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AGRICULTURAL OUTLOOK
relative to
FARM INCOME AND THE FARM FINANCIAL CRUNCH

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AGRICULTURAL OUTLOOK
relative to
FARM INCOME AND THE FARM FINANCIAL CRUNCH*

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The agricultural economy is in trouble. The level of farm family financial distress is very high. Rural businesses--especially those selling capital assets to farmers--are also suffering.

This paper addresses five questions:

- How many farm families are suffering under financial stress?
- What are the causes of the financial distress?
- What does the future hold for farm prices and income?
- Long run planning prices
- What attitudes & actions are needed to cope with the farm financial crisis?

How Many?

Will 13,000 lose their farms in the next two years? This was the number suggested by the Minnesota Department of Agriculture when they reported on their agricultural finance survey in September. But, in analyzing their study I found some sample bias when comparing their survey responses with census of agriculture figures. Larger farmers--because of larger debts--have more financial troubles than smaller ones--there were four times as many respondents to their recent survey in the large size group (>\$200,000 in farm sales) than found in the total population of farms. There were only half as many small farms (<\$40,000 in sales). (I recently learned that the survey sample included only those farms with over 160 acres. This excluded about 40 percent of all Minnesota farmers from the survey.)

The reporting of the findings of the Farm Finance Survey has been quite confusing and misleading. For example, the Minnesota Agricultural Statistics Service reported that 25 percent of those reporting debt had debts of over 70 percent of their assets. They did not say how many reported no debt.

* Paper presented at the 1985 Farm Bill Conference. Earle Brown Center, University of Minnesota, 12-18-84.

The survey summary reported that 27 percent of the respondents reported no debt. Actually, after adjusting this figure for size of farm bias, 36 percent of all farmers show no debt. (But only about 20 percent of farms with >\$40,000 sales show no debt.)

Adjusting other figures for sample bias results in a 10.5 percent figure for >70 percent in debt (compared to the study's reported 13 percent) and an 8 percent figure for 40 -70 percent in debt (compared to the 14 percent reported from the study). These 18 percent certainly would have difficulty earning enough to cover all interest costs plus family living given today's prices and production costs. This suggests that 15 to 20 percent of all Minnesota farmers are having serious cash flow problems. And, if we look only at commercial farmers--that one-half of Minnesota's farmers depending primarily upon agriculture for their living--about a third of those are likely having trouble meeting all their financial commitments.

Why Are They (The 15-20 Percent) In Trouble?

Let's look at six possible problem areas and the causes of those problems--both macro and micro. The following chart outlines six problem areas and the major causes of them that are outside the farmer's control as well as some that are within his control.

<u>Problem Area</u>	<u>Causes Of Problem</u>	
<u>Warning Signal</u>	<u>Outside Force</u>	<u>Farm Management Factor</u>
High interest costs	High interest rates	High leverage level
Low profits	Low prices	High costs
Low prices	Price cycle/strong \$	No marketing plan
Low yields	Poor weather	No risk control
Low asset turnover	Poor price/weather	Poor enterprise choice
Low farm sales	Poor price/weather	Under employment

Which ones can you change?

What Does The Future Hold?

First, let's look at the farm income situation. The biggest reasons for low farm income have been:

- (1) High interest costs
- (2) Escalating production costs
- (3) Weak foreign demands for U.S. grains
- (4) Weak domestic demand for red meat
- (5) Build-up of dairy surpluses

There's good news on **interest costs**--both on the interest rate side and on the farm debt level side. Rates have been declining in recent months. The lower rates will prevail through half of 1985--and on into the future if congress takes action to bring the deficits down. If they don't, and if the dollar value drops, nominal interest rates will increase again as will inflation rates. But increased inflation rates would also increase land prices and commodity prices; thus, taking some pressure off high debt farmers.

There is also some good news on the other major **production costs** that farmers face. Farm records show that next to interest the big ticket cost items are machinery (replacement, repairs and fuel), feed and fertilizer. Slack demand and larger available supplies of used machinery will keep a damper on machinery prices while changing replacement patterns will reduce annual purchases. This gain will be partially offset by increasing repair costs. However, the fuel component will continue to decline as world oil prices moderate and reduced tillage practices are more widely adopted.

Feed costs, the second major cost item on Minnesota farms, will be lower in 1985. And, if we remain in an oversupply situation for soybeans, the price of protein concentrates to livestock producers will remain relatively low. More selective shopping for least cost protein sources will also help since farm management records reveal that low return livestock producers currently pay higher prices for their protein concentrates than do high return ones.

Fertilizer costs can also be cut on many farms. Corn yields do not respond to phosphate and potash fertilizer when soil tests are medium or above--yet many farmers keep applying some each year.

There's hope for good news on the **demand** for U.S. grains as it is very likely that the dollar will drop in value during 1985. A likely 10 percent drop in 1985 would increase grain exports about 5 percent. And, once started the drop could become 20 to 30 percent quite quickly given the 50 percent uptick of the past few years. This would add 50 cents to bean prices and 20 cents to wheat and corn prices. Also, currently lower interest rates in the U.S. and other countries could encourage more economic growth in those countries and subsequently greater demand. These changes could give higher grain prices in 1985 and beyond than now expected.

As for **domestic demand** for red meat, there is some indication that this has started to improve. Had red meat demand been maintained, today's level of pork supplies would command \$60 rather than \$50 per cwt; today's level of beef supplies would command \$80 rather than \$65 per cwt. Beef and hog producers have lost money in three of the last four years. The outlook for 1985 is for higher returns to cattle feeding and hog production. Beef cow herds will lose less as a continued large reduction in cow numbers this fall reduces the 1985 calf crop. The national cow herd will continue to decline until steer calves reach 80 cents a pound. Reduced beef supplies will push cattle prices up \$2 to \$3 in 1985, with additional strength in the 1986-88 period as herd rebuilding gets underway again. Therefore, I expect choice slaughter steers will average higher during the next four years than they are today--in the high \$60's. The three year hog price cycle will also record somewhat higher prices--by \$2 to \$3 per cwt--in 1985 before dropping to cyclical lows again in 1986, and then recovering again in the 1987-88 period. I suggest a long term planning price of \$48-\$50 on hogs.

Dairy production is currently in much better balance with demand than it was a year ago--thanks to a surge in consumer buying at the same time the dairy diversion program is cutting supplies. The dairy enterprise will maintain stable to higher earnings in 1985 since net milk prices will hold (I don't expect a second 50 cent price support cut in July) while feed costs are reduced. Where to in 1986 and beyond will depend on the new dairy bill. A fairly quick increase in marketings is possible given the current large number of heifer replacements on hand and the cutback in grain feeding observed this year. If this occurs, milk prices will not improve. And, given my expectation that the new dairy bill will hold price supports down to a "safety net" level--dairymen who can't cash flow their operations at current margins will be leaving the business.

Overall, farm earnings for livestock producers will be up some in 1985 and will be considerably better during the coming four years than they were during the last four years when only dairying and the complete hog programs more than covered feed and cash costs (see back side of Farm Planning Prices). Income to crop farmers may decline in 1985, but could recover in subsequent years. For long run planning, I suggest fairly conservative prices based on current government loan rates for corn.

Long Run Planning Prices

Perhaps too much attention is focused on current prices and short term price outlook. Prices cycle up and down. Too often producers get in trouble by taking actions based on short-term price situations that are either above or below "normal". In fact, these wrong actions lead to the familiar production/price cycles observed in most commodities. High prices encourage expansion. Increased market supplies in the next period drive prices down. Low prices result in financial losses and production cutbacks. Lower supplies lead once again to higher prices. The complete cycle takes three years in hogs, one-half that long in poultry, but three times that long in beef.

To avoid a "wrong" decision on expansion or contraction, pay more attention to "normal" or average longer term expected prices. In a free market economy, this longer term price will be equal to or slightly below average production costs in the industry. When the typical producer--or, more accurately put, the expansion-minded producer--sees prices that are above his perceived production costs, production will be expanded. Likewise, losses encourage cutbacks--as is now happening in the national beef cow herd.

Using the above reasoning, we develop long run planning prices based on our estimates of typical production costs. This is, however, difficult for crops because "average production costs" depend in part on how land rent is charged. Since land is a residual claimant to returns from crop production, land values and rents really become a function of government crop price support programs in periods of over supply. Consequently, we start by pegging crop prices according to current government programs. A national support price of \$2.55 for corn will result in U.S. farm prices averaging 15 to 20 cents higher than this since storage costs must be at least partially covered. Minnesota corn prices are about 10 cents below U.S. prices. This puts southern Minnesota prices at an expected level of \$2.60 to \$2.75 with Minneapolis prices at \$2.90.

Given the competitive position of soybeans and other crops, their prices are estimated as shown in the attached publication--Farm Planning Prices.

Livestock prices are then estimated by calculating typical feeding costs and adding to these the margins necessary to cover nonfeed costs (based on recent history of what the industry seems to require to maintain production). For example, table 1 shows what the hog industry said is needed as "return over feed cost" in hog production. This, plus feed costs based on \$2.70 corn, suggests a long run planning price for hogs of about \$49. The hog price cycle 1983-85 will average very close to this estimate.

Note that the long run beef prices shown in the Farm Planning Prices are above those we have seen for a few years. Production costs have not been covered, industry losses have been severe, and beef production will be cut back until prices recover enough to justify expansion again. As noted above, this will require over 80 cents on steer calves.

Table 1. Projecting Long Run Planning Prices For Market Hogs

Period	Production Costs*		Average Hog Price
	Feed Costs	+ Return Over Feed Costs	
----- \$ per cwt -----			
Early 1960s	\$11.00	\$ 5.00	\$16.00
Late 1960s	12.00	9.00	21.00
Early 1970s	19.00	15.00	34.00
Late 1970s	24.00	20.00	44.00
Projected for 1980s	25-27	22-24	47-50

* Based on southern Minnesota farm management records.

Attitudes And Actions Needed To Cope With The Farm Financial Crisis

This last section first discusses our attitudes toward the current financial crisis in agriculture. Then it contains a few items to consider for action by each of several groups of farmers, creditors, educators and legislators.

Agriculture is in trouble. But let's not become immobilized by that fact. Let's look for the silver lining that surrounds the dark storm clouds. Look for the seeds of new opportunity that are present in every problem.

How each of you as individuals will fare in the coming year will depend upon how you decide to fare. As Abraham Lincoln once noted--a man feels about as good as he decides to feel. So develop positive attitudes and positive actions to deal with today's challenges. Some actions to consider follow:

For debtors in distress, you may have made some investment decisions that, in hindsight, don't look like good ones; don't dwell on them or look for someone else to blame them on. They were likely good decisions given your expectations of the future when you made them. As noted in Proverbs--none of us know what the future holds--so we all make mistakes.

But, almost any decision can be changed--don't refuse to give up a losing investment. Face up to the changed conditions and change the decision. Sell off the beef cow herd you were building. Sell off the extra silo or tractor you don't really need. Let go of that piece of land on which the contract for deed requires an annual cash cost that is half again what cash rents are. Change your farm plan. Try to develop one with your creditors that will have potential to develop positive cash flows. But if one can't be developed, keep your priorities straight. Ask yourself: What is really important in your life? Is it money? or farm ownership? or, even farming as an occupation? Are these as important as your faith? your family? your freedoms in this country? or your spiritual, mental and physical health?

For educators, educational emphasis needs to be shifted to cost control as well as financial and marketing management.

For legislators at the state level, farm real estate tax relief should be considered--scale back the tax penalties on larger acreages. Even more importantly, remove some of the roadblocks that have been built up that discourage equity capital from coming into agriculture--e.g. the alien ownership law, the farm corporation law and the modified tax loss law.

For legislators at the national level, consider changing income taxes to allow forgiveness of capital gains income in cases where creditors certify that some land must be sold in order to make a farm business viable again. Also, there will be a much greater demand for funds from FmHA than are presently allocated. Consider an interest rate write-down requirement for banks and PCAs to participate with FmHA on guaranteed loans.

For creditors, consider setting aside some debts for awhile at no interest on viable operations. Also, consider taking large write-offs this year and picking up some of it by carrying back a net operating loss to get back previously paid income taxes. (Some bankers are exploring this.)

For low debt - high earnings farmers, today's agricultural economic environment presents excellent opportunities to buy land and machinery--with almost everyone talking about how bad the situation is capital asset prices must be near bottom. Farm earnings will increase. Inflation rates will likely increase. And these are the major factors that determine land prices.

10/84

FARM PLANNING PRICES

projected by
Agricultural Economists, University of Minnesota

	Unit	1 Year Planning Price 10/1/ 84 to 10/1/85		Long Range Planning Prices ^{1/}	
		Mpls.	My Locality ^{2/}	Mpls.	My Local Farm Price ^{2/}
CROPS					
Corn	bu.	\$ 2.90	_____	\$ 2.90	_____
Oats	bu.	1.90	_____	1.80	_____
Wheat, 13% protein	bu.	4.00	_____	4.10	_____
Soybeans	bu.	6.60	_____	6.80	_____
Barley, all	bu.	2.50	_____	2.60	_____
Sunflowers	cwt.	11.80	_____	11.00	_____
		<u>Local</u>		<u>Local</u>	
Mixed hay	ton	\$40-60	_____	\$40-60	_____
Alfalfa hay	ton	55-85	_____	50-80	_____
Straw, grain	ton	40-70	_____	40-70	_____
LIVESTOCK					
		<u>Terminals</u>		<u>Terminals</u>	
Hogs	cwt.	\$50.00	_____	\$49.00	_____
Feeder pigs, 40 pounds	head	42.00	_____	44.00	_____
Hog feeding margin/cwt. gain ^{3/}	cwt.	40.00	_____	38.00	_____
Choice steer calves ^{4/}	cwt.	68.00	_____	75.00	_____
Beef cow herd sales ^{4/}	cow	260.00	_____	275.00	_____
Choice yearling steers	cwt.	64.00	_____	70.00	_____
Choice slaughter steers	cwt.	63.00	_____	67.00	_____
Beef feeding margin/cwt. gain ^{3/}					
Calves	cwt. of	62.00	_____	62.00	_____
Yearlings	gain	65.00	_____	65.00	_____
Slaughter lambs	cwt.	63.00	_____	64.00	_____
PRODUCE					
		<u>Local</u>		<u>Local</u>	
Milk, grade A, 3.5% butterfat	cwt.	12.40-12.80	_____	12.40-12.80	_____
Milk, grade B	cwt.	12.00-12.40	_____	12.00-12.40	_____
Eggs	doz.	.62-.67	_____	.60-.65	_____
Wool (with incentive)	lb.	1.35	_____	1.35	_____

^{1/} Long range planning prices do not include any allowance for future inflation. They are based on current cost structures but do not include government "deficiency" payments since these would require "set aside" acres. Future inflation may increase both costs and commodity prices above these levels. If future inflation is included in cost projections, it should also be added to these planning prices.

^{2/} Adjust terminal price as necessary for normal locational differentials when selecting a local planning price. Thus, a long-range planning price of \$2.65 might be appropriate in the surplus corn areas of southern Minnesota compared to \$3.00 for the deficit areas of north central Minnesota. Since a terminal market does not exist for some commodities (hay and milk) we suggest a probable range in outstate market prices.

^{3/} The hog and beef feeding margins are determined by subtracting the purchase cost of a feeder from the sale receipts of one finished animal and dividing by the cwt. of gain.

^{4/} Assumes average sales per cow of: steer calf - 190 lbs., heifer calf - 105 lbs., cow - 170 lbs.

RETURNS ABOVE FEED COSTS FOR MINNESOTA LIVESTOCK ENTERPRISES*

Year	Enterprise Including Breeding Herds				Feeding Enterprises	
	Dairy (cow)	Hogs (cwt.)	Beef (cow)	Sheep (ewe)	Feeder Pigs (cwt.)	Feeder Cattle (cwt.)
1960	\$155.52	\$10.16	\$71.65	\$ 5.30	\$10.16	\$ 5.77
1961	156.03	5.44	23.81	2.93	5.44	2.48
1962	115.38	4.92	27.49	4.80	2.40	6.18
1963	129.56	2.43	19.05	12.27	-.22	-6.09
1964	148.35	3.62	11.87	6.88	3.05	1.38
Avg. 1960-64	140.96	5.29	30.77	6.44	4.17	1.94
1965	141.25	11.90	10.75	11.06	7.75	7.12
1966	197.29	8.37	52.76	12.20	5.84	.68
1967	245.53	6.11	33.28	6.49	.85	4.87
1968	273.02	7.07	43.02	10.32	2.37	8.22
1969	276.88	13.37	35.11	11.32	6.87	-.95
Avg. 1965-69	226.79	9.36	34.98	10.27	4.73	4.37
1970	321.62	4.70	46.22	9.24	-.29	3.28
1971	324.89	5.68	48.06	11.63	3.95	12.65
1972	331.38	15.53	106.38	11.67	10.04	12.26
1973	371.53	21.34	106.05	13.24	13.29	7.54
1974	303.48	7.76	-138.58	-1.63	3.80	-21.16
Avg. 1970-74	330.58	11.00	33.62	8.83	6.16	2.91
1975	301.13	24.16	-77.73	4.56	14.75	8.77
1976	523.31	13.38	-46.45	12.99	5.64	-7.43
1977	612.46	17.72	18.78	34.58	10.92	8.99
1978	873.74	27.75	224.42	23.83	13.37	29.88
1979	1,049.52	11.38	148.20	34.41	.56	17.49
Avg. 1975-79	672.03	18.88	53.44	22.02	9.05	11.54
1980	1,063.27	13.12	128.31	20.51	4.12	3.72
1981	1,098.22	11.98	-3.64	32.16	4.42	5.13
1982	1,192.46	32.13	110.00	4.15	14.04	22.27
1983	865.37	10.74	2.10	-19.60	7.33	11.80
Avg. 1980-83	1,054.83	17.00	56.19	9.31	7.48	10.73
Current direct** operating costs	500.00	10.00	125.00	19.00	7.00	17.00

* Historical returns are from the summaries of records kept by farmer members of the Southwest Farm Management Association.

** Excludes family labor and facility replacement costs.