



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Staff Papers Series

Staff Paper P86-4

January 1986

FINANCIAL STRESS IN AGRICULTURE:
IMPLICATIONS FOR FARMERS, LENDERS AND CONSUMERS

by

Michael Boehlje



Department of Agricultural and Applied Economics

University of Minnesota
Institute of Agriculture, Forestry and Home Economics
St. Paul, Minnesota 55108

FINANCIAL STRESS IN AGRICULTURE:
IMPLICATIONS FOR FARMERS, LENDERS AND CONSUMERS

by

Michael Boehlje

Professor and Head of Department
Department of Agricultural and Applied Economics
University of Minnesota

Testimony presented before
U.S. House of Representatives
Subcommittee on Economic Stabilization
of the
Committee on Banking, Finance and Urban Affairs
October 23, 1985, Washington, D.C.

Staff Papers are published without formal review within the
Department of Agricultural & Applied Economics

The University of Minnesota is committed to the policy that
all persons shall have equal access to its programs, facilities
and employment without regard to race, religion, color, sex,
national origin, handicap, age, or veteran status.

FINANCIAL STRESS IN AGRICULTURE:
IMPLICATIONS FOR FARMERS, LENDERS AND CONSUMERS

INTRODUCTION

Many farmers are currently facing severe financial stress resulting in asset liquidations, problems in obtaining credit, and even bankruptcy. An important question in farm analysis is the applicability of traditional policy approaches to the problem of financial stress in agriculture, and the appropriate farm policy in this financially stressful time. This is a particularly relevant question given that the 1983 PIK program was one of the most expensive and largest government transfer programs for agriculture in recent history, and yet many farmers are still facing severe financial problems.

The roots of the financial problems of farmers today can be traced to the environment of the 1970s and the dramatic changes in that environment during the early 1980s. The decade of the 1970s can be characterized by high inflation rates, growing foreign and domestic demand for farm products, very low or negative real rates of interest, and a willingness to substitute asset appreciation for current earnings. Farmers borrowed heavily to purchase capital inputs and farmland and to aggressively expand their operations. Then in the 1980s interest rates rose to unprecedented high levels, foreign and domestic demand for farm commodities declined significantly because of worldwide recession, incomes dropped dramatically, and land values began a steady and relatively steep decline. Those farmers with high debt loads found it difficult to collateralize and service that debt with high interest rates, low incomes, and decreasing land values.

FINANCIAL STRESS IN AGRICULTURE

Melichar (November 1984) was the first to document the financial condition of the agricultural sector; those data will not be repeated in detail here. A key dimension of this documentation is the distribution of debt (Table 1). This distribution indicated that in 1984 approximately 58 percent of the farms in the United States had leverage ratios of 10 percent or less, 24 percent had ratios of from 11-40 percent, 11 percent had ratios of 41-70 percent and 8 percent had leverage ratios in excess of 70 percent. This highly leveraged category (greater than 70 percent) controlled 31 percent of the debt and 8 percent of the assets in U.S. agriculture. With current price, cost, and productivity relationships in agriculture, these highly leveraged farms are unable to make interest payments on their indebtedness, let alone repay any principal. In fact, Melichar's calculations suggest that farms with debt-to-asset ratios exceeding 30 percent will likely encounter some financial stress at current interest rates and rates of return on assets.

Survey data from individual Iowa farms collaborate Melichar's results and implications (Jolly, 1984). Of the 1,231 farmers surveyed, 31 percent had no real estate or nonreal estate debt and exhibited debt-to-asset ratios averaging 1.8 percent; these farmers are not financially stressed by the current economic conditions in agriculture. In contrast, 40 percent of the farmers have both real estate and nonreal estate debt and a debt-to-asset ratio averaging 41.7 percent. Table 2 indicates the distribution of opera-

tors, assets, and liabilities for the Iowa sample by debt-to-asset category; the distributional results are very similar to those in Table 1 from Melichar's work. Size classification of the data (Table 3) suggests that financial stress problems are not unique to a particular size farm - farms of all sizes are encountering such stress.

More recent studies corroborate that the financial stress in agriculture is not unique to Iowa. A national survey in January 1985 by Farm Journal and the Food and Agricultural Policy Research Institute indicates that nationwide, 15.4 percent of farmers have debt-to-asset ratios exceeding 70 percent, and 17.9 percent have debt-to-asset ratios of 40-70 percent; these farmers account for 30.8 percent and 34.9 percent of the debt respectively (Farm Journal, March 1985). For the central states, the data indicate a more severe problem; 21.0 percent of the farmers have debt-to-asset ratios exceeding 70 percent and 21.5 percent have ratios of 40-70 percent. Comparing these numbers to those obtained for Iowa in 1984 suggests that the financial conditions have deteriorated significantly in just one year.

A recently released USDA study also documents the nationwide characteristics of the problem (USDA, 1985). That study estimated that as of January 1985, 6.3 percent of family-sized farms in the United States holding 9.3 percent of the debt are insolvent; 7.4 percent of the farms holding 11.1 percent of the debt have debt-to-asset ratios of from 70-100 percent, and 20 percent of the farms holding 25.9 percent of the debt have debt-to-asset

ratios of 40-70.

Financial management strategies and enhanced farm and off-farm income can be used to relieve the stress for many farms, but those with higher leverage ratios (for example, 70 percent or greater) will likely not be able to obtain sufficient relief from various financial and farm management strategies to stave off asset liquidation or default. In essence, at least 8-10 percent of U.S. farm assets must find a new owner in the next year or so, or the debt secured by those assets will not be serviced. Even those with debt-to-asset ratios of 40-70 percent will experience declining equity (even if land values stabilize) unless commodity prices rise, interest rates and other input prices fall, or productivity increases. In essence, the financial stress is substantial for a significant subset of the farm population.

The financial stress problems faced by farmers have important implications beyond the farm gate. One of the first is the "shortfall" in interest and principal payments that the lenders will not receive this year. Doye and Jolly have estimated that nationwide \$2.2 billion of scheduled interest payments and \$6.2 billion of principal payments will not be made by farmers because they do not have the cash to service loan obligations (Doye and Jolly, 1985). These "shortfalls" will have a significant impact on the earnings and the liquidity of those who make loans to farmers. Furthermore, lenders will encounter significantly higher loan loss ratios in the future. Melichar has indicated that these ratios have risen dramatically for commer-

cial banks, and similar data indicate equal or more rapid deterioration in the portfolios of the Farm Credit System Agencies (PCAs, FLBs). A recent GAO study of the Farm Credit System has projected its losses at \$2.6 billion for the year ending June 30, 1986, and some analysts are suggesting that the "surprises" in the portfolio in the form of under-collateralized loans may add to the losses (Wall Street Journal, October 7, 1985). The losses that have resulted in 11 bank failures in Iowa since June 30, 1984, continue to plague that industry. A recent survey indicates that for the agricultural banks in Iowa, troubled debt increased by 60 percent since June 30, 1984, and now accounts for more than 32 percent of capital. Troubled debt is greater than equity capital at 24 banks, and more than 90 banks lost money in the first half of 1985. Nationwide, 363 of the 975 banks on the FDIC's troubled bank list are agricultural banks (Des Moines Sunday Register, October 13, 1985). Analysis by Reinders indicates that with 3 to 5 percent loss ratios (which some lenders are now encountering) even a very financially sound lender with 20 percent equity can remain in business for only three to four years (Reinders, 1985).

The agricultural input supply firms have financial problems as well. Ginder indicates that there has been a 400 percent increase in accounts receivable write-offs (losses) from 1981 to 1984 in a representative sample of cooperative input supply firms in the central states (Ginder, 1985). Approximately one-third of the sample firms have debt-to-asset ratios exceeding 70 percent. If bad debts total 1 to 2 percent of sales, 25 per-

cent of these firms will have debt servicing problems, and bad debt of 3 to 4 percent of sales would almost double the number of firms with debt servicing problems. Currently, these firms have 1 percent of sales in accounts receivable outstanding for 180 days or more (much of which will not be collected) and another 1 percent in accounts receivable of 60 to 180 days. Thus, many agribusiness firms are also financially vulnerable and a relatively small increase in non-payment on accounts receivable or a loss due to a farmer bankruptcy would threaten their survival.

The financial problems of farmers and agriculture may be sufficiently large to impact the public at large and the performance of the national economy. This impact will likely not occur through shortages of food and higher food prices, but through the financial markets. Wharton Econometrics has assessed the impact of financial stress in agriculture that results in non-payment of agricultural debt on the financial stability of the lending institutions and financial markets. Their analysis suggests that with a continuation of current farm income conditions and no government assistance to solve the farm financial crisis, loan losses could total as much as \$20 to 25 billion, which is approximately 10 percent of the total \$212 billion agricultural debt. A write-off of this magnitude would result in higher short-term private interest rates "due to the public perception of substantially higher risk being associated with financial asset holdings." The Wharton study argues that "although agricultural debt is dispersed among many creditors, the impact of large and widespread defaults on commercial

banks and the farm credit systems is expected to be sufficient to affect national financial markets." Their study indicates that the result of a write-off of \$20 to \$25 billion of agricultural debt would be a 75 to 125 basis point increase in short-term interest rates, 175,000 to 275,000 jobs lost, a reduction in total gross national product by \$30 to \$50 billion, and a \$14 to \$21 billion increase in the federal debt. The Wharton study suggests that financial stress faced by agriculture will eventually impact the national economy and the public at large unless preemptive measures are taken to resolve the farm financial crisis.

In summary, the impact of financial stress in agriculture on the U.S. economy might be visualized as a series of waves. The first wave will involve those highly leveraged farmers who cannot service their entire debt load. As these highly leveraged farms attempt to resolve their financial stress through the sale or other disposition of assets, the remaining farm population will incur costs in the form of reduced land values and the resulting impaired credit worthiness caused by declining collateral. This is the second wave. The third wave occurs when farmers reduce their purchases of capital items from local suppliers and are not able to pay on open accounts and trade credit extended by input supply firms. Thus, the local community absorbs part of the loss or cost because of reduced retail sales and economic activity, as well as losses from non-payment on accounts receivable and bankruptcies.

One of the institutions that will not receive payments from financially stressed farmers is the lending institution. As lending institutions become financially vulnerable, particularly those that access national money markets such as the Farm Credit System, the financial markets begin adding a larger risk premium to interest rates to compensate for the default risk and non-performance of borrowers. Interest rates will rise first for agricultural loans, but if the loss is large enough, the financial markets will require a larger risk premium from all borrowers - non-farm businesses, governments, and consumers. This is the fourth wave and the mechanism by which losses in agriculture will be transferred to non-farm businesses, consumers, and the economy at large. Note that this transfer occurs not through higher food costs, but through higher interest rates. Thus, the public will pay for part of the financial stress in agriculture, either through higher interest rates and larger government deficits due to the economic slowdown that is a result of higher interest rates, or through increased direct government expenditures to fund preemptive public sector intervention to reduce the consequences of financial stress in agriculture on the overall economy.

SECTOR ADJUSTMENTS TO OBTAIN STABILITY

Five major long-run adjustments appear necessary to obtain a more financially stable agricultural sector. These include:

1. Lower interest rates. Lower interest rates would benefit agriculture in four ways: lower direct costs of borrowing money, a lower valued dollar and increased demand and prices in the export markets, lower inventory carrying charges for holders and purchasers of agricultural commodities and thus marginally higher prices, and lower interest costs for supply firms and thus marginally reduced prices of purchased inputs. Interest rates, real and nominal, are very high by historical standards. Most analysts agree that reduction in the government deficit would result in lower real and nominal interest rates and a somewhat lower valued dollar. The importance of lower interest rates for agriculture is difficult to overstate; a 1 percent decline in interest rates on the over \$200 billion of U.S. agricultural debt would result in an approximate \$2 billion increase in net farm income. Tweeten estimates that lower interest rates resulting from a balanced budget would reduce the value of the dollar in foreign markets by 20 percent, leading to a 10 percent increase in exports within two years and as much as a 20 percent improvement in the longer run (Tweeten, 1985).

2. Mothball excess capacity. The U.S. agricultural sector currently has approximately 5 to 10 percent excess production capacity (Tweeten). This contributes significantly to the current low rate of return on farm assets. Yet, the productive capability of some of the agricultural asset

base is deteriorating because of excessive soil erosion. Conversion of 20 to 30 million acres of steep, erosive and low yielding grain land to grass or nonuse is one way to eliminate excess production and reduce soil erosion.

3. Lower resource values. In a period of excess capacity, a normal economic response is lower resource earnings and lower asset values. Land values in parts of the United States are 35-40 percent below the peak of the early 1980s. Given current prospects for prices, interest rates, and expected input costs, farm asset values may fall further. The financial stress of farmers further compounds the problem because a major strategy for alleviating financial stress is asset liquidation. Such liquidations increase the supply of land on the market and further contribute to land price declines.

4. Debt reduction. The total debt load of agriculture is not evenly distributed. About one-third of the farmers owe approximately two-thirds of the debt. For many of these farmers, earning capacity of assets is not sufficient to cover debt service costs with current interest rates and profit margins. This "excessive" debt must either be redistributed or eliminated. Redistribution may occur through debt-financed purchases of assets from those having cash flow problems by financially sound farmers or other investors. A reduction of the industry debt load will occur by repayment of debt with earnings from either on- or off-farm sources, by substitution of equity from outside the agricultural sector for farm debt, or by discharge of debt by agricultural lenders. Probably a significant amount of agri-

cultural debt will be discharged or written off over the next three to five years by the public and private lending institutions that service agriculture. This discharge of indebtedness will represent significant costs to lenders in the short run, but it will reduce the sector debt load and improve agriculture's financial condition in the long run.

5. Restructuring asset ownership. Some farmers with very high debt loads cannot "afford" to own all of their assets, and these assets must find new owners. This asset restructuring in many cases will accompany the redistribution and restructuring of debt. Lenders will inventory some assets in lieu of the note or mortgage, but these assets will eventually be placed on the market. Accompanying this restructuring of the ownership pattern of assets will be a set of important issues concerning the tenure arrangements in agriculture including the institutional structure and property rights of tenants versus landlords, the advantages and disadvantages of the separation of ownership and operation of real estate, and the volatile issue of outside equity in agriculture.

BENEFICIARIES OF AN ASSISTANCE PROGRAM¹

From a policy perspective, any proposal should establish general guidelines as to farmers, lenders and others who would reasonably be benefited

¹Taken from "Alternatives for Public Intervention to Assist in Stabilizing Farm and Ranch Financial Conditions," prepared by Neil E. Harl, Robert W. Jolly and Michael D. Boehlje, Department of Economics, Iowa State University, Ames, Iowa, and Steven E. Zumbach, Partner with Belin, Harris, Helmick, Heartney and Tesdell, Des Moines, Iowa. Unpublished paper, Iowa State University, Ames, Iowa, 1985.

by the program intervention and those who realistically could not benefit from the program. The most recent financial survey of farm operators conducted by the USDA delineates three broad groups toward which specific policies might be targeted. This information is summarized in Table 4.

There are farms whose financial condition is so weak that debt and asset restructuring is not effective or feasible. We designate this group as not restructurable. Their most likely option would be to exit agriculture. We identify farmers in this group as those who are technically insolvent as of January 1, 1985, or had a return to equity of less than -20 percent in 1984. Farmers in this group are consuming their capital stock so rapidly it is unlikely they can reorganize soon enough to avoid insolvency - particularly with the pressure of continuing declines in asset values.

Restructurable farms are those that can reorganize debts and assets and become profitable under economic conditions likely to prevail over the next five to ten years. This group consists of farmers with a return to equity from -20 percent to +5 percent in 1984.

Profitable farms are defined as those who earned more than 5 percent on equity in 1984. This group includes "going concerns" whose financial structure is appropriate for current and expected economic conditions. It also includes possible or recent entrants who have taken advantage of lower asset values and started farming.

The needs of these groups for financial assistance vary. In addition, their needs depend fundamentally on whether or not current economic con-

ditions persist or will change abruptly in a year or two. Farm businesses must adjust to economic conditions characterized by high real interest rates, commodity prices near current levels and continuing variability in input and output prices. Changes in these assumptions would alter the degree but not likely the kind of adjustment required for financial viability.

Nonstructurable farms need to exit quickly without the risk of further declines in the value of assets. Current market conditions will not permit this group to sell out. Delays erode what little equity they have remaining. Furthermore, asset liquidations by this group should be isolated from the market to avoid depressing asset values for all producers.

Restructurable farms need to move toward a viable financial structure quickly. Frequently this involves liquidating land and, in some cases, leasing additional assets. Again, these changes can be accomplished if the liquidity of asset and rental markets can be increased. Increased market liquidity results in a greater and more rapid volume of transactions and less reduction in asset values replacing reduced price response.

Profitable farms, particularly new entrants, need stable asset markets and access to long-term financing. Declining asset values erode the normally low equity of younger or entering farmers. This places them at risk from insolvency. Further, credit rationing by lenders because of insolvency risk may limit efficiency and growth of these nascent businesses.

Deregulation and widespread agricultural loan losses may lead to relatively high and variable interest rates. Beginning farmers particularly

need access to long-term financing with predictable and flexible debt service requirements. During the ensuing period of financial adjustment, existing lenders may be hard-pressed to provide financing of this sort.

SHORT-TERM PUBLIC POLICIES TO AID TRANSITION

A number of transition policies involving credit or lender adjustments are being discussed to deal with current financial stress of farmers (Brake, Boehlje and Lee; Doye and Jolly). Five of the more frequently discussed policies are debt restructuring, principal forgiveness (write-off), interest buy-down, foreclosure moratoria, and inventorying assets or facilitating changes in asset ownership patterns.

1. Debt restructuring. This refers to rescheduling of loan commitments by refinancing or rewriting short-term or intermediate-term debt to a long-term basis if justified by real estate collateral. Alternatively, each class of loans - short, intermediate and long-term - may be rescheduled over a longer repayment period. The premise of restructuring is that additional time to repay the principal reduces annual obligations.

Debt restructuring can be done voluntarily, and it can be useful for some percentage of farmers in trouble, i.e., those who need marginal help rather than massive help. For borrowers whose short- or intermediate-term debt is a high proportion of total debt, substantial improvement in cash flow may result from restructuring. However, the long-term benefits of restructuring should not be overestimated (Boehlje, Thamodaran and Barkema).

While restructuring is typically done on a voluntary basis by the lender, it may be encouraged by a government guarantee of the loan. FmHA has used this approach of providing a guarantee for 90 percent of the principal if the lender will write down the debt by at least 10 percent (principal or interest rate equivalent) and then restructure the loan so that a cash flow budget shows obligations can be met.

Restructuring farmer debt involves few costs to borrower or lender if the situation is analyzed carefully beforehand. There are no public costs unless loan guarantees are involved. Probably much of the potential voluntary debt restructuring has already occurred, however.

2. Principal forgiveness or write-down. A write-down might recognize that the value of the asset has fallen below the loan amount. Or, a write-down may be negotiated to ease impossible debt service requirements. Whether the write-down will resolve the problem depends on the debt service obligation in relation to income.

A write-down initiated by examiners can create a problem for lenders because it represents a direct loss of equity on the books. The lender might not agree with the examiner's analysis, yet the examiner forces the lender to reduce asset values, in turn eroding lender equity.

A principal buy-down is typically initiated through a public credit policy. An FmHA guarantee, for example, might apply if the lender writes down part of the outstanding principal and restructures payments to ease the debt service burden of the borrower.

While principal forgiveness or buy-down helps farmers in financial stress, it may lead to ill-will on the part of other farmers. They see financially troubled farmers gaining "unfair" advantages. Principal forgiveness represents a cost to the lender, and a principal buy-down is a cost to taxpayers. Both, however, do ease the debt burden of the financially stressed borrower.

3. Interest buy-down. This policy involves interest rate reductions on an existing loan. The buy-down refers to the government paying a part of the cost of an interest rate reduction if the private lender will reduce the interest rate. On a 14 percent loan, for example, a 4 percent buy-down would lower the interest rate to 10 percent. Some part of the cost would be borne by the government and the remainder by the private lender. An interest buy-down speaks directly to the basic problem facing financially stressed farmers - too much debt service.

Interest rate buy-downs can be implemented in many ways, including a direct government payment, an increased tax write-off for farm interest payments, a public guarantee to reduce the risk faced by lenders (allowing lenders to charge a lower rate), and the use of tax-exempt revenue bonds to obtain lower cost funds for agriculture.

The effectiveness of an interest buy-down is directly related to the amount of the reduction. While it is relatively effective in reducing the debt service burden, it is also expensive. A 4 percentage point reduction in interest rates on all debt owed by farmers with debt-asset ratios pf over

40 percent would require about \$4 billion (Doye and Jolly).

The effect on lenders of an interest buy-down depends on the fraction of cost paid by the government and expected loss through default if the borrower is not given some relief. Probably lenders would utilize an interest buy-down for borrowers who could not make it otherwise, but they would resist for those who might survive by other means.

4. Foreclosure moratoria. Moratoria have received substantial discussion. The purpose of a foreclosure moratorium is to stop proceedings to enable the financially stressed producer to gain temporary relief from excessive financial obligations. A key to the success of this approach is a relatively quick turnaround in the condition of the industry.

Moratoria as applied under the Frazier-Lemke Act in the 1930s affected only real estate loans (Munger and Feder). The farm was appraised, and the court granted a moratorium for three years. The farmer kept the property in his possession, continued to farm, and paid rent for its use. Within three years the farmer could pay the appraised value and redeem his property; if not redeemed, it was sold. The farmer was not liable for loan amounts greater than the lesser of the appraised value of the property or its sale price.

The moratorium approach limited farmer losses although it required some payment for use of the property. The main advantage, however, was that the courts could force creditors and borrowers to work out their differences. The experience of the 1930s was that relatively few farmers took advantage

of this approach. Creditors quickly made adjustments in lending practices, reducing new loans in states that had moratoria. If applied today, one might expect that moratoria would raise interest rates to compensate for increased risk and costs in agricultural lending, decrease credit availability, but stabilize asset values since fewer assets would be forced onto the market.

More recently, attempts have been made to develop targeted or limited moratoria that limit the lender's right to foreclose. For example, a limited moratorium allows the lender to foreclose but only after he has made a "good faith" attempt to use all public sector credit assistance programs available. Or, the lender might be restricted from foreclosing for non-payment of principal, i.e., the lender could foreclose only if the borrower falls behind on interest payments. In essence, conditional moratoria are a means to encourage the reluctant lender to cooperate with and assist those borrowers facing financial stress.

5. Inventorizing or facilitating changes in ownership patterns of assets. A number of means could aid in this approach. For example, lending institutions might be encouraged to take title to property in lieu of debt obligations and lease the property back to the original debtor. Then other resources such as machinery and equipment would not require liquidation.

The lender would be converting a nonperforming asset into one generating at least some return. To avoid the problem of lender illiquidity from holding such assets, the government would likely need to provide funds

(perhaps through the Federal Reserve discount window or sale of government-guaranteed bonds) in the amount of the transferred assets. Such government funds could be provided at lower cost than funds from the private sector, partly offsetting the lower return earned on rental. The lender might be required to remove the assets from its portfolio over a two- to four-year period. The original debtor would have first option to buy.

Government programs could also be initiated to hold repossessed land off the market. For example, FmHA is, in some places, already holding foreclosed land off the market for one to three years.

Private lenders could be assisted in other ways in holding land off the market. Bank regulations typically require that real estate assets taken over by the bank be valued at market first, and then be written down annually to discourage holding of such assets. The bank loses equity and is encouraged to dump assets. Some states even prohibit ownership of farmland by lenders or corporations, thus forcing repossessed farmland onto the market.

Methods should be considered to enable lenders to have more flexibility in recognizing the losses in their agricultural portfolio. A longer period over which assets are written down to market value (possibly 3-5 years) would allow the lender to offset the loss with future earnings rather than impair the capital base of the institution. Capital certificates provided by the U.S. government in the amount of losses on agricultural loans that must be amortized over time (5-10 years) may also be a useful mechanism for

using time and future earnings to blunt the size of the losses on the financial viability of lending institutions. This procedure would involve government guarantees of the capital structure of the lender rather than part of the loan portfolio.

An alternative approach would be for a state or the federal government to charter an entity to acquire nonperforming real estate debt and the assets securing that debt from lenders (Harl). Acquisitions would be held off the market, perhaps leased back to the original farmer, or put into a conservation reserve program. Funding could come from sale of state or federally issued tax-exempt bonds.

Programs to stabilize asset values have advantages and disadvantages. They are beneficial for farmers in financial trouble, primarily by maintaining collateral values on their individual balance sheets. Such policies also permit lenders to exercise forbearance because of being in less severe financial circumstances themselves. There would be mixed benefits for farmers not in trouble. Asset values would remain at higher levels, so individual balance sheets would be less negatively affected. Untroubled farmers, or other investors wanting to expand their asset base, however, would have to pay more to acquire assets. Lenders, of course, would be most affected by such policies since the basic purpose of the policies would be to protect them. Consumers and taxpayers would benefit from the increased stability associated with meaningful programs to keep asset markets from overreacting downward.

6. Other. Three additional approaches deserve brief mention. Farm price and income policies have been a traditional approach to raise farm income and ease financial problems. Improved income from such policies would increase the debt service capacity of farmers and would stabilize asset values at higher levels. But in the current situation, the traditional approach falls short because: (1) cash shortfalls for the bulk of distressed farmers are so great (Bullock, Economic Research Service), (2) the policies are very expensive, and (3) needed adjustments of capital and resources out of the sector are restricted.

Monetary and fiscal policies clearly affect farmer well being given their direct impact on debt service costs, carrying charges, and dollar exchange rates. Lower real and nominal interest rates would be helpful to the entire agricultural sector.

Given market indications that resources, including human resources, need to exit agriculture, increased attention should be given to programs and policies to help people make the transition out of farming. For too long our efforts have worked to avoid exit rather than to assist in the adjustment out. Research studying displaced farmers gives disturbing results (Heffernan and Heffernan). Three-quarters of displaced farmers stay in the community, but close to one half appear headed toward poverty. The personal trauma, social upheaval, and loss of productivity to the economy from ignoring this problem are a high price for society to pay.

CHANGING RURAL ATTITUDES

There is a fundamental concern that I would like to share concerning changing attitudes in rural communities that suggest increased polarization, divisiveness, and the potential for confrontation. I do not have numerical documentation for this changing attitude, but discussions with farmers and lenders suggest that it is real and increasingly pervasive. This changing attitude has at least three dimensions. First, business relationships in rural communities are deteriorating. Farmers who were willing to cooperate with their lender in making adjustments in prior years are taking a more protective-of-self stance. Merchants and dealers are less willing to operate without excessive legal documentation of transactions. Business people are becoming more suspicious and less trusting in their dealings. This "non-cooperative" attitude shows up clearly in the lending relationships in which farmers use the threat of bankruptcy to gain accommodations from the lender. Some farmers are "building new houses," separating real estate and other assets from the farm business and their own personal ownership by transfers to children and other family members to protect property from creditors and to have a base to restart if the "old house" - the current farm - is lost. Second, some farmers who have the financial ability to pay on their obligations are consciously debating whether they should do so. This is particularly the case with Farm Credit Systems borrowers where the discussions of financial assistance or a "bail out" are most frequent. The arguments for non-payment are threefold: first,

the proceeds from those who do pay will be used to offset the losses of those who don't pay and, consequently, those farmers making their payments are subsidizing those who default; second, if there is some form of federal assistance, it will likely be targeted to those who are not making their payments, and so those who do pay will be penalized by not receiving direct benefits from any government assistance program; and third, massive defaults will put additional pressure on the public sector to provide assistance, and if such assistance is not forthcoming and the lender takes aggressive foreclosure action (which also would be unlikely if there are massive defaults on the part of borrowers), the payment could be made at the last minute during the redemption period without risk of losing control or ownership of the property.

These two behaviors noted earlier suggest a third concern about changing attitudes in rural communities. There appear to be changing standards of "honesty" or "commitment" in rural communities compared to earlier years. The "your word is your bond" attitude is no longer standard. Rural people are not necessarily becoming blatantly dishonest, but they are more willing to accept the grey area between "right" and "wrong" and accept less than "pure" business decisions. The reasons for this change in standards of honesty may be twofold: one, that people's standards sometimes are adjusted when financial survival is at stake, and two, farmers feel that their current financial problems are "not all their own fault" and that others - including lenders, business firms, and the government - are partly to blame,

so it is justified to transfer part of the loss to others through defaulting on commitments. A fundamental question is whether these perceived changes in the "moral fiber" in rural communities are transitory or permanent, and what they might imply concerning future business arrangements and even personal and social commitments of those who live in rural communities.

CONCLUSIONS

Data from many states along with those from the U.S. Department of Agriculture indicate that a significant number of farmers are suffering financial stress. This stress is a result of the many changes in the financial environment for agriculture and is not simply a result of lower incomes. Other factors that contribute to the financial stress problem of the U.S. agricultural sector are a higher debt load, shorter maturities on debt, reduced liquidity, higher and more volatile interest rates, increased income and collateral risk, limited availability of refinancing alternatives, and asset liquidations. Government policies of the past have contributed to today's financial stress by encouraging higher land values, more debt utilization, growth in farm size, and higher interest rates.

Given the complex nature of the financial stress problem, a public policy approach that focuses only on one characteristic of that problem will probably be ineffective. Specifically, price and income support programs that have been the major component of agricultural policy in the past may be quite ineffective in solving the current financial stress problem - such

programs do not focus on some of the major dimensions of the stress problem (i.e., loan maturities, liquidity, collateral risk, etc.), and furthermore, quite likely will not be targeted to those individuals who have financial stress. Such programs may in fact compound and contribute to the longer-run financial problems in agriculture.

Various policy options that are more targeted to the financial stress problem have been identified, including interest rate buy-downs, debt moratoria, debt restructuring, asset restructuring, recapitalization, etc. While spiraling farm debt suggests that debt restructuring is the answer to the current financial stress, a restructuring of agricultural assets remains the key to a long-term solution. The results of both firm level and the aggregate analyses indicate that asset restructuring through sale-leasebacks is a preferred option to interest rate buy-downs or liability restructuring in reducing financial stress for individual farm firms and the industry. The rearranging of liabilities is not a permanent solution to the current financial stress, because even with more time to repay, many farmers will not be able to service their debt with current or expected interest rates, productivity, and input and commodity prices. However, debt restructuring is an important mechanism for buying time to implement more permanent solutions. Asset restructuring including liquidation, debt reductions, and equity infusions will be required to improve the chances of long-term survivability of many farm businesses.

One of the key objectives of any public policy to alleviate financial

stress should be to protect the resource markets from collapsing - stabilizing resources values is critical to maintaining the stability of the agricultural production sector and rural communities. If resource values decline precipitously because of excessive supplies being offered to a market that has no liquidity to absorb them, many farmers who were a "good credit risk" will no longer be so because of declining collateral values. But using government intervention to stabilize resource values at levels that are not supportable in the long run can result in very high government costs, inefficient resource allocation, and higher consumer prices for food products. Such a result is also clearly not desirable.

The agricultural sector has suffered significant wealth losses during recent years. An important public policy concern is how those losses will be shared among the various firms in the private sector (farmers, lenders, input supply firms, landlords, etc.) and between the public sector and the private sector. A related concern is how to keep the losses from becoming more severe than they need be. A strategy of doing nothing today could, if the financial condition of agriculture continues to deteriorate, very easily result in irresistible political and economic pressures to implement drastic options later such as a general and extended debt moratorium or significant increases in commodity support prices. But inappropriate action now may interfere with the longer-run adjustments in resource values and utilization that must occur to retain an efficient and financially sound agricultural sector.

Table 1. U.S. Farm: Debts and Assets by Leverage

	<u>Debt to Asset Ratio (percent)</u>				<u>Total (%)</u>
	<u>0-10</u>	<u>11-40</u>	<u>41-70</u>	<u>71+</u>	
Operators (%)	58	24	11	8	100
Debt (%)	5	32	32	31	100
Assets (%)	47	32	14	8	100

Source: Melichar, January 1984 Federal Reserve Bulletin.

Table 2. Estimated Percentage Distributions of Sample Farm Operators, Their Assets and Liabilities by Relative Debt Levels*

	<u>Debt to Asset Ratio (percent)</u>			
	<u>0-10</u>	<u>11-40</u>	<u>41-70</u>	<u>71+</u>
Operators (%)	36	35	18	10
Assets (%)	30	40	21	9
Liabilities (%)	3	32	40	25

Source: Farm Finance Survey, March 1984, Iowa Department of Agriculture.

*Totals may not equal 100 due to rounding errors.

Table 3. Estimated Percentage Distributions of Iowa Farm Operators, Their Debt and Assets by Farm Size and Debt Level Categories*

Farm Size**		Debt-to-Asset Ratio (%)			
		0-10	11-40	41-70	71+
	Number in Sample	13	7	7	5
Very small	% Operators	41	22	22	16
	% Assets	39	25	25	11
	% Debt	0	25	41	34

	Number in Sample	61	45	25	17
Small	% Operators	41	30	17	11
	% Assets	41	31	18	11
	% Debt	3	25	33	38

	Number in Sample	211	199	95	58
Medium	% Operators	37	35	17	10
	% Assets	34	37	18	11
	% Debt	3	31	35	31

	Number in Sample	29	55	33	6
Large	% Operators	24	45	27	5
	% Assets	24	45	26	5
	% Debt	4	35	47	14

	Number in Sample	314	306	160	86
All	% Operators	36	35	18	10
	% Assets	30	40	21	9
	% Debt	3	32	40	25

Source: Farm Finance Survey, March 1984, Iowa Department of Agriculture.

*Totals may not equal 100 due to rounding errors.

**Size Category	Assets
Very small	Under \$50,000
Small	\$50,000-\$199,999
Medium	\$200,000-\$999,999
Large	\$1,000,000 and over

Table 4. Target Groups for Financial Policy

Group	Percent of U.S. Total		
	Operators	Debt	Assets
Not restructurable ¹	15.1	27.6	8.8
Restructurable ²	45.8	36.5	55.1
Profitable ³	39.1	35.9	36.1

Source: 1984 Farm Costs and Returns Survey, USDA

¹ Insolvent or had a return to equity less than -20 percent.

² Return to equity from -20 to +5 percent.

³ Return to equity greater than +5 percent.