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1971-1973

HOG FARMS IN SOUTHERN MINNESOTA

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INTRODUCTION

This report summarizes 1971-1973 farm business records of 226 farmers who have hogs as a major enterprise. The purpose of the publication is (1) to provide hog raisers, vocational agriculture instructors, county agents, and others working with farmers with specific information relative to costs and returns from the entire farm operation as well as from the hog enterprise and (2) to show earnings variations which occur among farmers. Individual farm records were secured from the Southeastern and Southwestern Minnesota Farm Management Associations and the vocational-technical schools in Winona, Austin, Mankato, Jackson and Willmar.

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The authors are indebted to Dorothy T. Spreck and Eileen Miley for their help in preparing the tables included in this report.

Three types of hog farms are summarized in this report: (1) highly specialized hog farms (farrowing and feeding to market weight--complete hog enterprise), (2) complete hog enterprise and cash crops, and (3) purchased feeder pigs and cash crops. In this study, a hog farm is considered highly specialized when 80 percent or more of the cash income comes from the hog enterprise. The two enterprise farms (complete hogs and cash crops and purchased feeder pigs and cash crops) have 80 percent or more of the cash income from the two enterprises, with a minimum of 20 percent from the smallest of the two.

The data in table 1 show the number of farms in each category for which averages were secured. Where the number of cases allows, each category is further divided into high and low earnings groups.

Simple arithmetic averages are used throughout the report. Calculations were made for each group or category each year and the results for each of the three years were averaged.

Table 1. Number of Farms Included

Type	1971	1972	1973	Average of 3 years
Complete hog program	20	40	46	36
Purchased feeder pigs and cash crops	24	40	28	30
Complete hog program and cash crops				
Less than 200 work units*	28	31	39	33
200-279 work units	43	55	43	47
380-399 work units	41	55	49	48
400 work units and over	<u>26</u>	<u>32</u>	<u>39</u>	<u>32</u>
Total	182	253	244	226

* For a discussion of work units, see Pherson, C. L. and T. R. Nodland, "Work Unit Estimates for Measuring Size of Business," Department of Agricultural Economics, University of Minnesota Report No. R68-4, September 1968.

Hog raisers experienced relatively high incomes during the years included in this study. Returns were somewhat below average in 1971, above average in 1972, and at record highs in 1973. Even though three-year earnings were above average, there were wide differences in the accomplishments of hog producers during this three-year period.

Because farmers included in this study are, in general, above average in managerial ability and operate larger and more productive farms, their returns to labor and management are higher than the average returns reported in census type data. Wide variations in management and practices followed do exist between farms. It can be assumed that similar variations occur among all farmers in the area.

CAPITAL MANAGED

Average capital managed for various classifications of hog farms is shown in table 2. These data represent values as reported by farmers in their farm business records. They approximate current market values for the years included in this study except for real estate. Land is valued at cost and real estate improvements are valued at cost less an annual depreciation based on estimated length of life, except in case of rented land where conservative market prices are used. No corrections have been made for price inflation which occurred after the farms were purchased. Capital managed includes the value of all farm assets owned by the operators plus assets owned by landlords.

Capital managed per farm varied widely among the types of farms and the various size-of-business categories included. Among the factors contributing to this variation are the number of acres per farm, purchase price of the farm, and the investment in livestock, buildings and equipment.

Table 2. Average Capital Managed on Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
1. Number of farms	18	36	18	15	30	15
2. Acres in farm	279	290	200	484	424	364
3. Number of work units	503	389	275	333	303	273
Average capital managed as of January 1						
4. Hogs	\$ 27182	\$ 20420	\$ 13657	\$ 8687	\$ 7926	\$ 7165
5. Other livestock	2072	1818	1565	4197	3359	2520
6. Crops, seed, feed	21033	16683	12333	22230	20185	18141
7. Auto & truck (fm sh)	1953	1794	1634	2299	2080	1861
8. Tractors & crop mach.	12810	10941	9072	18793	16396	13999
9. Livestock equipment	4429	3845	3262	1488	1458	1429
10. Land	64091	49860	35629	127788	110864	93937
11. Buildings, fencing*	27832	23903	19973	26362	23550	20739
12. Total capital	\$161402	\$129264	\$ 97125	\$211844	\$185818	\$159791
Average capital managed as of December 31						
13. Total capital	\$197925	\$153211	\$108497	\$241219	\$207794	\$174369

* Not including farm dwelling.

The data in table 3 show total and per acre investment in buildings and land based on account book values. Average per acre values were approximately \$350. This compares with estimated sales prices for 1973, as reported by Mandale and Raup,¹ of \$247 per acre for West Central Minnesota, \$459 per acre for Southwestern Minnesota, and \$433 for the southeastern area of the state.

1. Mandale, Maurice and Philip M. Raup, "The Minnesota Real Estate Market in 1973." Economic Report ER74-1, Department of Agricultural and Applied Economics, University of Minnesota, January 1974.

Table 2. Average Capital Managed on Hog Farms in Southern Minnesota, 1971-1973
(continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		Average	1/2 low in average	
		1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings			
1.	33	24	47	23	24	48	24	32
2.	210	322	313	303	390	399	409	560
3.	155	245	243	240	322	333	344	503
Average capital managed as of January 1								
4.	\$ 4990	\$ 7488	\$ 7524	\$ 7563	\$ 9848	\$ 10665	\$ 11517	\$ 16968
5.	1514	764	737	709	943	1894	2885	2129
6.	11068	16293	15248	14160	22295	21665	21007	30943
7.	1570	2247	1993	1728	2305	2289	2274	2742
8.	7027	11631	11228	10805	15837	16366	16917	22172
9.	835	1234	1432	1640	2108	2188	2270	4010
10.	53444	90624	82972	74965	111446	110236	108933	153987
11.	11024	16817	17936	19086	23389	23201	23004	29428
12.	\$ 91472	\$147098	\$139070	\$130656	\$188171	\$188504	\$188807	\$262379
Average capital managed as of December 31								
13.	\$101626	\$170987	\$157894	\$144191	\$215807	\$212069	\$208129	\$295657

The data in table 4 show capital managed per litter of pigs raised on the highly specialized farms. Over one-half of the investment is in land and buildings. High earnings farms had the lowest total investment per litter as well as the lowest investment in each classification of capital managed, except for the investment in hogs. If one were to add \$200 per acre to the value of land in order to reflect more current prices, the average per litter investment would increase by \$365, or to about \$1280 per litter on the high earnings farms and \$1440 per litter on low earnings farms.

Table 3. Average Investment in Real Estate on Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
1. Land (beginning of year)	\$ 64091	\$ 49860	\$ 35629	\$127788	\$110864	\$ 93937
2. Farm buildings	27832	23903	19973	26362	23550	20739
3. Estimated investment in dwelling	9000	9000	9000	9000	9000	9000
4. Total investment in real estate	\$100923	\$ 82763	\$ 64602	\$163150	\$143414	\$123676
5. Number of acres	279	240	200	484	424	364
6. Average investment per acre*	\$362	\$345	\$323	\$337	\$338	\$340

* Average investment based on 1974 land values would be up by at least \$200 per acre.

Table 4. Average Capital Managed per Litter on Complete Hog Farms in Southern Minnesota, 1971-1973

Item	1/2 high in earnings	Average	1/2 low in earnings
Number of litters	170	131	95
Acres per litter	1.6	1.8	2.1
Hogs	\$159.89	\$155.88	\$143.76
Other livestock	12.19	13.88	16.47
Crops, seed, feed	123.72	127.35	129.82
Auto and trucks	11.49	13.69	17.20
Tractors and crop machinery	75.35	83.52	95.49
Livestock equipment	26.05	29.35	34.34
Land	377.01	380.61	375.04
Buildings, fencing*	163.72	182.47	210.24
Total capital managed	\$949.42	\$986.75	\$1022.36

* Not including dwelling.

Table 3. Average Investment in Real Estate on Hog Farms in Southern Minnesota, 1971-1973 (continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		400 work units & over		
		1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings	
1.	\$ 53444	\$ 90624	\$ 82972	\$ 74965	\$111446	\$110236	\$108933	\$153987
2.	11024	16817	17936	19086	23389	23201	23004	29428
3.	9000	9000	9000	9000	9000	9000	9000	9000
4.	\$ 73468	\$116441	\$109908	\$103051	\$143835	\$142437	\$140937	\$192415
5.	210	322	313	303	390	399	409	560
6.	\$350	\$362	\$351	\$340	\$369	\$357	\$345	\$344

EARNINGS STATEMENTS

Receipts, expenses, and labor and management are shown in table 5. Any landlord's share, in the case of rented farms, is included to make the records comparable on a whole farm basis. "Labor and management earnings" is the amount remaining as a salary to the farm operator if a value is entered for the labor of other members of the family and a charge of about 6 percent interest on all capital managed is included as part of the farm expenses.

There were wide variations in earnings within each category. On highly specialized hog farms, the one-half of the farmers with high earnings averaged \$50,556; the one-half of the farmers with low earnings averaged only \$16,106. Within the two intermediate size groups of the complete hog and cash crop farms, the one-half of the farmers highest in earnings averaged \$10,000 to \$15,000 above the low one-half in earnings. In the case of purchased feeder pigs and cash crops, high earnings farmers had incomes almost three times as large as low earnings farmers.

Table 5. Summary of Earnings - Cash Statement - for Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
RECEIPTS						
1. Hogs sold	\$ 85529	\$ 62772	\$ 40013	\$ 44357	\$ 39277	\$ 34198
2. Other livestock sold	2041	1889	1738	5013	4000	2987
3. Crops - corn	2787	2111	1435	18762	15771	12780
4. - other crops	6702	4777	2852	22683	17261	11839
5. Other capital assets sold	356	279	202	585	457	328
6. Work off the farm	529	470	411	1074	1323	1573
7. Miscel. farm income	872	744	616	1116	1157	1197
8. Total sales	\$ 98816	\$ 73042	\$ 47267	\$ 93590	\$ 79246	\$ 64902
9. Increase in capital	36523	23947	11372	29375	21976	14578
10. Family liv. from farm	235	222	208	325	230	135
11. Total receipts	\$135574	\$ 97211	\$ 58847	\$123290	\$101452	\$ 79615
EXPENSES						
12. Hogs bought	\$ 3042	\$ 2286	\$ 1529	\$ 18787	\$ 16335	\$ 13884
13. Other lvstk. bought	851	708	565	1561	1518	1474
14. Misc. lvstk. expense	2378	1858	1337	556	456	357
15. Feed bought	30080	22298	14516	12069	11135	10203
16. Fertilizer bought	3719	2872	2024	4937	4464	3992
17. Other crop expenses	3836	3056	2277	5516	5158	4798
18. Custom work hired	1316	1170	1024	1388	1333	1277
19. Gas, oil, grease	1567	1335	1104	2066	1815	1565
20. Repair power & crop machinery	2219	1918	1617	2594	2408	2222
21. Repair real estate	854	786	719	517	486	455
22. Repair livestock equip.	1034	749	466	225	260	295
23. Wages of hired labor	1969	1251	533	1185	908	630
24. Electricity expense	811	684	556	410	412	415
25. Real estate taxes	1745	1422	1098	2797	2520	2242
26. General farm expense	1056	864	672	784	733	682
27. Total operating exp.	\$ 56477	\$ 43257	\$ 30037	\$ 55392	\$ 49941	\$ 44491
28. New power & mach.	6802	4954	3105	8716	7690	6664
29. New lvstk. equipment	2506	1727	949	1415	900	385
30. New buildings, etc.	5710	3824	1938	1781	2434	3086
31. Total purchases	\$ 71495	\$ 53762	\$ 36029	\$ 67304	\$ 60965	\$ 54626
32. Decrease in farm cap.	-	-	-	-	-	-
33. Interest on capital managed @ 6%	10780	8474	6168	13592	11808	10025
34. Unpaid family labor	2657	1573	488	3304	2357	1410
35. Board for hired labor	86	71	56	35	25	14
36. Total expenses	\$ 85018	\$ 63880	\$ 42741	\$ 84235	\$ 75155	\$ 66075
37. Labor & mgmt. earn.	\$ 50556	\$ 33331	\$ 16106	\$ 39055	\$ 26297	\$ 13540

Table 5. Summary of Earnings - Cash Statement - for Hog Farms in Southern Minnesota 1971-1973 (continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units			280-399 work units			
		1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings	
RECEIPTS								
1.	\$ 12784	\$ 22052	\$ 22150	\$ 22256	\$ 29148	\$ 30088	\$ 31066	\$ 49662
2.	1109	936	803	665	1554	1835	2128	1737
3.	6435	9368	9118	8852	16936	14857	12682	20410
4.	8132	16632	13888	11022	17196	17291	17383	21832
5.	234	541	498	451	2608	1640	625	2174
6.	304	473	432	387	752	740	729	897
7.	641	717	745	775	975	1023	1073	1331
8.	\$ 29639	\$ 50719	\$ 47634	\$ 44408	\$ 69169	\$ 67474	\$ 65686	\$ 98043
9.	10154	23889	18824	13535	27636	23565	19322	33278
10.	168	107	126	144	166	204	245	201
11.	\$ 39961	\$ 74715	\$ 66584	\$ 58087	\$ 96971	\$ 91243	\$ 85253	\$131522
EXPENSES								
12.	\$ 708	\$ 907	\$ 1166	\$ 1437	\$ 930	\$ 1344	\$ 1774	\$ 2496
13.	445	630	676	726	604	990	1391	1286
14.	375	583	656	731	933	909	885	1513
15.	3996	7054	7670	8315	10232	10379	10533	15354
16.	1843	2934	2922	2909	4398	4178	3949	6701
17.	2267	3628	3460	3284	4901	4827	4750	7420
18.	793	781	914	1054	978	1054	1135	1287
19.	1077	1424	1380	1332	1649	1703	1759	2246
20.	1273	1819	1816	1812	2428	2481	2536	3255
21.	357	490	482	474	677	737	800	785
22.	169	212	225	238	310	333	357	500
23.	268	646	572	496	1201	1088	970	2285
24.	261	329	368	408	455	470	486	670
25.	1282	1855	1807	1758	2405	2445	2485	3470
26.	524	617	714	814	824	881	941	1127
27.	\$ 15638	\$ 23909	\$ 24828	\$ 25788	\$ 32925	\$ 33819	\$ 34751	\$ 50395
28.	3637	7845	6187	4451	6465	6762	7072	8396
29.	701	463	612	769	1583	1078	553	1748
30.	1227	2199	2290	2390	5910	4477	2980	6918
31.	\$ 21203	\$ 34416	\$ 33917	\$ 33398	\$ 46883	\$ 46136	\$ 45356	67457
32.	-	-	-	-	-	-	-	-
33.	5793	9542	8909	8245	12119	12017	11908	16741
34.	445	229	669	1131	1035	1317	1611	5858
35.	20	40	49	58	70	64	57	306
36.	\$ 27461	\$ 44227	\$ 43544	\$ 42832	\$ 60107	\$ 59534	\$ 58932	\$ 90362
37.	\$ 12500	\$ 30488	\$ 23040	\$ 15255	\$ 36864	\$ 31709	\$ 26321	\$ 41160

Table 6. Cash Statement on a Per Litter Basis for Complete Hog Farms in Southern Minnesota, 1971-1973

Item	1/2 high in earnings	Average	1/2 low in earnings
RECEIPTS			
Hogs sold	\$ 503	\$ 479	\$ 421
Other livestock sold	12	14	18
Crops sold - corn	16	16	15
- other	39	36	30
Other farm income	11	12	13
Total sales	<u>\$ 581</u>	<u>\$ 557</u>	<u>\$ 497</u>
Increase in farm capital	215	183	120
Family living from the farm	1	2	2
Total receipts	<u>\$ 797</u>	<u>\$ 742</u>	<u>\$ 619</u>
EXPENSES			
Hogs bought	\$ 18	\$ 17	\$ 16
Other livestock bought	5	5	6
Miscellaneous livestock expense	14	14	14
Feed bought	177	170	153
Fertilizer bought	22	22	21
Other crop expenses	22	23	24
Custom work hired	8	9	11
Gas, oil, grease bought (farm share)	9	10	11
Repair of power and crop machinery	13	15	17
Repair of real estate	5	6	7
Repair of livestock equipment	6	6	5
Wages of hired labor	12	10	6
Electrical expense	5	5	6
Real estate taxes	10	11	12
General farm expense	6	7	7
Total operating expense	<u>\$ 332</u>	<u>\$ 330</u>	<u>\$ 316</u>
New power and crop machinery	40	38	33
New livestock equipment	15	13	10
New buildings	33	29	20
Total purchases	<u>\$ 420</u>	<u>\$ 410</u>	<u>\$ 379</u>
Decrease in farm capital	-	-	-
Interest on capital managed	63	65	65
Unpaid family labor	16	12	5
Board for hired labor	1	1	1
Total expenses	<u>\$ 500</u>	<u>\$ 488</u>	<u>\$ 450</u>
Labor and management earnings	\$ 297	\$ 254	\$ 169

Large quantities of feed were purchased by the operators of the highly specialized complete hog farms. They purchased corn and protein feeds. In all the other categories, feed purchases were largely protein feeds or complete hog rations.

Income, expenses, and earnings are calculated on a per litter basis in table 6 for the specialized complete hog farms. Differences in gross income per litter between high and low earnings farms are greater than differences in expenses. The additional \$128 in income per litter which high earnings farmers secure is a substantial reward for greater efficiency. During this period of relatively high prices for hogs, maximum production seems to be more important than control over expenses.

The data in table 7 show earnings on an enterprise basis. Instead of stressing cash expenses and cash receipts, this arrangement stresses net value produced and net expenses. Net increase in value produced includes sales, value used in the home, changes in inventories, and accounts for transfers between enterprises. The value of purchased livestock is subtracted so the result is the value of livestock and livestock products added by the enterprise during the year.

In the calculation of return from crops, credit is given to crops for feed raised on the farm and consumed by livestock. The return to crops, as shown in table 7, becomes the net value produced from crops for that year less the cost of purchased seed, fertilizer and similar expenses.

Each category of expenses is calculated in a similar manner. Depreciation, repairs, gas, oil, etc., are accounted for. This type of earnings statement more accurately reflects annual production for each productive enterprise and annual costs for each service enterprise.¹

1. For the method of calculation of income and expenses on an enterprise basis, see Nodland, Truman R., "Know Your Farm Business," University of Minnesota Agricultural Extension Service Pamphlet 138, Revised 1971.

Table 7. Summary of Earnings - Enterprise Statement - for Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
RECEIPTS AND NET INCREASES						
1. Hogs	\$ 96564	\$ 70624	\$ 44684	\$ 31669	\$ 27356	\$ 23043
2. Other livestock	1499	1337	1176	2199	2086	1973
3. Total productive livestock	\$ 98063	\$ 71961	\$ 45860	\$ 33868	\$ 29442	\$ 25016
4. Feed fed	46622	35702	24783	19947	18220	16492
5. Return over feed	\$ 51441	\$ 36259	\$ 21077	\$ 13921	\$ 11222	\$ 8524
6. Value added by crops	33770	\$ 24439	\$ 15108	60085	45018	29951
7. Miscellaneous farm income	872	744	616	1116	1157	1197
8. Total value added	\$ 86083	\$ 61442	\$ 36801	\$ 75122	\$ 57397	\$ 39672
EXPENSES AND NET DECREASES						
9. Truck and auto	\$ 1795	\$ 1601	\$ 1407	\$ 2002	\$ 1812	\$ 1622
10. Electricity expense	811	684	556	410	412	415
11. Tractors and crop machinery	6288	5394	4500	7842	7048	6250
12. Livestock equipment	2342	1794	1247	939	786	634
13. Buildings, fencing	3423	3027	2632	2696	2469	2243
14. Miscellaneous livestock expense	2378	1858	1337	556	456	357
15. Labor*	4909	2993	1078	4449	3056	1662
16. Taxes	1745	1422	1098	2797	2520	2242
17. General farm expense	1056	864	672	784	733	682
18. Interest on capital managed	10780	8474	6168	13592	11808	10025
19. Total expenses	\$ 35527	\$ 28111	\$ 20695	\$ 36067	\$ 31100	\$ 26132
20. Labor and management earnings	\$ 50556	\$ 33331	\$ 16106	\$ 39055	\$ 26297	\$ 13540

* Includes wages paid and value of board to hired labor, unpaid family labor, and a part of the payment for custom work hired.

Table 7. Summary of Earnings - Enterprise Statement - for Hog Farms in Southern Minnesota, 1971-1973 (continued)

Complete hog program and cash crops								
Less than 200 work units	200-279 work units			280-399 work units			400 work units & over	
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings		
RECEIPTS AND NET INCREASES								
1.	\$ 14052	\$ 25147	\$ 25054	\$ 24963	\$ 34134	\$ 33704	\$ 33256	\$ 55455
2.	954	553	696	845	954	1556	2183	1402
3.	\$ 15006	\$ 25700	\$ 25750	\$ 25808	\$ 35088	\$ 35260	\$ 35439	\$ 56857
4.	8023	12592	13251	13943	17434	18100	18795	29365
5.	\$ 6983	\$ 13108	\$ 12499	\$ 11865	\$ 17654	\$ 17160	\$ 16644	\$ 27492
6.	20416	40238	33021	25472	49205	45197	41004	61034
7.	641	717	745	775	976	1023	1073	1331
8.	\$ 28040	\$ 54063	\$ 46265	\$ 38112	\$ 67835	\$ 63380	\$ 58721	\$ 89857
EXPENSES AND NET DECREASES								
9.	\$ 1306	\$ 1624	\$ 1538	\$ 1450	\$ 1781	\$ 1856	\$ 1934	\$ 2115
10.	261	329	368	408	455	470	486	670
11.	3510	5666	5355	5028	6612	7116	7641	9404
12.	455	533	578	626	964	922	878	1575
13.	1192	1895	1921	1948	2611	2687	2768	3723
14.	375	583	656	731	933	909	885	1513
15.	842	931	1379	1849	2267	2368	2474	8359
16.	1282	1855	1807	1758	2405	2445	2485	3470
17.	524	617	714	814	824	881	941	1127
18.	5793	9542	8909	8245	12119	12017	11908	16741
19.	\$ 15540	\$ 23575	\$ 23225	\$ 22857	\$ 30971	\$ 31671	\$ 32400	\$ 48697
20.	\$ 12500	\$ 30488	\$ 23040	\$ 15255	\$ 36864	\$ 31709	\$ 26321	\$ 41160

Table 8. Enterprise Statement on a Per Litter Basis for Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program		
	1/2 high in earnings	Average	1/2 low in earnings
1. Average number of litters	170	131	95
2. Acres per farm	279	240	200
3. Acres per litter	1.6	1.8	2.1
RECEIPTS AND NET INCREASES			
4. Hogs	\$ 568	\$ 539	\$ 471
5. Other livestock	<u>9</u>	<u>10</u>	<u>12</u>
6. Total livestock	\$ 577	\$ 549	\$ 483
7. Feed fed	<u>274</u>	<u>272</u>	<u>261</u>
8. Return over feed (value added)	\$ 303	\$ 277	\$ 222
9. Value added by crops	198	186	159
10. Miscellaneous farm income	<u>5</u>	<u>6</u>	<u>6</u>
11. Total value added	\$ 506	\$ 469	\$ 387
EXPENSES AND NET DECREASES			
12. Truck and auto	\$ 11	\$ 12	\$ 15
13. Electricity expense	5	5	6
14. Tractors and crop machinery	37	41	47
15. Livestock equipment	14	14	13
16. Buildings	20	23	28
17. Miscellaneous livestock expense	14	14	14
18. Labor	29	23	11
19. Real estate taxes	10	11	12
20. General farm expense	6	7	7
21. Interest on capital managed @ 6%	<u>63</u>	<u>65</u>	<u>65</u>
22. Total expense	\$ 209	\$ 215	\$ 218
23. Labor and management earnings	\$ 297	\$ 254	\$ 169

Some comparisons can be made between the average farms under the complete hog program and the complete hog and cash crop farms with 400 or more work units (table 8). Farmers in both groups farrow over 100 litters and have about the same net increase in value from hogs, feed cost, and return over feed. The major difference between the two groups comes from the fact that the hog and cash crop farmers operate more than two times as much tillable land as the more highly

Table 8. Enterprise Statement on a Per Litter Basis for Hog Farms in Southern Minnesota, 1971-1973 (continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		Average	1/2 low in earnings	
		1/2 high in earnings	Average	1/2 high in earnings	1/2 low in earnings			
1.	31	48	49	50	64	64	64	106
2.	210	322	313	303	390	399	409	560
3.	6.7	6.7	6.4	6.1	6.1	6.2	6.4	5.3
RECEIPTS AND NET INCREASES								
4.	\$ 453	\$ 524	\$ 511	\$ 499	\$ 533	\$ 527	\$ 520	\$ 523
5.	<u>31</u>	<u>11</u>	<u>14</u>	<u>17</u>	<u>15</u>	<u>24</u>	<u>34</u>	<u>13</u>
6.	\$ 484	\$ 535	\$ 525	\$ 516	\$ 548	\$ 551	\$ 554	\$ 536
7.	<u>259</u>	<u>262</u>	<u>270</u>	<u>279</u>	<u>272</u>	<u>283</u>	<u>294</u>	<u>277</u>
8.	\$ 225	\$ 273	\$ 255	\$ 237	\$ 276	\$ 268	\$ 260	\$ 259
9.	659	838	674	509	769	706	640	576
10.	<u>20</u>	<u>15</u>	<u>15</u>	<u>16</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>13</u>
11.	\$ 904	\$1126	\$ 944	\$ 762	\$1060	\$ 990	\$ 917	\$ 848
EXPENSES AND NET DECREASES								
12.	\$ 42	\$ 34	\$ 31	\$ 29	\$ 28	\$ 29	\$ 30	\$ 20
13.	8	7	8	8	7	8	8	6
14.	113	118	109	101	103	111	119	89
15.	15	11	12	12	15	14	14	15
16.	39	39	39	39	41	42	43	35
17.	12	12	13	15	15	14	14	14
18.	27	19	28	37	35	37	38	79
19.	42	39	37	35	38	38	39	33
20.	17	13	15	16	13	14	15	11
21.	<u>186</u>	<u>199</u>	<u>182</u>	<u>165</u>	<u>189</u>	<u>188</u>	<u>186</u>	<u>158</u>
22.	\$ 501	\$ 491	\$ 474	\$ 457	\$ 484	\$ 495	\$ 506	\$ 460
23.	\$ 403	\$ 635	\$ 470	\$ 305	\$ 576	\$ 495	\$ 411	\$ 388

specialized hog farms. The complete hog farms operate 240 acres per farm. Nearly all the crops are fed to hogs and large amounts of feed are purchased. Large hog and cash crop farms operate 560 acres of land and, thus, produce more crops than can be utilized by the hog enterprise. Their added expense over the complete hog farm is \$245 per litter but the added income per litter from value added by crops is \$390. This accounts for much of the difference of \$128 in labor earnings per litter in favor of the large hog and cash crop farms.

Table 9. Rate Earned on Capital Managed on Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
1. Labor & management earnings	\$ 50556	\$ 33331	\$ 16106	\$ 39055	\$ 26297	\$ 13540
2. Interest on capital managed @ 6%	<u>10780</u>	<u>8474</u>	<u>6168</u>	<u>13592</u>	<u>11808</u>	<u>10025</u>
3. Total (2 + 3)	\$ 61336	\$ 41805	\$ 22274	\$ 52647	\$ 38105	\$ 23565
4. Estimated wage for operator	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>
5. Return to capital (3 - 4)	\$ 51736	\$ 32205	\$ 12674	\$ 43047	\$ 28505	\$ 13965
6. Average capital managed	\$179664	\$141238	\$102811	\$226532	\$196806	\$111387
7. Rate earned on capital managed	28.8%	22.8%	12.3%	19.0%	14.5%	12.5%

The data in table 9 show calculations of earnings as the rate earned on capital managed. It is most useful in dealing with larger than average farms where the contribution of capital may be greater than the contribution of the operator's labor (not including management). Return to capital is the residual remaining after an estimated charge has been deducted for all factors of production, including operator's labor but not management. An arbitrary charge of \$9600 was used for all sizes of farms and for all levels of profitability. A constant charge for the operator's labor is probably unrealistic in that the better operators could command higher wages in alternative opportunities and the lower earnings operators might command a wage more nearly equal to that paid for hired labor.

A well organized farm should yield a reasonable return to the operator for his labor and management as well as capital. The information in table 9 shows that farmers received a relatively high return on the "book value" of their capital managed during the years 1971-1973. If real estate values were adjusted upward to near current market prices, rate earned on capital would be lowered considerably.

Table 9. Rate Earned on Capital Managed on Hog Farms in Southern Minnesota, 1971-1973 (continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		Average	1/2 low in earnings	
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average			1/2 low in earnings
1.	\$ 12500	\$ 30488	\$ 23040	\$ 15255	\$ 36864	\$ 31709	\$ 26321	\$ 41160
2.	<u>5793</u>	<u>9542</u>	<u>8909</u>	<u>8245</u>	<u>12119</u>	<u>12017</u>	<u>11908</u>	<u>16741</u>
3.	\$ 18293	\$ 40030	\$ 31949	\$ 23500	\$ 48983	\$ 43726	\$ 38229	\$ 57901
4.	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>	<u>9600</u>
5.	\$ 8693	\$ 30430	\$ 22349	\$ 13900	\$ 39383	\$ 34126	\$ 28629	\$ 48301
6.	\$ 96549	\$159042	\$148482	\$137424	\$201989	\$200286	\$198468	\$279018
7.	9.0%	19.1%	15.0%	10.1%	19.5%	17.0%	14.4%	17.3%

THE CROPPING PROGRAM

Date in tables 10 and 11 show the average acreage per farm and yields per acre. Since a large proportion of the land in these farms is tillable, they are well adapted to the production of corn and the raising of hogs. Corn harvested for grain is the major crop on all farms, with soybeans second in importance. There is little need for hay and pasture on tillable land when hogs are the major enterprise.

Average yields of corn were about the same for all the groups of farms. The range by farm type was only from 99 to 105 bushels. However, the differences in crop yields between the high and low earnings farms were larger. Differences in corn yields between high and low farms ranged from 15 bushels per acre on the purchased feeder pigs and cash crop farms to nine bushels per acre on the medium-large complete hog and cash crop farms. Variations in the yields of soybeans, oats and alfalfa were also greater between high and low earning categories than among farm types.

Table 10. Average Acres Per Farm for Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
1. Canning peas	.5	.3	-	2.0	2.8	3.7
2. Oats for grain	14.8	14.2	13.7	12.3	8.6	4.8
3. Other small grain	<u>1.4</u>	<u>1.3</u>	<u>1.2</u>	<u>1.7</u>	<u>3.1</u>	<u>4.3</u>
4. Total small grain	16.7	15.8	14.9	16.0	14.5	12.8
5. Corn grain	142.8	122.4	101.8	207.5	187.5	167.5
6. Soybeans	56.6	39.4	21.9	170.3	130.7	91.1
7. Sweet corn	1.8	1.2	.6	3.0	4.3	5.6
8. Other cult. crops	<u>.7</u>	<u>.5</u>	<u>.3</u>	<u>.7</u>	<u>2.0</u>	<u>3.4</u>
9. Total cult. crops	201.9	163.5	124.6	381.5	324.5	267.6
10. Total till. land in hay	4.6	5.8	7.1	4.4	5.6	6.8
11. Total till. land in pasture	4.2	3.8	3.4	.8	1.1	1.5
12. Till. land not cropped*	<u>19.5</u>	<u>18.0</u>	<u>16.2</u>	<u>47.3</u>	<u>38.2</u>	<u>29.0</u>
13. Total tillable land	246.9	206.9	166.2	450.0	383.9	317.7
14. Non-till. pasture and hay	9.5	12.8	16.1	6.5	11.0	15.5
15. Timber, waste, roads and farmstead	<u>22.3</u>	<u>20.2</u>	<u>18.1</u>	<u>28.0</u>	<u>29.3</u>	<u>30.7</u>
16. Total acres in farm	278.7	239.9	200.4	484.5	424.2	363.9
17. Percent land tillable	88.5%	86.2%	82.9%	92.9%	90.5%	87.3%

* Includes set-aside acres.

Table 11. Average Crop Yields Per Acre for Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
1. Corn for grain, bu.	106.1	100.2	94.1	109.6	102.0	94.3
2. Soybeans, bu.	35.4	32.5	29.0	35.2	32.8	29.8
3. Oats for grain, bu.	66.5	65.9	65.4	82.1	77.4	70.0
4. Alfalfa hay, tons	4.3	3.8	3.5	3.4	3.3	3.3

Table 10. Average Acres Per Farm for Hog Farms in Southern Minnesota, 1971-1973
(continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		1/2 low in earnings	400 work units & over	
		1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings			
1.	.2	2.3	2.1	1.9	1.6	1.4	1.2	4.3
2.	10.0	8.5	9.3	10.0	9.5	11.6	13.9	11.4
3.	<u>2.5</u>	<u>2.7</u>	<u>1.8</u>	<u>1.0</u>	<u>1.9</u>	<u>3.4</u>	<u>4.8</u>	<u>5.4</u>
4.	<u>12.7</u>	<u>13.5</u>	<u>13.2</u>	<u>12.9</u>	<u>13.0</u>	<u>16.4</u>	<u>19.9</u>	<u>21.1</u>
5.	83.3	119.7	122.6	125.6	168.3	168.8	169.2	253.1
6.	58.9	118.4	103.0	86.8	129.7	128.7	127.6	164.1
7.	1.3	2.2	2.6	3.0	2.5	1.6	.7	6.7
8.	<u>1.1</u>	<u>8.2</u>	<u>4.2</u>	<u>.2</u>	<u>6.2</u>	<u>5.4</u>	<u>4.6</u>	<u>4.4</u>
9.	<u>144.6</u>	<u>248.5</u>	<u>232.4</u>	<u>215.6</u>	<u>306.7</u>	<u>304.5</u>	<u>302.1</u>	<u>428.3</u>
10.	7.1	2.0	4.3	6.9	2.7	4.4	6.2	6.1
11.	2.6	1.6	1.2	.8	.3	.8	1.2	1.3
12.	<u>17.0</u>	<u>30.0</u>	<u>30.6</u>	<u>30.9</u>	<u>34.8</u>	<u>37.5</u>	<u>40.3</u>	<u>50.9</u>
13.	184.0	295.6	281.7	267.1	357.5	363.6	369.7	507.7
14.	8.8	6.8	9.0	11.2	6.2	9.8	13.4	12.1
15.	<u>16.8</u>	<u>19.9</u>	<u>22.2</u>	<u>24.8</u>	<u>26.2</u>	<u>25.7</u>	<u>25.4</u>	<u>40.0</u>
16.	209.6	322.3	312.9	303.1	389.9	399.1	408.5	559.8
17.	87.8%	91.7%	90.0%	88.1%	91.7%	91.1%	90.5%	90.7%

Table 11. Average Crop Yields Per Acre for Hog Farms in Southern Minnesota,
1971-1973 (continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		1/2 low in earnings	400 work units & over	
		1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings			
1.	98.7	106.1	101.0	95.6	109.7	105.1	100.2	104.7
2.	31.6	33.7	30.3	27.2	35.8	34.4	33.4	33.3
3.	63.9	79.3	75.4	72.1	75.9	72.9	70.6	75.4
4.	3.7	3.6	3.4	3.2	4.1	3.7	3.4	3.7

Table 12. Crop Production Expenses on Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
1. Fertilizers bought per tillable acre	\$15.06	\$13.88	\$12.18	\$10.97	\$11.63	\$12.57
2. Other crop expenses per tillable acre	15.54	14.77	13.70	12.26	13.44	15.10
3. Tractor & machinery expense/crop acre	28.17	29.14	30.70	19.51	20.45	21.76
4. Tractor & machinery investment per crop acre	57.39	59.11	61.88	46.76	47.58	48.74

Fertilizer and other crop expenses are about the same for all types of hog farms, except for the specialized hog farms and the largest complete hog-cash crop group. These two types spent \$2-\$3 more per acre on fertilizer and \$1-\$2 more per acre on other crop expenses. These two types were also the highest earning farms for this three-year period.

Tractors and machinery expenses and investments per acre are significantly larger on the specialized hog farms because of the intense hog production relative to crop acres. (The specialized hog farms obtained 59 percent of gross income from livestock compared to 30 percent or less for all other groups.) Also, the high earnings of the specialized hog farms in recent years has encouraged--and permitted--higher rates of mechanization. Higher earnings, and subsequent greater ability to modernize, may also explain why the investment per acre increases with size of farm on the complete hog-cash crop farms. In contrast to economy of scale theories, which expect per acre investments to decline with farm size, tractor and machinery investments climb from \$42.74 to \$50.31 as crop acreage goes from 164 to 325. A slight drop to \$48.68 does show up for the largest farm size, which had 455 crop acres.

Table 12. Crop Production Expenses on Hog Farms in Southern Minnesota, 1971-1973
(continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		Average	in earnings	
		1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings			
1.	\$10.02	\$ 9.93	\$10.37	\$10.89	\$12.30	\$11.49	\$10.68	\$13.20
2.	12.32	12.27	12.28	12.29	13.71	13.28	12.85	14.61
3.	21.30	21.46	21.43	21.36	20.51	21.88	23.28	20.65
4.	42.74	44.06	44.93	45.90	49.12	50.31	51.54	48.68

FEED COSTS AND RETURNS FROM HOGS

Production and feed costs are shown for the hog enterprise in table 13. Home grown feeds have been charged to hogs at current market prices and purchased feeds have been charged at cost.

Returns over feed and returns for \$100 of feed cost were very consistent among all groups with complete hog programs. The smallest farms--less than 200 work units--show just slightly lower returns because of a poorer feed conversion with subsequent higher feed costs.

Returns over feed from purchased feeder pigs is expected to be less than in a complete hog program, since labor and other nonfeed costs are less. For the past three years, 1971-1973, return over feed costs on the hog finishing farms averaged \$9.05 per cwt. produced compared with \$15.71 on the specialized hog farms.

Differences between high and low earning farms may appear surprisingly small. This is because the farms are sorted on the basis of total farm earnings--and crop earnings are more important than hog earnings on all the farms except the

Table 13. Average Feed Costs and Returns from Hogs on Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
1. Pounds produced	303843	224204	144566	131932	114980	98029
Per cwt. produced:						
2. Net increase in value	\$31.12	\$31.55	\$31.99	\$24.19	\$23.71	\$23.24
3. Feed cost	<u>14.80</u>	<u>15.84</u>	<u>16.88</u>	<u>14.06</u>	<u>14.66</u>	<u>15.27</u>
4. Return over feed cost	\$16.32	\$15.71	\$15.11	\$10.13	\$ 9.05	\$ 7.97
5. Return for \$100 feed	\$211	\$199	\$190	\$172	\$162	\$152
6. Price rec'd per cwt. sold	\$28.44	\$28.64	\$28.84	\$28.17	\$28.33	\$28.49
7. Weight per hog sold	230	232	233	231	227	224
8. Miscellaneous costs per cwt. produced*	\$.81	\$.88	\$.95	\$.33	\$.33	\$.33
Feed per cwt. produced, lbs.:						
9. Corn	333	347	361	299	317	335
10. Small grain	13	20	28	11	12	12
11. Commercial feeds**	<u>78</u>	<u>85</u>	<u>91</u>	<u>90</u>	<u>87</u>	<u>84</u>
12. Total concentrates	424	452	480	400	416	431
13. Total number litters raised	170	131	95			
14. Number of pigs born per litter	9.4	9.4	9.4			
15. Number of pigs weaned per litter	7.8	7.7	7.5			
16. Number feeder pigs bought				776	665	556
17. Total weight of pigs bought				31905	26863	21949
18. Price paid per feeder pig				\$24.55	\$24.60	\$24.65

* Miscellaneous costs include items such as veterinary expenses, purchased bedding, breeding fees, registration fees, etc.

** This includes protein feed and the purchase of complete hog feeds which have not been divided between corn, small grain and protein.

first group shown. Thus, lower return to the hog enterprise might be partially or completely offset by higher returns to the crop enterprises. So, this sort should not be interpreted as showing the difference between the high return hog enterprises and the low return ones. Rather, it shows that those farmers who had the highest total farm earnings in any group also tended to do better than average with their hog enterprise.

Feed fed per cwt. of gain averaged 451 pounds for all complete hog programs compared to the 416 pounds required by the hog finishing farms. Purchased feeder pigs require less because the overhead cost of maintaining a breeding herd is not included.

SUMMARY

The data in table 14 summarizes earnings and some of the characteristics of farms that include hogs as a major enterprise. One-half of the complete hog farms earned an average of 12.3 percent return on capital managed, compared to 28.8 percent for the one-half most profitable farms. The rate of return is lower and the variation is less on the other farms where the hog enterprise accounts for less than 30 percent of gross receipts (line 23).

An assumed charge of \$9600 as a value of the operator's labor was made in calculating rate earned on capital managed.

The following are some of the characteristics of the most profitable farms compared to the least profitable farms:

1. More total acres and more tillable acres for most of the categories.
2. A higher percent of tillable land in soybeans.
3. More work units per worker (work accomplished per worker).
4. More capital managed in total and per worker.

5. Larger business in terms of total work units, farm sales and total value added.
6. More pigs weaned per litter.
7. Less feed needed to produce 100 pounds of hogs.
8. More return for each \$100 of feed consumed by hogs.
9. Higher crop yields.
10. Less operating expenses per \$100 of sales.

Many of the above differences between high and low earnings farms are essentially differences in efficiency of production and in size of business. An increase in size of business does not guarantee an increase in earnings; there are great differences in earnings among farmers with operations of approximately the same size. The farmer who does a good job of managing a medium size farm operation is likely to have a larger income than a large scale poorly managed operation.

Table 14. Some Characteristics of Hog Farms in Southern Minnesota, 1971-1973

Item	Complete hog program			Purchased feeder pigs and cash crops		
	1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings
Earnings						
1. Net cash income	\$ 27321	\$ 19280	\$ 11238	\$ 26286	\$ 18281	\$ 10276
2. Labor & mgmt earn.	\$ 50556	\$ 33331	\$ 16106	\$ 39055	\$ 26297	\$ 13540
3. Rate earned on cap.	28.8%	22.8%	12.3%	19.0%	14.5%	12.5%
Land						
4. Total acres	279	240	200	484	424	364
5. Tillable acres	247	207	166	450	384	318
6. % till land in - corn	57.8%	59.2%	61.2%	46.1%	48.8%	52.7%
7. - soybeans	22.9%	19.0%	13.2%	37.8%	34.0%	28.7%
Labor						
8. Number of workers	1.70	1.47	1.30	1.53	1.42	1.30
9. Work units/worker	296	265	212	218	213	210
10. Value added/worker	\$ 50637	\$ 41797	\$ 28308	\$ 49099	\$ 40420	\$ 30517
Capital						
11. Total capital mgd.	\$179664	\$141238	\$102811	\$226532	\$196806	\$111387
12. Capital mgd/worker	\$105685	\$ 96080	\$ 79085	\$148060	\$138596	\$ 85682
Size of business						
13. Total work units	503	389	275	333	303	273
14. Total farm sales	\$ 98816	\$ 73042	\$ 47267	\$ 93590	\$ 79246	\$ 64902
15. Total value added	\$ 86083	\$ 61442	\$ 36801	\$ 75122	\$ 57397	\$ 39672
Hogs						
16. Pounds produced	303843	224204	144566	131932	114980	98029
17. No. litters raised	170	131	95			
18. Pigs weaned/litter	7.8	7.7	7.5			
19. Lbs feed to produce 100 lbs hogs	424	452	480	400	416	431
20. Return for \$100 feed	\$211	\$199	\$190	\$172	\$162	\$152
Crop Yields						
21. Corn, bu.	106	100	94	110	102	94
22. Soybeans, bu.	35	33	29	35	33	30
Source of gross income						
23. % from - livestock	59.8%	59.0%	57.3%	18.5%	19.6%	21.5%
24. - crops	39.2%	39.8%	41.0%	80.0%	78.4%	75.5%
25. - misc income	1.0%	1.2%	1.7%	1.5%	2.0%	3.0%
Expenses						
26. Pow & mach, equip, & bldg exp/work unit	\$29.14	\$32.13	\$37.61	\$41.71	\$41.34	\$40.89
27. Trac & mach expense per crop acre	\$28.17	\$29.14	\$30.70	\$19.51	\$20.45	\$21.76
28. Lvstk equip exp per 100 lbs hogs	\$.77	\$.80	\$.86	\$.71	\$.68	\$.65
29. Oper exp/\$100 sales	\$57.15	\$59.22	\$63.55	\$59.19	\$63.02	\$68.55
30. Tot purch/\$100 sales	\$72.35	\$73.60	\$76.22	\$71.91	\$76.93	\$84.17

Table 14. Some Characteristics of Hog Farms in Southern Minnesota, 1971-1973
(continued)

	Complete hog program and cash crops							400 work units & over
	Less than 200 work units	200-279 work units		280-399 work units		400 work units		
		1/2 high in earnings	Average	1/2 low in earnings	1/2 high in earnings	Average	1/2 low in earnings	
Earnings								
1.	\$ 8436	\$ 16303	\$ 13717	\$ 11010	\$ 22286	\$ 21338	\$ 20330	\$ 30586
2.	\$ 12500	\$ 30488	\$ 23040	\$ 15255	\$ 36864	\$ 31709	\$ 26321	\$ 41160
3.	9.0%	19.1%	15.0%	10.1%	19.5%	17.0%	14.4%	17.3%
Land								
4.	210	322	313	303	390	399	409	560
5.	184	296	282	267	358	364	370	508
6.	45.3%	40.5%	43.5%	47.0%	47.1%	46.4%	45.8%	49.9%
7.	32.0%	40.0%	36.6%	32.5%	36.3%	35.4%	34.5%	32.3%
Labor								
8.	1.13	1.20	1.21	1.23	1.40	1.40	1.40	1.77
9.	137	204	201	195	230	238	245	284
10.	\$ 24814	\$ 45052	\$ 38236	\$ 30985	\$ 48454	\$ 45271	\$101259	\$ 89060
Capital								
11.	\$ 96549	\$159042	\$148482	\$137424	\$201989	\$200286	\$198468	\$279018
12.	\$ 85442	\$132535	\$122712	\$111726	\$144278	\$143062	\$141763	\$157637
Size of business								
13.	155	245	243	240	322	333	344	503
14.	\$ 29639	\$ 50719	\$ 47634	\$ 44408	\$ 69169	\$ 67474	\$ 65686	\$ 98043
15.	\$ 28040	\$ 54063	\$ 46265	\$ 38112	\$ 67835	\$ 63380	\$ 58721	\$ 89857
Hogs								
16.	\$ 46724	\$ 80727	\$ 81295	\$ 81815	\$108508	\$109894	\$111328	\$188041
17.	31	48	49	50	64	64	64	106
18.	7.0	7.7	7.6	7.3	7.7	7.4	7.1	7.4
19.	477	427	446	466	437	447	457	434
20.	\$191	\$206	\$197	\$188	\$203	\$197	\$191	\$197
Crop yields								
21.	99	106	101	96	110	105	100	105
22.	32	34	30	27	36	34	33	33
Source of gross income								
23.	24.9%	24.3%	27.0%	31.2%	26.0%	27.1%	28.3%	30.6%
24.	72.8%	74.4%	71.4%	66.8%	72.5%	71.3%	69.8%	67.9%
25.	2.3%	1.3%	1.6%	2.0%	1.5%	1.6%	1.9%	1.5%
Expenses								
26.	\$43.38	\$41.01	\$40.16	\$39.42	\$38.58	\$39.19	\$39.85	\$34.77
27.	\$21.30	\$21.46	\$21.43	\$21.36	\$20.51	\$21.88	\$23.28	\$20.65
28.	\$.97	\$.66	\$.71	\$.76	\$.89	\$.84	\$.79	\$.84
29.	\$52.76	\$47.14	\$52.12	\$58.07	\$47.60	\$50.12	\$52.90	\$51.40
30.	\$71.54	\$67.86	\$71.20	\$75.21	\$67.78	\$68.38	\$69.05	\$68.80