

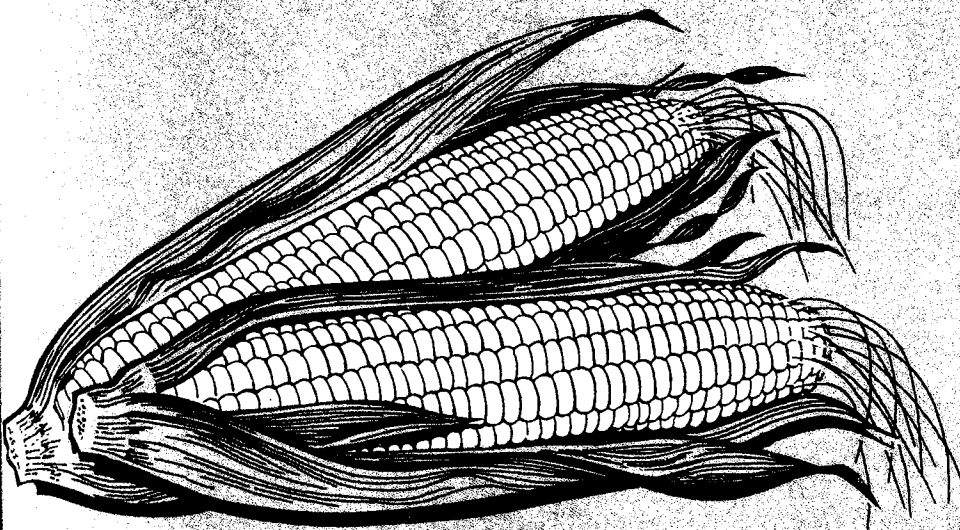
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COSTS and RETURNS



**Commercial
Corn Belt
Farms**

1964

FARM COSTS STUDIES

This report is part of a continuing nationwide study of costs and returns on commercial farms and ranches by type and size in some of the important farming regions of the United States. The study is conducted under the general supervision of Wylie D. Goodsell, Farm Production Economics Division, Economic Research Service. Objectives, methodology, procedure, and terms are uniform for all areas covered in the study.

The 1964 costs and returns studies have been conducted on the following:

- Dairy Farms, Northeast and Midwest
- Corn Belt Farms
- Egg-Producing Farms, New Jersey
- Broiler Farms, Maine, Delmarva, and Georgia
- Cotton Farms
- Tobacco Farms, Coastal Plain, North Carolina
- Tobacco-Livestock Farms, Bluegrass Area, Kentucky
- Wheat Farms, Plains and Pacific Northwest
- Western Livestock Ranches

Summary statistics for all types of farms in the study are presented in a report, revised annually. The latest such report was published in 1964 and is titled: "Farm Costs and Returns, Commercial Farms, by Type, Size, and Location," Agriculture Information Bulletin No. 230, Revised 1964.

Information on the studies can be obtained from Farm Production Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C. 20250.

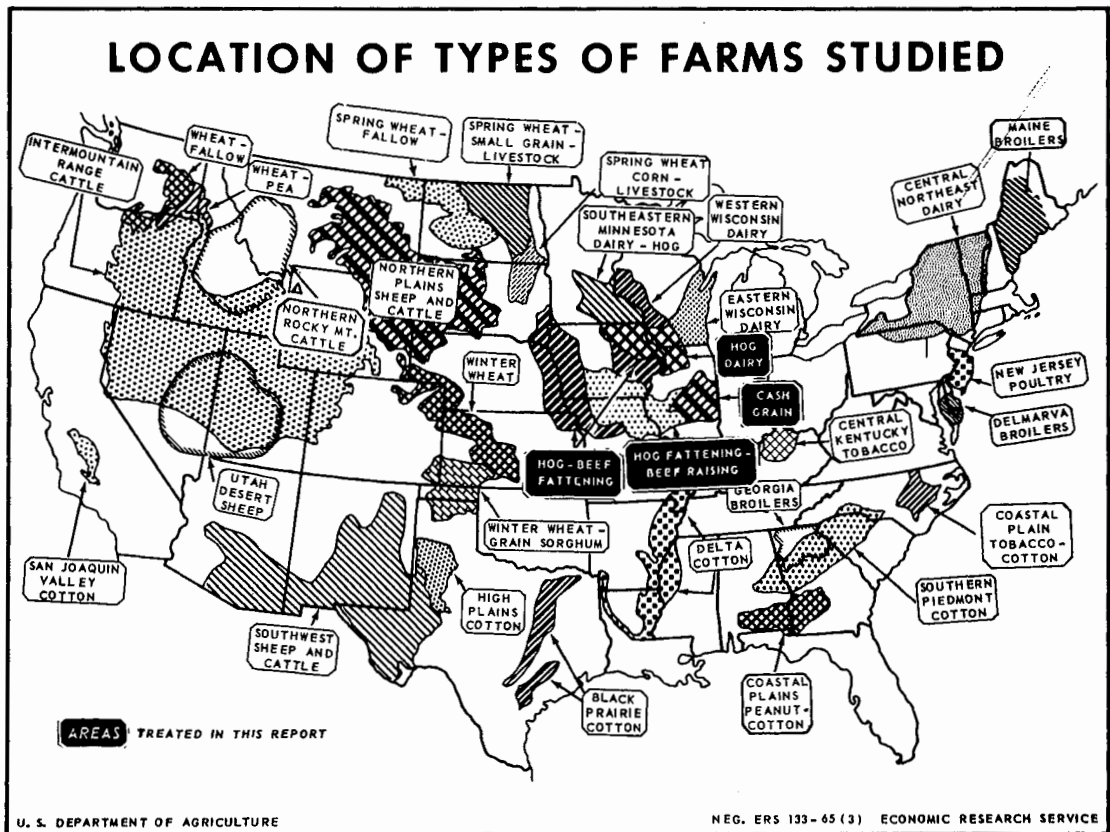


Figure 1

COSTS AND RETURNS

COMMERCIAL CORN BELT FARMS, 1964

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Net returns in 1964 were higher than in 1963 for each of the commercial Corn Belt farm types reported in this publication (fig. 1, table 1). Net farm incomes for these farms in 1963 and 1964 were:

<u>Farm types</u> ¹	<u>1963</u>	<u>1964</u>
Hog-dairy	\$6,850	\$7,173
Hog fattening--beef raising	3,953	4,395
Hog-beef fattening	7,006	8,643
Cash grain	11,374	12,205

¹ The data are based on (1) a specific area as shown in figure 1; (2) specific farm types; and (3) typical or modal farms within each farm type. The distribution pattern of farms within each farm type also permits the data to be an accurate measure of the average of all farm sizes of the specified type. For specific farm sizes falling significantly above or below the typical size reported, it is necessary to adjust the data accordingly.

Major factors increasing returns on Corn Belt farms in 1964 were recordbreaking net farm production; higher prices received for corn, soybeans, and fed cattle; and a decrease in feeder cattle prices on hog-beef fattening farms. Those tending to reduce incomes were lower hog prices and increased quantities of inputs purchased.

Hog-Dairy Farms

Net farm income on hog-dairy farms in 1964 averaged about 5 percent above a year earlier (table 1). Total receipts were up about 3 percent, while total expenditures increased only 1 percent. The increase in total receipts was made possible by a record level of milk production and increased Government payments under the feed grain program. Prices received for products sold in 1964 averaged about the same as for 1963.

The overall quantity of inputs did not change significantly from 1963

levels. A 4-percent drop in the number of pigs raised reduced outlays for feed. Increased purchases were made for fertilizer, farm power, and machinery. Prices paid for production inputs and labor averaged about 1 percent above the 1963 level.

If a charge of 4.1 percent is used for capital invested in the farm and this amount is subtracted from net farm income, the estimated return to operator and family labor is \$1.14 per hour for 1964. In 1963, the amount was \$1.11.

Table 1.- Organization, costs and returns, specified Corn Belt farms, 1963 and 1964

Item	Unit	Hog-dairy ^{1/}		Hog fattening-- beef raising		Hog-beef fattening ^{1/}		Cash grain	
		1963	1964 ^{2/}	1963	1964 ^{2/}	1963	1964 ^{2/}	1963	1964 ^{2/}
Land in farm.....	Acre	186	188	280	288	266	270	271	283
Cropland harvested.....	do.	123	125	132	138	191	195	217	233
Crops harvested:									
Corn for grain.....	do.	51.0	53.4	55.0	58.3	95.2	96.6	94.4	103.2
Corn for silage.....	do.	6.0	6.3	---	---	---	---	---	---
Oats.....	do.	32.7	31.7	16.0	15.0	33.0	31.6	29.0	27.1
Soybeans.....	do.	---	---	26.0	29.0	17.6	20.9	80.0	90.2
Hay.....	do.	33.5	33.6	34.9	36.0	34.1	34.3	13.5	12.3
Pigs raised.....	Number	231	222	137	148	283	272	35	32
Cattle sold.....	Cwt.	100.5	111.7	94.1	111.8	886.6	921.1	65.2	50.0
Cows.....	Head	22.5	22.9	21.3	23.6	2.0	2.0	6.0	4.7
Total farm capital, Jan. 1.....	Dollar	69,760	74,540	58,890	62,650	122,990	123,720	129,140	140,870
Land and buildings.....	do.	47,800	53,020	41,160	44,350	84,320	86,130	116,800	128,480
Machinery and equipment.....	do.	8,080	8,310	6,400	6,650	10,100	10,470	8,000	8,810
Livestock.....	do.	8,760	7,930	7,600	7,160	17,230	15,640	2,540	1,780
Crops.....	do.	5,120	5,280	3,730	4,490	11,340	11,480	1,800	1,800
Total labor used.....	Hour	4,580	4,620	3,710	3,710	3,920	3,940	3,170	3,240
Hired.....	do.	980	1,020	300	370	720	740	320	320
Total cash receipts.....	Dollar	16,772	17,273	9,221	10,647	32,116	33,190	20,878	22,154
Crops.....	do.	0	0	1,766	2,561	1,345	1,552	16,225	18,043
Hogs.....	do.	7,849	7,430	4,333	4,844	9,217	8,986	1,313	1,038
Cattle.....	do.	1,704	1,692	1,994	2,124	20,427	21,775	1,357	962
Other livestock and livestock products...	do.	6,545	7,281	348	334	106	102	265	263
Other, including Government payments.....	do.	674	870	780	784	1,021	775	1,718	1,848
Value of perquisites.....	do.	843	846	725	743	899	921	1,086	1,092
Change in inventory of crops and livestock.	do.	188	139	1,242	832	310	275	-576	-594
Gross farm income.....	do.	17,803	18,258	11,188	12,222	33,325	34,386	21,388	22,652

Item	Unit	Hog-dairy <u>1/</u>		Hog fattening-- beef raising		Hog-beef fattening <u>1/</u>		Cash grain	
		1963	1964 <u>2/</u>	1963	1964 <u>2/</u>	1963	1964 <u>2/</u>	1963	1964 <u>2/</u>
		:	:	:	:	:	:	:	:
Total cash expenditures.....	Dollar	11,255	11,388	7,614	8,336	26,554	26,083	10,552	11,106
Feed purchased.....	do.	2,752	2,540	1,274	1,363	6,307	6,418	473	403
Livestock expense.....	do.	1,056	1,109	363	379	<u>3/</u> 11,842	<u>3/</u> 10,771	113	96
Fertilizer and lime.....	do.	627	665	567	600	916	982	1,571	1,608
Other crop expense.....	do.	611	633	457	498	964	998	771	845
Machinery.....	do.	3,007	3,077	2,683	3,019	3,565	3,844	4,453	4,807
Farm buildings and fences.....	do.	885	890	825	835	645	665	740	750
Labor hired.....	do.	1,125	1,207	312	401	850	888	349	363
Taxes.....	do.	860	891	924	996	1,176	1,227	1,859	1,986
Other.....	do.	332	376	209	245	289	290	223	248
Inventory adjustment, machinery and buildings.....	do.	-302	-303	-379	-509	-235	-340	-538	-659
Total operating expenses.....	do.	10,953	11,085	7,235	7,827	26,319	25,743	10,014	10,447
Net farm income.....	do.	6,850	7,173	3,953	4,395	7,006	8,643	11,374	12,205
^ω Charge for capital at 4.1 percent interest.....	do.	2,860	3,056	2,571	2,738	5,428	5,470	5,490	5,980
Return to operator and family labor.....	do.	3,990	4,117	1,382	1,657	1,578	3,173	5,884	6,225
Index numbers (1957-59=100):									
Gross farm income.....	---	118	121	130	142	131	136	149	158
Net farm income.....	---	94	99	98	111	75	92	170	182
Net farm production.....	---	113	118	128	143	125	127	134	140
Crop yields per acre.....	---	107	108	106	114	114	114	123	117
Production per hour of man labor.....	---	111	115	120	134	119	121	140	142
Production per unit of input.....	---	102	104	104	111	104	104	113	115
Operating expense per unit of production.....	---	117	116	119	116	117	112	113	113
Total cost per unit of production.....	---	108	108	106	101	108	105	95	97
Power and machinery (quantity).....	---	106	106	110	115	109	111	106	114
Prices received for products sold.....	---	95	94	98	101	91	92	105	107
Prices paid, including wages to hired labor.....	---	110	111	109	111	112	106	102	105

1/ Revised. 2/ Preliminary. 3/ Includes purchased feeder cattle.

Note: Information presented here is on an owner-operator basis primarily for comparability between types of farms. Net farm income is the return to operator and unpaid members of the family for their labor and management on the farm and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

Net farm production increased about 4 percent above 1963. Physical efficiency, measured by the index of production per unit of input, increased almost 2 percent from 1963 levels. Production per hour of labor also increased about 4 percent. The increase in net production and a modest increase in quantity of inputs purchased caused operating expense per unit of production and the total cost per unit of production to increase slightly from year-earlier levels.

Hog Fattening--Beef Raising Farms

Net farm income on hog fattening--beef raising farms in 1964 increased 11 percent above 1963. Total cash receipts increased some 15 percent, while total expenditures increased about 9 percent. The increase in receipts came from the corn, soybeans, cattle, and hog enterprises.

Higher corn yields and higher prices received for soybeans increased crop receipts from \$1,766 in 1963 to \$2,561 in 1964. Increased production of cattle and hogs offset lower prices received for hogs and unfinished cattle. Livestock receipts increased from \$6,327 in 1963 to \$6,968 in 1964.

Record-high prices paid by these operators for a 9-percent larger quantity of production inputs was the major factor contributing to the increase in total expenditures. Purchases for feed, power, and machinery increased most from 1963 levels.

Assuming a charge of 4.1 percent for the use of capital on hog

fattening--beef raising farms, the return per hour for operator and family labor in 1964 is an estimated 50 cents. In 1963, the return was 40 cents.

The record net farm production in 1964 was almost 12 percent above 1963. This made possible record-breaking levels in the production per hour of man labor and the production per unit of input. Reductions were also made in the operating expense per unit of production and the total cost per unit of production indexes.

Hog-Beef Fattening Farms

Net farm income on hog-beef fattening farms in 1964 increased 23 percent above 1963 levels. This large gain partly reflected the low income received by these operators in 1963. Total cash receipts increased only 3 percent in 1964, but total expenditures fell 2 percent. The increase in total receipts was due to a record level of fat cattle production combined with increased prices received for fat cattle and soybeans. Receipts from the hog enterprise dropped almost 3 percent, as both production and prices were lower than a year earlier. Prices received for all commodities averaged 1 percent above 1963 levels.

A decrease in total operating expense was made possible by a sharp decline in prices paid for feeder cattle--from \$29.10 per hundredweight in 1963 to \$25.70 in 1964. This price drop, combined with a 60-cent per hundredweight increase in fat cattle prices, caused a smaller negative price margin in 1964 than in 1963 (fig. 2). Total production inputs on hog-beef fattening

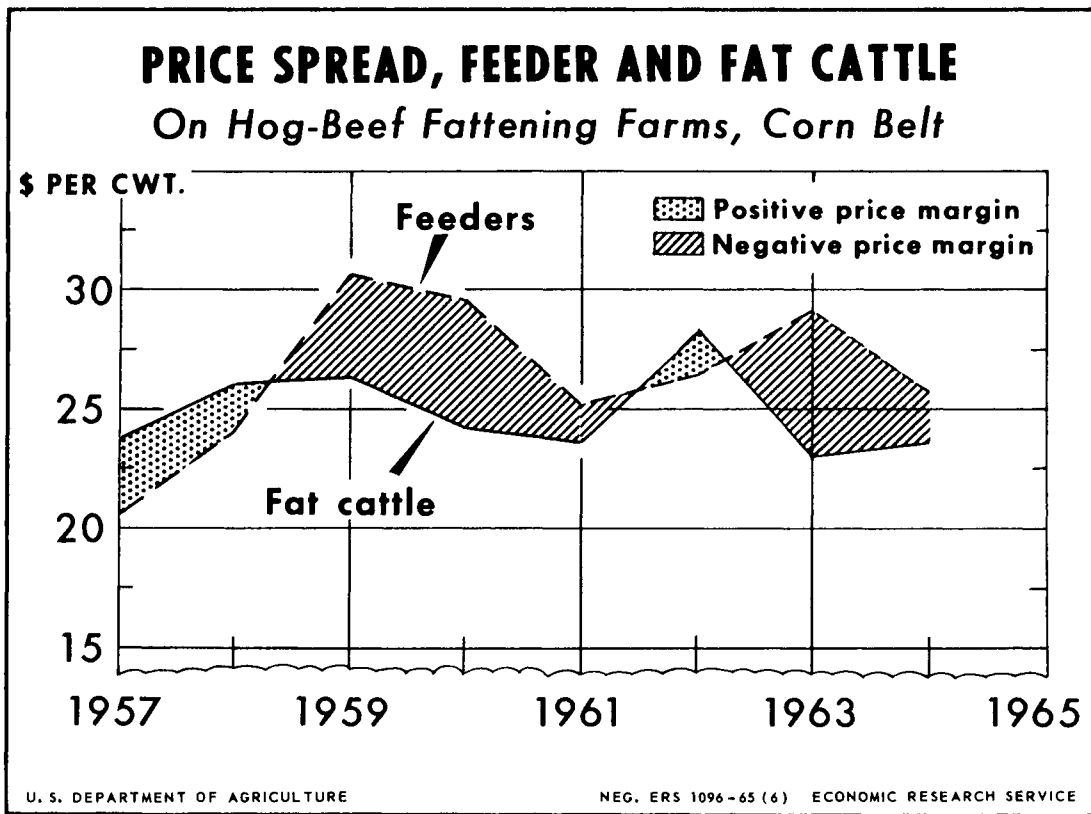


Figure 2

farms increased 3 percent above 1963. Expenditures for feed, fertilizer, power, and machinery increased most from 1963 levels.

Assuming a charge of 4.1 percent for the use of capital on hog-beef fattening farms, the return per hour for operator and family labor is estimated to be 99 cents. In 1963, the return was 49 cents.

Record net farm production in 1964 was 2 percent above 1963 levels. This made possible record-breaking levels in production per hour of man labor. Production per unit of input remained unchanged from 1963's record level. Significant improvements were registered in operating expense per unit of production and total cost per unit of production.

Cash Grain Farms

Net farm income on cash grain farms in 1964 increased 7 percent from 1963. Total cash receipts increased 6 percent and total expenditures increased 5 percent. Record cash receipts were due to larger grain production and higher prices received for corn and soybeans. Crop yields were down almost 5 percent, but were offset by a larger acreage harvested and more favorable prices. The trend to larger farms and less livestock was in evidence on these farms in 1964. Acreages of corn and soybeans increased while, acreages of pasture, small grains, and hay decreased. Prices received for all commodities increased 2 percent above 1963 levels. Participation in the feed grain program remained high, with

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most operators choosing the 20-percent diversion level.

Total operating expenses per farm increased from \$10,552 in 1963 to \$11,106 in 1964. Record-high prices paid by these operators for a 2-percent larger quantity of production inputs contributed to the increase in total expenditures. Outlays for fertilizer, lime, power, machinery, and taxes increased most.

Assuming a charge of 4.1 percent for the use of capital on cash grain

farms, the return per hour for operator and family labor is estimated to be \$2.13. In 1963, the return was \$2.06.

The record net farm production in 1964 was 4 percent above 1963. This made possible a recordbreaking level in the production per hour of labor and production per unit of input indexes. However, lower crop yields caused operating expense per unit of production to remain unchanged from a year earlier, while the cost per unit of production increased 2 percent.