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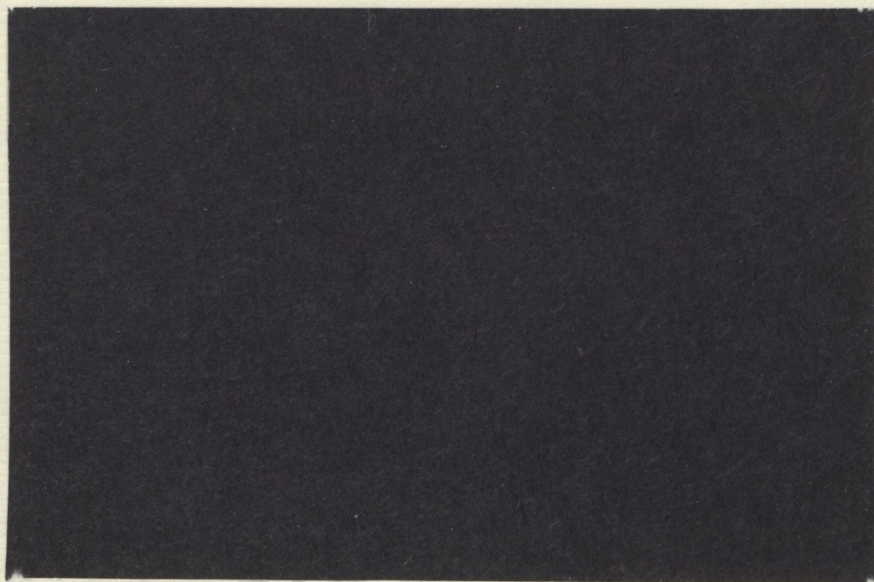
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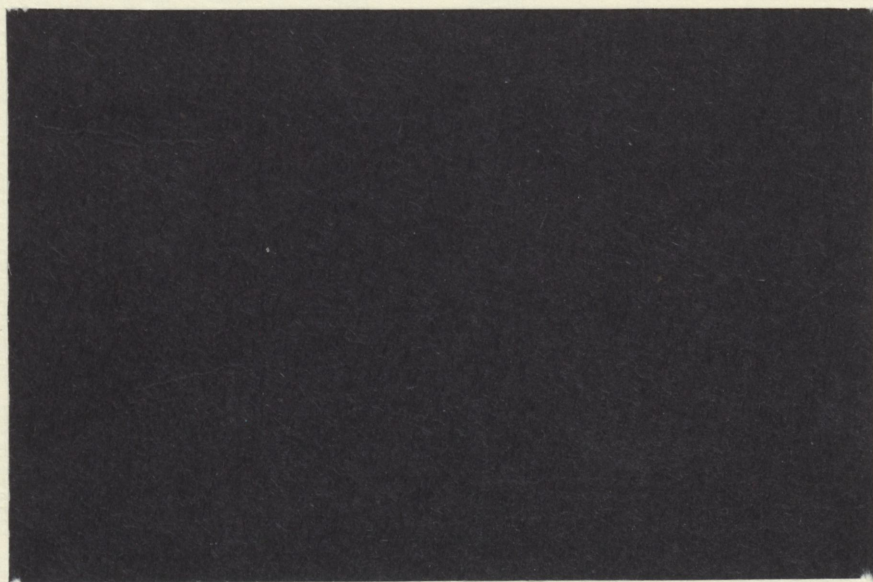


FAPRI Staff Report

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FINANCIAL IMPACT STUDY.
OVERVIEW

June 1985

CNFAP-2-85

FARM JOURNAL Magazine
Philadelphia, Pennsylvania

and

Food and Agricultural Policy
Research Institute

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This report was made possible through the cooperation of Agricultural Economists and the staff in the Food and Agricultural Policy Institute at the University of Missouri and Iowa State University plus Editors and Staff at Farm Journal magazine in Philadelphia, PA. The persons contributing to the Research in participating organizations were:

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NATIONAL FARM SURVEY ON FINANCIAL STRESS
Farm Journal and Food and Agricultural Policy Research Institute

Introduction

In an effort to examine the magnitude of the financial difficulties facing farmers today, several surveys have been conducted. These studies have focused on individual regions and have been very useful in providing a snapshot of a particular area. For example, studies from several states including Iowa, Minnesota, Wisconsin, and Missouri have indicated that many farmers, especially those with heavy debt-to-asset ratios, will be forced out of farming in the next 3 to 5 years.

But very little information has been available on the magnitude of the problem from a national standpoint. For this reason Farm Journal magazine in conjunction with the Food and Agriculture Policy Research Institute (FAPRI) at the University of Missouri and Iowa State University decided to conduct a national survey in an attempt to fill this void.

In order to achieve the quickest possible survey response, the Ag-Pulse mailing system (developed by Ira Bix of Farm Journal) was used. This computerized system, along with the telephone, is utilized by Farm Journal to continually survey the U.S. agricultural industry.

Survey Procedure and Size

A survey of 8,000 owner-operators were randomly selected from Farm Journal's computerized data bank of 1.1 million units. The survey results were evaluated for four major regions in the U.S. according to a distribution-

al breakdown utilized by Farm Journal (Figure 1). Exactly 2,000 names were randomly selected from each region. National averages were weighted to compensate for concentration of operations. Thus the central region, for example, with a high concentration of operations, is given a greater weight than the others in the national average computation.

An advisory letter was mailed on approximately December 1, 1984, indicating that a four-page questionnaire would arrive one week later. Currently about 1,600 responses have been received, representing 20 percent of all questionnaires originally mailed.

An initial survey response based on 1,223 observations was reported in the March issue of Farm Journal magazine. The percent analysis represents an update of the research data base used in that report. The number of questionnaires in the data base has been increased to 1,232, with 33 new questionnaires added and 24 questionnaires from the original survey response deleted.

The deletions were based on quality control standards revised to ensure greater accuracy of recorded data. These deletions were primarily associated with reports containing negative assets and debt-to-asset ratios in excess of 300. The implication of a debt-to-asset ratio in excess of 300 is that the operator is beyond a point for which collateral can sustain outstanding debt. Thus, the upper level cutoff on such ratios. These deletions may eliminate some producers who have sources of income not reported; however, this check ensures that overstatements do not bias the overall analysis.

The updated set of 1,232 questionnaires is the basis for the summary tables reported. Approximately 368 of the responses could not be used for financial evaluation due to omitted data. But it is apparent from an

examination of all the responses that the respondents gave careful consideration to the financial information they reported. Also the pattern of responses reflected a fairly uniform coverage of all states, farm sizes, and operations.

As expected, a large percentage of the respondents came from small farms. There were 520 operators, representing 42 percent of the total samples, with gross sales below \$50,000. The middle income group with sales between \$50,000 and \$250,000 accounted for 571 operators or 46 percent of the total sample. Farms with gross sales above \$250,000 represented 11 percent of the survey total. For purposes of comparison, 1982 census of agriculture data showed 5.4 percent of farms with gross sales in excess of \$200,000, approximately 23 percent with sales between \$40,000 and \$200,000, and 71.6 percent below \$40,000.

The survey results were also evaluated for categories of farm operations that included crops, dairy, poultry, beef, and pork. Crop operations were defined as those operations in which crop sales accounted for 70 percent of gross sales; beef, poultry and dairy operations, 50 percent of gross sales; pork operations, 30 percent of gross sales.

Obviously some overlap can be expected given this arbitrary breakdown. The actual cut-off was ascertained from the total distribution of responses to ensure a subsample per region in excess of 30 observations. For this reason no summary information is given on the poultry industry since only 14 observations were contained in this farm operation category.

I. GENERAL FINANCIAL INFORMATION

REAL ESTATE AND OPERATING LOANS

	CENTRAL	EAST	SOUTH	WEST	U.S.
Number of Observations	310	283	270	366	1,229
	-----percent-----				
<u>NO</u> Real Estate Debt	41	50	50	36	44
<u>WITH</u> Real Estate Debt	59	50	50	64	56
CURRENT ON PRINCIPAL	97	95	98	99	98
CURRENT ON INTEREST	96	93	98	98	97
<u>NO</u> Operating Debt	32	45	44	37	39
<u>WITH</u> Operating Debt	68	55	56	63	61
CURRENT ON PRINCIPAL	90	88	88	92	90
CURRENT ON INTEREST	92	87	87	92	90

*44 PERCENT OF FARMS HAD NO REAL ESTATE LOANS.

*39 PERCENT OF FARMS HAD NO OPERATING LOANS.

*FARMS WITH REAL ESTATE DEBT (56 PERCENT) INDICATE 2 TO 3 PERCENT NOT CURRENTLY ON PRINCIPAL AND INTEREST.

*FARMS WITH OPERATING DEBT (61 PERCENT) INDICATE 10% NOT MEETING CURRENT FINANCIAL OBLIGATIONS.

*FINANCIAL STRESS IS REFLECTED IN PERCENT OF TOTAL FARMS NOT CURRENT ON OPERATING LOANS. APPROXIMATELY 6 PERCENT OF ALL FARMS FALL IN THIS CATEGORY IN 1984, 61 PERCENT HAVE OPERATING LOANS AND 10 PERCENT ARE NOT CURRENT.

*CONTINUATION OF CURRENT FINANCIAL MARKETS AND COMMODITY PRICES SUGGEST ABOUT 5 PERCENT IN 1986 AND 5 PERCENT IN 1987.

II. FARM SIZE AND DEBT DISTRIBUTION

FARM OPERATIONS - NATIONALLY

	BEEF	CROPS	DAIRY	PORK
<u>ACRES</u>				
Owned	1,127	403	338	207
Rented	756	441	120	280
<u>TOTAL</u>	1,883	844	458	487
-----thousand-----				
Assets	633	614	558	380
Debt	141	175	128	181
D/A Percent	19	36	26	48
Off-Farm Income	19	11	4	8

*BEEF PRODUCERS LARGEST OPERATIONS WITH LEAST DEBT AND HIGHEST OFF-FARM INCOME.

*CROP PRODUCERS AVERAGE 844 ACRES - ABOUT ONE-HALF OWNED WITH RELATIVELY HIGH DEBT/ASSETS.

*PORK PRODUCERS AVERAGE ABOUT 500 ACRES WITH HIGH PERCENT OF LAND RENTED AND HIGHEST DEBT/ASSET.

*DAIRY PRODUCERS AVERAGE ABOUT 560 ACRES, MAJORITY OWNED AND FAIRLY LOW DEBT RATIO.

*OFF-FARM INCOME LOWEST IN PORK AND CROP OPERATIONS.

CROP PRODUCERS

	CENTRAL	EAST	SOUTH	WEST	U.S.
<hr/>					
<u>ACRES</u>					
Owned	296	216	345	936	403
Rented	312	172	594	641	441
<u>TOTAL</u>	608	388	939	1,577	844
<hr/>					
	-----thousand-----				
Assets	477	393	540	1,291	614
Debt	144	66	160	341	175
D/A Percent	37	16	37	32	35
Off-Farm Income	8.8	21	13	11	11

*FARMS AVERAGE 844 ACRES, HIGHEST IN WEST, LOWEST IN EAST.

*EAST FARMS LOWEST DEBT - HIGHEST OFF-FARM INCOME.

*WESTERN AND SOUTHERN FARMERS SIGNIFICANTLY LARGER THAN OTHER REGIONS.

*CENTRAL AND SOUTH HIGHEST PERCENT OF RENTED LAND ALSO HIGHEST DEBT/ASSET.

BEEF PRODUCERS

	CENTRAL	EAST	SOUTH	WEST	U.S.
<u>ACRES</u>					
Owned	1,157	294	461	2,952	1,127
Rented	1,135	131	215	1,633	756
<u>TOTAL</u>	2,292	425	676	4,585	1,883
-----thousand-----					
Assets	629	278	476	1,111	633
Debt	-247	77	41	232	140
D/A Percent	32	22	10	23	19
Off-Farm Income	14	27	24	16	19

*LARGEST FARMING OPERATIONS IN CENTRAL AND WEST.

*CENTRAL REGION HIGHEST DEBT PERCENT, OTHER REGIONS SHOWS RELATIVELY SMALL DEBT PRESSURE.

*OFF-FARM INCOME HIGHEST FOR ANY OTHER FARMING OPERATION.

DAIRY PRODUCERS

	CENTRAL	EAST	SOUTH	WEST	U.S.
<hr/>					
<u>ACRES</u>					
Owned	374	261	407	142	338
Rented	100	89	178	132	120
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<u>TOTAL</u>	474	350	585	274	458
<hr/>					
	-----thousand-----				
Assets	542	480	626	620	558
Debt	-134	103	93	236	128
D/A Percent	27	23	25	29	26
Off-Farm Income	3.4	3.6	5.4	4.4	4.0

*RELATIVELY LOW PERCENT OF LAND RENTED.

*AVERAGE FARM SIZE HIGHEST IN SOUTH AT 585 ACRES.

*RELATIVELY LOW DEBT/ASSETS AND FAIRLY UNIFORM ACROSS ALL REGIONS.

*LEAST OPPORTUNITY FOR OFF-FARM INCOME AVERAGING \$4,000 PER YEAR NATIONALLY.

FARM SIZE AND DEBT DISTRIBUTION BY REGION

	CENTRAL	EAST	SOUTH	WEST	U.S.
<u>ACRES</u>					
Owned	417	249	398	1,497	547
Rented	446	120	365	915	463
<u>TOTAL</u>	863	369	763	2,412	1,010
-----thousand-----					
Assets	478	454	514	1,175	582
Debt	164	92	101	278	155
D/A Percent	38	20	25	28	32
Off-Farm Income	8.3	12.2	18.9	12.5	12.6

*WESTERN REGION LARGEST FARMING OPERATION WITH HIGHEST ASSETS AND ONLY 28 PERCENT DEBT.

*CENTRAL AND SOUTHERN FARMS SIMILAR IN SIZE, WITH MUCH HIGHER DEBT IN CENTRAL.

*OFF-FARM INCOME SIGNIFICANTLY HIGHER IN SOUTH AT \$18,900 PER YEAR VERSUS \$8,300 IN CENTRAL.

*EAST REGION SMALLEST FARMS WITH LEAST DEBT.

III.

LAND AND CAPITAL TRANSACTIONS

	CENTRAL	EAST	SOUTH	WEST	U.S.
ACRES OWNED	417	249	398	1,497	547
NET ACRES PURCHASED					
Years					
0-3	22	16	15	30	20
4-6	46	33	18	14	32
7-10	61	12	33	108	55
Total	129	61	66	152	107
NET PURCHASE RELATIVE TO ACRES OWNED	31	24	17	10	20
NET CAPITAL PURCHASED					
Years					
	-----thousand-----				
0-3	25	34	19	43	26
4-6	32	28	25	31	29
7-10	30	28	28	38	30
Total	87	90	72	112	85

*ON AVERAGE U.S. FARMS ACCUMULATED 20 PERCENT OF TOTAL AREA OWNED IN LAST 10 YEARS.

*WEST ACCUMULATED MOST ACRES BUT SMALLEST PERCENT OF TOTAL AREA OWNED.

*CENTRAL ACCUMULATED 31 PERCENT OF AREA OWNED IN LAST 10 YEARS, MAJORITY PURCHASED PRIOR TO 1980.

*AVERAGE CAPITAL PURCHASES FAIRLY UNIFORM ACROSS ALL REGIONS. SOUTH REFLECTS GREATEST DECLINE IN NET PURCHASES IN LAST 3 YEARS.

IV.

LAND AND CAPITAL TRANSACTIONSDEBT/ASSET ABOVE 40 PERCENT¹

	CENTRAL	EAST	SOUTH	WEST	U.S.
ACRES OWNED	443	187	379	1,237	500
NET ACRES PURCHASED					
Years					
0-3	15	28	25	-51	11
4-6	71	37	40	122	68
7-10	87	30	57	177	88
Total	173	95	122	248	167
NET PURCHASE RELATIVE TO ACRES OWNED	40	51	32	20	33
NET CAPITAL PURCHASED					
Years					
	-----thousand-----				
0-3	23	34	13	57	25
4-6	35	40	27	37	34
7-10	36	44	30	42	35
Total	94	118	70	136	94

*FARMERS WITH HEAVIER DEBT LOAD PURCHASED 33 PERCENT OF TOTAL LAND IN THE LAST 10 YEARS.

*ACREAGE OWNED IS BELOW NATIONAL AVERAGE FOR ALL FARMERS - PERCENT PURCHASED IS 13 PERCENT HIGHER.

*FARMERS IN EAST PURCHASED AN AVERAGE OF 95 ACRES, ABOUT 50 PERCENT OF TOTAL AREA OWNED.

*FARMERS IN CENTRAL PURCHASED 40 PERCENT OF TOTAL AREA OWNED.

*CAPITAL PURCHASES ARE HIGHER THAN TOTAL NATIONAL AVERAGE, LOWEST LEVELS IN THE SOUTH.

¹ 31 PERCENT OF ALL FARMS SURVEYED

V. FARM SIZE AND DEBT DISTRIBUTION BY AGE GROUP

INFORMATION FOR FARMERS YOUNGER THAN 35

	ALL	D/A > 40 PERCENT	D/A > 70 PERCENT
<u>ACRES</u>			
Owned	500	267	339
Rented	586	573	527
<u>TOTAL</u>	1,086	840	866
-----thousand-----			
Percent Owned	46	32	39
Debt/Asset	51	77	100
Off-Farm Income	\$8,639	\$9,272	\$7,628

*YOUNG FARMERS AVERAGE ALMOST 1,000 ACRES OF FARM LAND, 46 PERCENT OWNED.

*YOUNG FARMERS WITH DEBT/ASSETS ABOVE 40 PERCENT AVERAGED 250 ACRES LESS THAN TOTAL GROUP WITH HIGHER PERCENT RENTED.

*YOUNGER FARMERS HAVE ABOUT AVERAGE DEBT BUT LOWER END OF ASSETS.

*OFF-FARM INCOME SUBSTANTIALLY BELOW NATIONAL AVERAGE OF \$12,613.

INFORMATION FOR ALL FARMERS

	ALL	D/A > 40 PERCENT	D/A > 70 PERCENT
<u>ACRES</u>			
Owned	547	500	333
Rented	463	744	639
<u>TOTAL</u>	<u>1,010</u>	<u>1,244</u>	<u>972</u>
-----thousand-----			
Percent Owned	54	40	34
Debt/Asset	32	76	106
Off-Farm Income	\$12,613	\$10,542	\$8,035

*AVERAGE FARM IS ABOUT 1,000 ACRES WITH 54 PERCENT OWNED, \$12,613 OFF-FARM INCOME AND DEBT/ASSET AT 32 PERCENT.

*HIGHER STRESS FARMS, 31 PERCENT, RENT MORE LAND AND HAVE LESS OFF-FARM INCOME.

*HEAVIEST DEBT FARMS 13.5 PERCENT HAVE LEAST OFF-FARM INCOME AND HEAVIEST CONCENTRATION OF RENTED LAND.

VI. DEBT CONCENTRATION BY FARM SIZE

	REGION				WEIGHTED NATIONAL AVERAGE
	EAST	SOUTH	CENTRAL	WEST	
	D/A	D/A	D/A	D/A	D/A
<u>GROSS SALES CLASS</u>					
Less than 10,000	13.78	13.07	15.57	15.53	13.93
10,000 - 24,999	9.14	7.97	23.60	21.18	15.02
25,000 - 49,000	11.96	28.43	29.44	27.70	27.88
50,000 - 99,999	-25.87	43.17	39.07	26.43	37.76
100,000 - 249,999	23.56	38.01	43.42	25.73	38.52
250,000 - 499,999	41.26	33.48	54.03	41.49	48.41
500,000 and Over	13.64	22.93	43.45	43.15	35.19
All	20.85	25.30	38.37	28.32	31.80

*EAST HAS LOWEST DEBT/ASSET RATIO WITH HEAVIEST FINANCIAL STRESS IN \$250 TO \$500 THOUSAND.

*SOUTH INDICATES HIGHEST FINANCIAL STRESS IN \$50 TO \$100 THOUSAND.

*CENTRAL REFLECTS HEAVIEST CONCENTRATION OF FINANCIAL PRESSURE STARTING AT \$100 THOUSAND AND ABOVE.

*WEST INDICATES GREATEST FINANCIAL STRESS IN FARMS ABOVE \$250 THOUSAND.

VII.

DEBT CONCENTRATION BY FARMING OPERATION

	TYPE				
	CROPS	BEEF	PORK	DIARY	POULTRY
	D/A	D/A	D/A	D/A	D/A
GROSS SALES CLASS					
Less than 10,000	18.93	10.85	16.61	22.85	14.22
10,000 - 24,999	16.50	9.22	37.27	12.45	None
25,000 - 49,000	30.21	17.15	30.51	41.64	38.82
50,000 - 99,999	43.04	30.27	39.36	24.07	27.55
100,000 - 249,999	41.95	28.36	61.56	22.20	52.67
250,000 - 499,999	50.48	45.44	60.60	34.32	None
500,000 and Over	32.40	44.32	36.16	33.36	48.00
All	36.07	19.45	47.56	25.58	33.84

*CROP PRODUCERS INDICATE GREATEST FINANCIAL STRESS IN MID RANGE FARMS FROM \$50 TO \$500 THOUSAND IN GROSS SALES.

*BEEF PRODUCERS HAVE LOWEST TOTAL DEBT TO ASSET BUT LARGER PRODUCERS, ABOVE \$250 THOUSAND, INDICATE FINANCIAL PRESSURE.

*PORK PRODUCERS CARRY HIGHEST DEBT/ASSETS WITH TWO CLASSES IN THE HIGH STRESS CATEGORY, \$100 TO \$500 THOUSAND GROSS SALES.

*SMALL DAIRY FARMS, \$25 TO \$50 THOUSAND INDICATE HEAVY FINANCIAL STRESS.

VIII. FINANCIAL STRESS REGIONAL AND AGE GROUP

REGIONAL DEBT/ASSET RATIO BY AGE GROUP

REGION	AGE					ALL AGE
	Under 35	35-44	45-54	55-64	Over 65	GROUPS
	D/A	D/A	D/A	D/A	D/A	D/A
Central	55.100	56.830	44.128	18.618	8.130	38.191
West	44.613	42.112	25.808	19.028	11.060	27.798
South	44.725	40.196	23.495	16.933	5.537	25.576
East	41.519	26.846	17.739	11.186	5.683	20.062
Weighted National Average	50.650	47.367	32.598	17.754	7.243	31.652

*NATIONAL DEBT/ASSET 32 PERCENT.

*HIGHEST RATIO IN CENTRAL, LOWEST IN EAST.

*YOUNGER FARMERS - HIGHER DEBT RATIO.

*VULNERABLE ZONE DEBT/ASSET ABOVE 40 PERCENT.

*VULNERABLE FARMERS EXTEND THROUGH AGE 54 IN CENTRAL, 44 IN SOUTH AND WEST, AND 35 IN EAST.

NATIONAL DEBT DISTRIBUTION

	NUMBER OF ACTUAL OBSERVATIONS	WEIGHTED % DISTRIBUTION	DEBT		% OF NATIONAL DEBT
			THOUSAND DOLLARS		
			AVERAGE DEBT	TOTAL DEBT	
<u>DEBT/ASSET CLASS</u>					
00-10	524.000	39.517	11.215	1,334.457	2.860
10-40	377.000	29.431	180.016	15,952.287	34.194
40-70	199.000	17.487	322.231	16,967.027	36.369
70 Plus	132.000	13.564	303.575	12,398.404	26.576
All	1,232.000	100.000	154.941	46,652.176	100.000

*MAJORITY OF FARMS FALL IN LOW DEBT CATEGORY, ABOUT 69 PERCENT AND HOLD ONLY 37 PERCENT OF TOTAL DEBT - 40 PERCENT HOLD ONLY 2.9 PERCENT OF TOTAL DEBT.

*MINORITY OF FARMS FALL IN HEAVY DEBT CATEGORY, ABOUT 31 PERCENT BUT HOLD A MAJORITY OF DEBT, 63 PERCENT.

*MOST SIGNIFICANT CURRENT PROBLEM, CONCENTRATION OF DEBT IN MINORITY OF FARMS.

IX. FARMS IN FINANCIAL TROUBLE

*PERCENT OF FARMS BETWEEN 12 TO 18 PERCENT THAT MAY BE FORCED OUT BECAUSE OF FINANCIAL PROBLEMS.

*APPROXIMATELY 5 PERCENT OF FARMS FORCED OUT EACH YEAR FOR THE NEXT 3 YEARS UNDER CURRENT CONDITIONS.

*CHARACTERISTICS OF FARMS IN FINANCIAL TROUBLE.

-HIGH RENTERS.

-YOUNG - BELOW AGE 45.

-LOW OFF-FARM INCOME.

-HIGH CASH FLOW OPERATION.

-NOT NECESSARILY-AN AGGRESSIVE LAND BUYER.

-PORK AND CROP PRODUCERS.

-MOST LIKELY IN CENTRAL REGION - HOWEVER STRESS INDICATED IN ALL REGIONS.

*AMOUNT OF DEBT THAT MAY NOT BE SERVICED, AROUND 60 BILLION WITH ABOUT ONE-HALF RECOVERABLE FROM ASSETS FINANCED. INDICATES AROUND 30 BILLION SHORT-FALL IN THE FINANCIAL COMMUNITY IN THE NEXT 3 YEARS.

NOTE: Detailed information available upon request from the Center for National Food and Agricultural Policy

