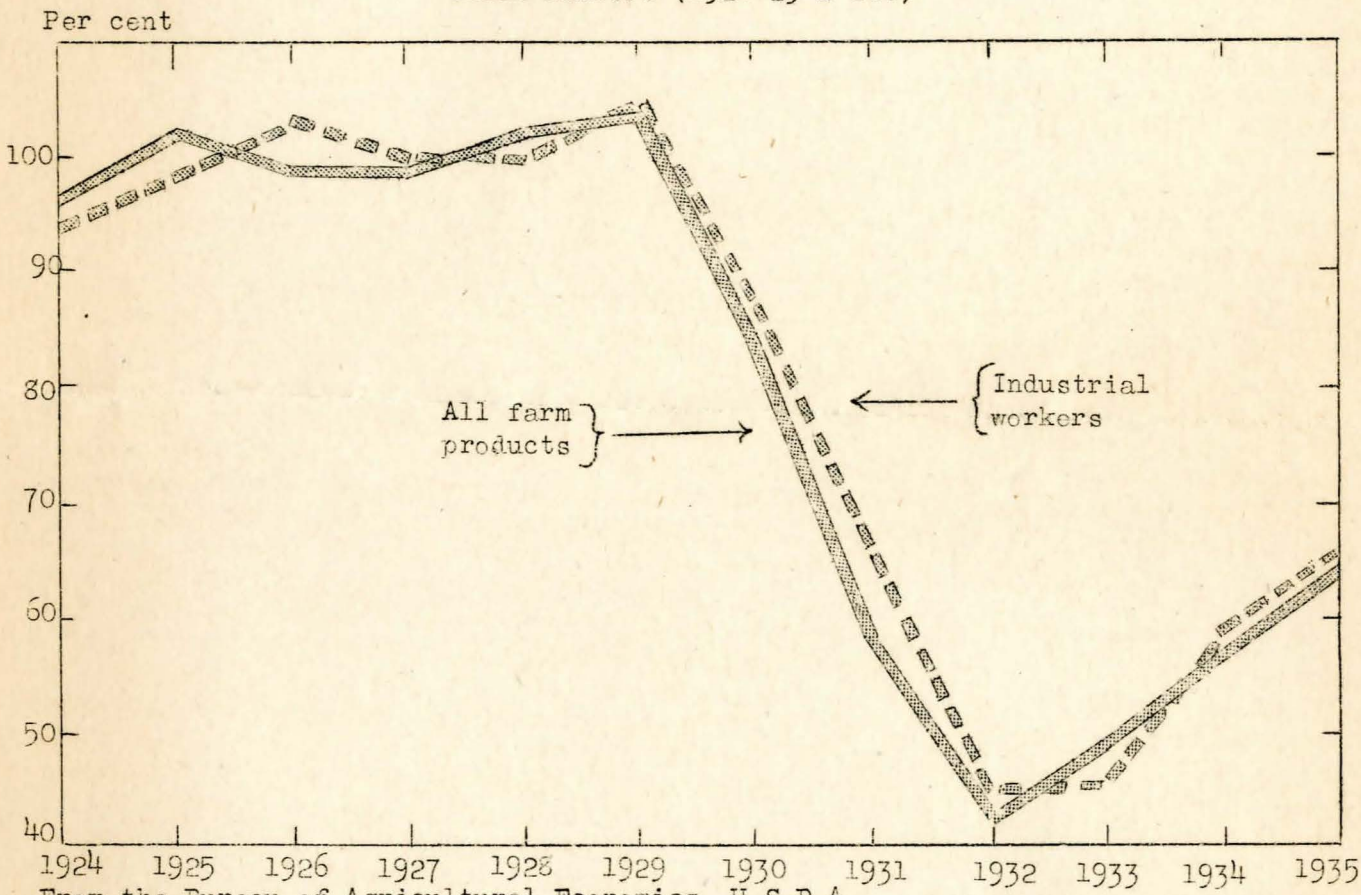
EXPENSES. Total gross expenses and decreases were $1,045 for the high group and $777 for the low. The larger business of the former would be expected to entail a larger outlay for expenses. We are concerned not so much with the total expenses as we are with the returns in proportion to expenses. The expenses for each $100 gross income were $50 for the high group and $148 for the low. Some indicators of the relation of incomes to expenses can be noted in observing the man labor costs per acre and the power and machinery costs per acre in crops. The man labor cost per acre was $1.49 for the high group and $1.32 for the low group. The labor cost for the former group was somewhat greater than that of the low group. The power and machinery costs per acre in crops were $2.65 and $1.92, respectively, for the high and low groups. The data show an advantage to the low group in the matter of these costs. These items of cost are the most important ones. When value of unpaid labor is added to the total expenses and decreases we find the labor cost to be more than 42 per cent of the total for the high group and over 47 per cent for the low group. The costs for power and machinery were over 35 per cent of the total costs for the high group and over 31 per cent for the low group. These two items of cost comprise such a large proportion of the total that any savings made in connection with them have a decidedly favorable influence upon the final farm returns.

SUMMARY. The greater returns of the high group over those of the low were due chiefly to (1) higher crop yields, (2) more efficient feeding and handling of more livestock, and (3) lower expenditures in proportion to income.

INTERDEPENDENCE OF INCOMES OF AGRICULTURE AND INDUSTRIAL WORKERS

Agriculture prospers when it produces products for the market which have a relatively high purchasing power. In general purchasing power is higher when prices are higher. Prices tend to go higher if the supply is low and demand is active. The price trend is downward if supply is abundant and demand is slow. The greatest prosperity comes when demand is sufficient to take all that is produced at a profitable price. The supply of agricultural products is largely determined by the farmers themselves and nature. Demand arises chiefly from the ranks of other workers. The relation between incomes of industrial workers in the United States and cash income from farm marketings is shown in the graph below.

CASH INCOME FROM FARM MARKETINGS AND INCOME OF INDUSTRIAL WORKERS
Index Numbers (1924-29 = 100)



From the Bureau of Agricultural Economics, U.S.D.A.

This graph shows that, during the period 1924 to 1935 farm incomes and incomes of industrial workers held a definite relationship to each other. From 1929 to 1932 the fall in incomes of both groups was practically in the same proportion. During the period following 1932 to 1935 both increased in practically the same proportion. The graph indicates that agriculture and industry prosper together and endure adversity together. Practically the same relationship is found to exist between agricultural income and the incomes of the various other classifications of producers. These situations show that in the long run when one group of producers is prosperous all others likewise are likely to be prosperous, and when one group suffers financial difficulties the same is likely to be true of other groups. The income of industrial workers is on an upward trend, and the same is very likely to hold true for agricultural income.