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# Farm Family Adjustments to Financial Stress 

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EDITOR'S NOTE: This special issue is the third and last in a series of publications that address recent financial problems of Minnesota farmers and rural communities. The earlier issues, "Financial Stress in Agriculture: Its Cause and Extent" (No. 651, June 1986), and "Financial Assistance to Minnesota Farmers: Public Programs and Policy Issues" (No. 652, September 1986), are available from Louise Letnes, 231 Classroom Office Building, 1994 Buford Ave., University of Minnesota, St. Paul, MN 55108.

The article contained in this issue, "Farm Family Adjustments to Financial Stress," outlines a variety of options available to farm lamilies. It includes analyses of farm business restructuring, alterations in financial arrangements, and considerations in farm management.

The article was written by Professor Vernon Eidman, Professor and Head Michael Boehlje, Assistant Professor Kent Olson, Professor Emeritus Paul Hasbargen, and Associate Professor Glenn Pederson, all of the Department of Agricultural and Applied Economics, Colkege of Agriculture, University of Minnesota.

The previous article in this series discussed public sector responses to farm financial stress (Pederson and Eidman). Most of the adjustments, however, are being absorbed in the private sector by farm lamilies, their relatives, and their credilors. This article examines the family adjustments, the farm business organization changes, and the restructuring of farm assets and liabilities which have been made and are being made in response to financial stress.

This article examines a range of options being used by farmers and their lenders. The first section stresses the importance of carefully analyzing the effect of any adjustment being considered before the adjustment is made. It reviews the three major financial statements of the farm business which are used throughout the arlicle. The second section discusses how larm families have "tightened their belts" and increased non-farm income in recent lears. The third section shows how adjusting the farm's production and marketing plan can help increase income and/or detrease expenses.

When adjustments in income and withdrawals by the family are insufficient to solve the problem, farmers typically turn 10 rescheduling debt payments. In cases of more severe financial stress, farmers and their lenders may choose to restructure li-
abilities and assets. The implications of these adjustment alternatives are described in the fourth and fifth sections of this article.

The remainder of the article describes several methods of implementing rescheduling and restructuring options. These include the sale and leaseback of assets, the infusion of outside equity, the opportunities for merger of two farms, opportunities for new farmers to enter and for existing farmers to recycle, and the use of bankruptcy to accomplish family objectives.

While some changes can be made quickly, other adjustments may take longer to complete. A farmer can easily change production practices to lower input use. However, the process of restructuring liabilities and assets will take longer-perhaps even one or two years-because more people are involved in and affected by the proposed adjustment. This article is intended to review adjustments that have been made and to serve as a guide to beginning the adjustment process. Each farm and family needs to consider its own individual situation and seek financial and legal advice as needed.

## Evaluating the Impact of Alternative Adjustments

An effective manner of discussing the impact of the various adjustments farmers and their creditors can make on the performance of the farm business is to estimate their effect on the three major financial statements: the cash flow statement, the income statement, and the balance sheet. These three statements are used to trace the financial performance of the business over time. If the farm records are in good shape, these statements are relatively simple to prepare. If the records are not in good shape, the task is more difficult, but the rewards can be great. An abbreviated format for each of these three statements is shown in Figure 1.

## Cash Flow Statement

The cash flow statement (Figure la) lists all sources and uses of cash for a period of time. The sources of cash include the cash in checking and savings accounts at the beginning of the year, operating receipts from the sale of crops and livestock, government program payments, gas tax refunds, custom work, etc., and cash received from the sale of capital items such as machinery and breeding stock. The sources of cash also include money bor-
rowed during the year and nonfarm income from wages and off-farm investments. A reduction in savings or the sale of securities that are owned are potential sources of cash. Obtaining outside equity is less commonly used, but represents a potential source of cash. Gifts, inheritances, allowing another individual to buy into the business (as a partner), and the issue and sale of stock for corporations are examples of outside equity.

The uses of cash are listed in the lower portion of the annual cash flow. Moving cash into savings and purchasing securities represent uses of cash. Ending cash is also a use, making total uses equal to total sources for the period.

The cash flow provides information on the movement of cash through the business. It is used in combination with the other two statements to analyze the ability of the farm business to meet its cash commitments as they come due. This ability to pay the bills over the short run is referred to as the liquidity of the business.

## Income Statement

The annual income statement is used to measure the profitability of the business (Figure 1b). Unlike the cash flow, it considers noncash as well as cash sources of income and expenses. The income statement considers changes in the amount and value of inventory, the change in the value of capital items (breeding stock, machinery, improvements to land), accounts payable and receivable, and accrued expenses (interest, rent, taxes) to estimate the amount of money which the business made over the specified period. The before-tax return to unpaid labor, equity capital, and management is commonly referred to as net farm income. Subtracting the income tax that must be paid on the year's income and the estimated market value of the unpaid labor and management ( $\$ 1,000$ per month for 12 months) results in a residual return to equity capital in the business ( $-\$ 3,300$ ). Dividing by the amount of equity in the business at the beginning of the year $(\$ 78,000)$ results in the average rate of return on equity for the year ( -4.2 percent). Thus, the sample income statement in Figure 1 b provides three commonly used measures of profitability of the whole-farm business-the before-tax return to unpaid labor, equity capital, and management; the after-tax return to unpaid labor, equity capital, and management; and the rate of return on equity capital.

The bottom portion of the income statement provides a method to calculate the change in owner's equity that occurs over the period. This provides a link be-

FiGURE 1: SAMPLE FINANCIAL STATEMENTS
Figure 1a: Annual Cash Flow Statement for 1986

| Sources of Cash |  |
| :--- | ---: |
| Beginning Cash | 1,500 |
| Cash Operating Receipts (Crop \& Livestock Sales and | 197,800 |
| $\quad$ Miscellaneous Cash Receipts) | 200 |
| Sale of Capital Items | 36,100 |
| New Borrowings | 6,000 |
| Nonfarm Income | 0 |
| Reduction in Savings, Stocks, and Bonds | 0 |
| Outside Equity | $\$ 240,100$ |
| $\quad$ Total Sources |  |
|  | $\$ 129,000$ |
| Farm Operating Expenses Before Interest | 27,600 |
| Interest Payments | 20,000 |
| Purchases of Capital Items | 27,300 |
| Proprietor Withdrawals and Cash Dividends | 2,500 |
| Income Taxes Paid | 31,200 |
| Principal Payments | 0 |
| Increase in Savings, Stocks and Bonds | 2,500 |
| Ending Cash | $\$ 240,100$ |
| Total Uses |  |

Figure 1b: Annual Income Statement for 1986

+ Operating Receipts (Crop Sales, Livestock Sales and Miscellaneous Cash Receipts)
\$197,800
- Operating Expenses Before Interest 12.9,000
- Interest Payments 27,600
$=$ Net Cash Operating Income
\$ 41,200
+ Change in Value of Inventories, Accounts Payable, and Accounts Receivable 4,000
+ Change in Value of Capital Items $(30,400)$
$=$ Before-Tax Return to Unpaid Labor, Equity Capital, and Management 11,200
- Income Tax Paid and Accrued on Current Year's Income 2,500
$=$ After-Tax Return to Unpaid Labor, Equity Capital, and Management
- Value of Unpaid Labor and Management 12,000
$=$ Residual Return to Equity Capital
Rate of Return on Equity $=\frac{\text { Residual Return to Equity }}{\text { Beginning of Year Equity }} \quad \frac{(3,300}{78,000}=(4.2 \%)$

|  | After-Tax Return to Unpaid Labor, Equity, Capital, and Management |
| :--- | ---: |
| + | $\$ 8,700$ |
| Nonfarm Income After Tax | 5,500 |
| $=$ | Proprietor Withdrawals (or Cash Dividends for Corporations) |
| $=$ | Addition to Owners' Equity |

tween the income statement and the balance sheet that clearly indicates how the combination of changes in farm income, nonfarm income, and proprietor withdrawals will impact on the owner's equity in the business. The calculation is illustrated in the final four lines of Figure $1 b$. The addition to owners' equity of $-\$ 13,100$ indicates that equity in the business decreased by that amount over the calendar year 1986.

## Balance Sheet

The balance sheet lists the value of the assets and liabilities of the business on a specified date (Figure 1c). There is more than one way to value assets, but for purposes of this discussion, we will assume that the entries in the balance sheet are stated as current market values. The comparison of total assets and total liabilities provides a measure of solvency. The dollars of equity in the business (total assets minus total liabilities) is the amount of
money that would remain with the owners if the business were liquidated on the date the balance sheet is prepared. The amount of equity is another measure of solvency. Many farmers and lenders also prefer to calculate a ratio measure of solvency. Perhaps the most commonly used ratio measure of solvency is the debt-asset (D/A) ratio. This is calculated as total liabilities divided by total assets (\$251,000/ $\$ 316,000$ or 79.5 percent). The ratio measure is used frequently because it indicates at a glance the percentage change in asset values that would result in total assets being equal to total liabilities. This is calculated as 100 minus D/A ( $100-79.5=20.5$ percent for the example in Figure 1c). If the market value of assets were to decline 21 percent, the total assets would be slightly less than the total liabilities.

These three financial statements indicate that this business borrowed more money during the year to meet cash commitments, produced a negative return to equity capital, and suffered a loss in equity. This solution will be referenced throughout the discussion to illustrate the effect of adjustments that farmers and their lenders can make on liquidity, profitability, and solvency of the business.

## Adjustments in Proprietor Withdrawals and Nonfarm Income

The severe drop in farm earnings in the '80s has caused many farm families to reexamine their career goals. Frequently, one or more of the family members has laken an off-farm job to supplement farm earnings. In some cases, a farm-related business has been started or expanded to increase income. The farmer-members of the Southwestern Minnesota Farm Business Management Association reported average non-farm earnings of $\$ 2,337$ in 1980. In 1985, average non-farm earnings were $\$ 6,015$; in 1986, $\$ 5,517$. An increase in off-farm earnings is certainly one method to improve the cash flow position and increase the addition of owners' equity. Given the low farm earning potential in the current economic environment, some have decided they cannot make a living from farming and have turned to other vocations-at least for now.

In some multi-family farming units, one family (or more) has left the family business. Usually the family departing is the one that can best make the shift. Skill levels, job availability, age, and interest in farming versus available alternative jobs are factors that have influenced who goes and who stays. Or, if a low-return live-

Figure 1c: Balance Sheet, December 31, 1986

| Assets | Liabilities |
| :---: | :---: |
| Current Business: (Cash, Accounts receivable, Livestock and crops held for sale and feed, Farm supplies) $\$ 96,400$ | Current Business: (Accounts Payable, Notes payable within 12 months, Principal on longer-term debt that is to be paid within 12 months, accrued interest, taxes and rent) <br> \$75,100 |
| Intermediate Business: (Machinery, Breeding livestock, Moveable buildings, Securities not readily marketed) \$67,800 | Intermediate Business: (Deferred principal Accounts and notes payable, Contin gent tax liabilities on intermediate as sets) |
| Long-Term Business: (Farmland, Permanent buildings and improvements) $\$ 151,800$ | Long-Term Business: (Deferred principal on real estate loans, Contingent tax liability on long-term assets) |
| Total Business Assets: \$316,000 | Total Business Liabilities: \$251,100 |
|  | Business Equity: \$64,900 |
| Personal Assets: \$30,000 | Personal Liabilities: |
| Total Assets: \$346,000 | Total Liabilities: \$251,100 |
|  | Equity \$94,900 |
|  | Total Liabilities and Owners' Equity $\$ 346,000$ |

stock enterprise, such as beef, has been dropped, the family member who was most involved in that enterprise might be the one to leave the farm or to spend more time in the family's farm-related business.

The current financial situation has also created problems in rural communities with many businesses curtailing operations or closing their doors. Also, the general U.S. economy has caused some non-farm related industries to close plants in rural areas. These events have reduced employment opportunities in rural areas. Some families have been forced to relocate in order to find employment.

Farm families also have reduced family expenditures during the 1980s. For example, the farmer-members of the Southwestern Minnesota Farm Business Management Association reported that average family use of cash for all purposes dropped from $\$ 30,078$ in 1980 , to $\$ 27,378$ in 1985, and to $\$ 26,570$ in 1986. Expenditures for autos, new household equipment, furnishings, or home improvements have been the first to be cut by many families.

Reducing proprietor withdrawals by increasing non-farm income or decreasing family expenditures may provide funds which can be used to reduce current liabilities. This is illustrated by comparing
columns 1 and 2 of Figure 2 a . The entries in column 2 indicate the outcome that would have occurred if the operator had reduced 1986 proprietor withdrawals by $\$ 5,000$ and applied the full amount to payment of current liabilities. The action would have increased the addition to owners' equity (Figure 2b), reduced business liabilities by $\$ 5,000$, and increased business equity by the same amount (Figure 2c). This example made the simplifying assumption that neither the ending value of personal assets nor the amount of interest paid and accrued would be affected by this shift. In reality, reducing proprietor withdrawals by an amount as large as $\$ 5,000$ would probably result in changes in both of these items, but would not alter the general result illustrated here.

## Farm Income Adjustments

Farm earnings vary greatly. The average difference in net returns between the top and bottom 20 percent of the farm operations in several different record keeping groups in Minnesota has been over $\$ 70,000$ during each of the past three years. Top return farms excel over low return farms in each component of the in-

FIGURE 2: SAMPLE FINANCIAL STATEMENTS WITH ADJUSTMENTS
Figure 2a: Adjusted Annual Cash Flow Statement for 1986

|  | (1) <br> Base <br> Case | (2) <br> Reduced Family Living | (3) <br> Reduced <br> Family <br>  <br> Reduced <br> Oper. Exp. | (4) <br> Reduced Family Living, Reduced Operating Expenses and Principal Writedown |
| :---: | :---: | :---: | :---: | :---: |
| Sources of Cash |  |  |  |  |
| Beginning Cash | \$ 1,500 | \$ 1,500 | \$ 1,500 | \$ 1,500 |
| Cash Operating Receipts | 197,800 | 197,800 | 197,800 | 197,800 |
| Sale of Capital Items | 200 | 200 | 200 | 200 |
| New Borrowings | 36,100 | 36,100 | 36,100 | 36,100 |
| Nonfarm Income | 6,000 | 6,000 | 6,000 | 6,000 |
| Reduction in Savings, Stocks and Bonds | 0 | 0 | 0 | 0 |
| Outside Equity | 0 | 0 | 0 | 0 |
| TOTAL SOURCES | \$240,100 | \$240,100 | \$240,100 | \$240,100 |
| Uses of Cash |  |  |  |  |
| Farm Operating Expenses |  |  |  |  |
| Before Interest | \$129,000 | \$129,000 | \$126,000 | \$126,000 |
| Interest Payments | 27,600 | 27,600 | 27,600 | 24,800 |
| Purchases of Capital Items | 20,000 | 20,000 | 20,000 | 20,000 |
| Proprietor Withdrawals and Cash Dividends | 27,300 | 22,300 | 22,300 | 22,300 |
| Income Taxes Paid | 2,500 | 2,500 | 3,000 | 3,600 |
| Principal Payments | 31,200 | 36,200 | 38,700 | 40,900 |
| Increase in Savings, Stocks and Bonds | 0 | 0 | 0 | 0 |
| Ending Cash | 2,500 | 2,500 | 2,500 | 2,500 |
| TOTAL USES | \$240,100 | \$240,100 | \$240,100 | \$240,100 |

come formula: volume of production, sales price, and costs.

During the 1970s when the margins (price minus cost per unit) were more favorable, many farmers emphasized volume. In the ' 80 s , in order to survive, many have had to redirect their efforts to increasing the margins through controlling costs and improving marketing.

Cost control efforts need to be aimed especially at the largest cost items. For financially stressed farmers, these often are interest, machinery costs, rent, feed, and fertilizer.

Custom hire or exchange work with a neighbor is being used more and more to replace some machinery ownership overhead costs on these farms. Feed costs are being examined more closely. Low return livestock operations usually show higher prices paid for protein feeds as well as more feed per unit of output. Producing higher quality forages, getting help with ration balancing, and shopping more carefully for lower priced protein feeds can help bring these costs under control.

Land costs are being reduced by negotiating lower cash rents or shifting from cash to crop share rentals. Financially stressed farmers can also take action to get rid of real estate debt in several different ways as discussed in later sections of this article.

Farm records reveal that, compared to low return crop producers, high return crop producers consistently achieve higher yields per acre with similar or lower input costs. Fertilizer, pesticide, and machinery costs are often greater for low return than for high return crop producers. For example, in 1985 the low return corn grower on cash rented land in the Southwestern Minnesota Farm Business Management Association expended $\$ 37.27$ for fertilizer compared with $\$ 31.17$ for the top return grower. ' The low return grower paid $\$ 10$ per acre more for cash rent, suggesting that the land should not have been any less productive. Average yield per acre was 30 bushels less for the low producer, however. In general, high return crop producers tend to purchase inputs at more favorable prices and develop a system of production considering timing and placement of inputs for optimum efficiency. For example, many farmers are finding that they can achieve continued high yields with lower phosphate and potash applications. This is being accomplished by careful testing to avoid part of the expense of routine annual maintenance applications commonly made during the 1970s. For example, research at the Minnesota Agricultural Experiment Station shows that there is rarely any economic yield response from phosphate fertilization of corn when the
soil tests 35 lbs . or more.
Volume of sales is still important-es. pecially on a per worker basis. Some ways that farmers have found to increase volume have been by more intensive use of livestock facilities, renting unused livestock facilities from neighbors, custom feeding of livestock, renting additional land, and doing custom machine work for others.

Marketing management in the current economic environment requires participation in government wheat and feed grain programs in order to achieve the best returns to the farm. It also requires the use of forward price contracts to lock in returns better than loan rates when available. However, forward contracts and hedging are not always the right marketing techniques. Hog farmers who contracted in early 1986 "lost"' income because cash prices rose above contract prices later in 1986. Analysis should be done before contracting and hedging decisions are made.

The impact of an increase in 1986 net cash income is examined in column 3 of Figure 2. The example assumes the operator could have reduced operating expenses by $\$ 3,000$ while maintaining operating receipts at the same level. This change would have increased the income tax liability. Thus, the after-tax return to unpaid labor. equity capital, and management (Figure 2b) as well as the addition to owners' equity (Figure 2b) would have increased by $\$ 2,500$. The simplifying assumption is made that the $\$ 2,500$ would have been applied to current liabilities in a way that did not alter the interest charges paid during 1986. Thus, compared to not increasing income (column 2), curent business liabilities would have declined by $\$ 2,500$ and equity would have increased by the same amount.

In summary, the current cost-price squeeze puts a premium on practices that pare costs while holding prices as high as possible. But a high volume is required to spread overhead costs and to accumulate a significant net income once a positive margin is achieved.

## Reschedule and <br> Restructure Liabilities

Many borrowers facing large interest and principal payments have reduced the amount of the payment(s) due within any one year to ease cash flow problems. This

[^0]Figure 2b: Alternative Annual Income Statements for 1986

|  | (1) <br> Base <br> Case | (2) <br> Reduced Family Living | (3) <br> Reduced <br> Family <br>  <br> Reduced <br> Oper. Exp. | (4) <br> Reduced Family Living, Reduced Operating Expenses and Principal Writedown |
| :---: | :---: | :---: | :---: | :---: |
| + Operating Receipts <br> - Operating Expenses | \$197,800 | \$197,800 | \$197,800 | \$197,800 |
| Before Interest | 129,000 | 129,000 | 126,000 | 126,000 |
| - Interest Payments | 27,600 | 27,600 | 27,600 | 24,800 |
| $=$ Net Cash Operating Income | 41,200 | 41,200 | 44,200 | 47,000 |
| + Change in Value of Inventories, Accounts Payable and Accounts |  |  |  |  |
| Receivable | 400 | 400 | 400 | 400 |
| + Change in Value of Capital Items | $(30,400)$ | $(30,400)$ | $(30,400)$ | $(30,400)$ |
| = Before-Tax Return to Unpaid Labor, Equity Capital and |  |  |  |  |
| Management | 11,200 | 11,200 | 14,200 | 17,000 |
| - Income Tax Paid and Accrued on Current |  |  |  |  |
| Year's Income | 2,500 | 2,500 | 3,000 | 3,600 |
| = After-Tax Return to Unpaid Labor, Equity Capital and Management | 8,700 | 8,700 | 11,200 | 13,400 |
| - Value of Unpaid Labor and Management | 12,000 | 12,000 | 12,000 | 12,000 |
| = Residual Return to Equity Capital | $(3,300)$ | $(3,300)$ | (800) | 1,400 |
| Rate of Return on Equity | (4.2\%) | (4.2\%) | (1.0\%) | 1.8\% |
| After-Tax Return to Unpaid Labor, Equity Capital and Management | 8,700 | 8,700 | 11,200 | 13,400 |
| + Nonfarm Income After Tax | 5,500 | 5,500 | 5,500 | 5,500 |
| - Proprietor Withdrawals or Cash Dividends | 27,300 | 22,300 | 22,300 | 22,300 |
| = Addition to Owners' Equity | $(13,100)$ | $(8,100)$ | $(5,600)$ | $(3,400)$ |

Figure 2c: Alternative Balance Sheets, December 1, 1986

|  | (1) Base Case | (2) <br> Reduced Family Living | (3) <br> Reduced <br> Family <br>  <br> Reduced <br> Oper. Exp. | (4) <br> Reduced Family Living, Reduced Operating Expenses and Principal Writedown |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Current Business: | \$ 96,400 | \$ 96,400 | \$ 96,400 | \$ 96,400 |
| Intermediate Business: | 67,800 | 67,800 | 67,800 | 67,800 |
| Long-Term Business: | 151,800 | 151,800 | 151,800 | 151,800 |
| TOTAL BUSINESS | \$316,000 | \$316,000 | \$316,000 | \$316,000 |
| Personal Assets | \$ 30,000 | \$ 30,000 | \$ 30,000 | \$ 30,000 |
| Total Assets | \$346,000 | \$346,000 | \$346,000 | \$346,000 |
| Liabilities |  |  |  |  |
| Current Liabilities | \$ 75,100 | \$ 70,100 | \$ 67,600 | \$ 65,400 |
| Intermediate Business | 6,000 | 6,000 | 6,000 | 6,000 |
| Long-Term Business | 170,000 | 170,000 | 170,000 | 151,800 |
| TOTAL BUSINESS | \$251,100 | \$246,100 | \$243,600 | \$223,200 |
| Personal Liabilities | 0 | 0 | 0 | 0 |
| Total Liabilities | \$251,100 | \$246,100 | \$243,600 | \$223,200 |
| Business Equity | \$ 64,900 | \$ 69,900 | \$ 72,400 | \$ 92,800 |
| Equity | \$ 94,900 | \$ 99,900 | \$102,400 | \$122,800 |

can be accomplished by "rescheduling" the loan, i.e., changing the term (or length) of a loan and/or the timing of payments. This approach is likely to be preferred over "restructuring'" (as discussed below) by the lender because it implies that all interest and principal payments will be made, even though the payments may be made over a longer period of time. Rescheduling can also help the borrower's cash flow problem by spreading the principal payments over a longer period which reduces the principal and, hence, the total payment per period.

The sample farm has relatively high current business liabilities (Figure 1c). The operator may find it advantageous to refinance part of the current liabilities over several years. For example, suppose the operator refinances $\$ 35,000$ of current liabilities over five years with equal annual principal payments. Doing so would move $\$ 28,000$ of liabilities from the current to the intermediate category. The amount of the intermediate loan due within 12 months ( $\$ 7,000$ ) would remain under the current category. The result of this rescheduling would be $\$ 47,100$ of current liabilities and $\$ 34,000$ of intermediate liabilities. The rescheduling would make repayment of the liability more manageable.

An alternative method to change the loan servicing payments per year is to "restructure'' the loan. In restructuring a loan, the borrower and lender agree to change the total amount of principal and/or the interest rate to be paid. The borrower is able to "erase" debt, but the lender will have a financial loss with restructuring. Thus, borrowers are likely to favor restructuring and lenders will favor rescheduling.

Restructuring and rescheduling liabilities can be used (1) to keep total principal and interest payments in balance with a firm's repayment capacity, and (2) to keep current, intermediate, and long-term liabilities in balance with each other. Negotiations between borrowers and lenders often result in a combination of restructuring and rescheduling. The remainder of this section discusses several methods to restructure and reschedule liabilities along with the tax implications of each.

## Decrease Principal Payments/ Outstanding Principal

Negotiating a principal write-down from commercial lenders and renegotiating contracts for deed are two major methods which have been used for decreasing principal and still retaining ownership of the asset. Lenders may be willing to consider these alternatives when the value of an asset has declined to a level below the debt commitment and/or the repayment ca-
pacity is less than the debt service requirement, but this willingness also depends on the lender's financial condition. The alternatives of selling assets or "letting them go back'" also decrease principal and are discussed in the section "Restructuring Assets.'

Both the farmer and lender (or first owner) may find write-downs and renegotiations more favorable than the alternatives of foreclosure, repossession, and resale. Even though the renegotiated amount of the principal will be lower than the original contract or loan, the renegotiated principal may be greater than the net amount that a lender can obtain from a new buyer. Furthermore, an institutional lender may be willing to make concessions, if doing so corrects a borrower's debt structure imbalance and repayment of the remaining amount is highly likely. Tax implications and the desire to keep a good farmer on the land are other reasons for both sides to seriously consider principal write-downs and contract renegotiation.

The Internal Revenue Service may view forgiven debt as taxable income, making the potential tax implications of principal write-down tremendous. Under current law (1986), forgiven indebtedness is considered taxable income unless the debtor qualifies for one of the following exclusions: 1) debt is discharged in a bankruptcy case; 2) the debtor is insolvent by more than the forgiven debt; or 3) the discharged debt can be offset by decreasing the basis of depreciable business assets. The Tax Reform Bill of 1986 broadens the opportunity for solvent taxpayers to exclude the discharge of debt from income. Since this is an extremely complicated area, expert legal advice should be used. As a brief, non-legal summary, let us look at the new law's features on debt discharge. It allows discharged indebtedness to be excluded from taxable income by writing down the basis of farmland as well as depreciable assets, carryovers, recapture variables, and other tax attributes. Any debt forgiven which is not used (or cannot be used) to decrease basis is considered income to the debtor. Basis reduction occurs at the beginning of the tax year following the year in which the debt is forgiven; this allows for some planning of asset purchases and sales. Tax losses from the sale of some assets can be used to offset other gains, making the timing of asset sales and the debt restructuring potentially important.

Negotiating a write-down of part or all of accounts payable will decrease the level of current liabilities and improve the liquidity position of the farm. Business people who write-down accounts payable will
do so if they perceive that it is the least-loss way to handle the situation. How much they can write-down will depend upon their own financial condition and their ability to sustain a loss in liquidity.

For the farmer, the advantage of writing down accounts payable is the improvement in liquidity. The disadvantage is that, if they are willing to still do business with the farmer, these businesses will most likely require cash payment upon purchase and give no credit in the future. This may be an advantage in that it forces a farmer to develop a more comprehensive farm plan including financial and credit considerations. The tax implications of an accounts payable write-down may be minimal. A debt forgiven that would have been a deductible expense when paid is not considered income by the IRS. Accrued interest that has not been paid (or claimed as a deduction under accrual accounting) is not considered income when it is forgiven. For example, when a dealer forgives a farmer's $\$ 10,000$ fertilizer bill, the farmer's gross income, cash expenses, and taxable income are unaffected. Thus, the advantages to the farmer of having accounts payable written off are to reduce cash commitments and current liabilities. This will improve the farmer's cash flow, increase net farm income, and improve the debt asset position. It will have the opposite impact on the financial position of the business forgiving the account.

It may be possible to renegotiate land rental agreements to improve liquidity. Renegotiating a cash lease to lower the payment will reduce current liabilities. These adjustments could reflect the higher return to land which has a wheat or feed grain base for government acreage programs. Also, changing a cash lease to a share lease will reduce current liabilities and improve liquidity, particularly in pooryield and low-price years. Flexible leases can be used to share production and price risk between the tenant and the landowner. These can be developed in many forms such as bushel leases, flexible cash leases where the rent depends on yield and/or commodity prices, or a combination cash and share lease.

The sample farm has long-term liabilities that exceed the market value of longterm assets (Figure 2c). Suppose the operator had negotiated a write-down of the long-term principal from $\$ 170,000$ to the market value of the long-term assets $(\$ 151,800)$ at the beginning of 1986 . The effect is illustrated by comparing columns 3 and 4 of Figure 2. The illustration assumes the interest rate before and after the write-down is 11 percent and that the operator was able to reduce the basis of the real
estate by the amount of the write-down $(\$ 18,200)$, thus avoiding any tax liability on the forgiven debt. A comparison of the two columns of Figure 2 indicates the write-down reduces interest payments by $\$ 2,800$, but increases taxable income (so increases the income tax paid), allowing an additional $\$ 2,200$ in principal payments. This additional payment is applied to cur rent liabilities. Thus, the effects of the debt write-down are to increase liquidity, im. prove profitability through the reduction of interest expenses, and improve solvency.

## Decrease Interest Rate

In some cases, a write-down of the interest rate has been used in conjunction with, or instead of, a principal write-down, The Minnesota program of sharing a writedown between the state and the lender received $\$ 18$ million in additional funding during the recent legislative session. However, the amount of money provided by the state again may be insufficient to help all who are eligible.

Some institutions will make loans at two percent above the certificates of deposit (CD) rate when the CD's are pledged as collateral. Farmers able to find someone willing to pledge CD's may find this is a very good way to obtain a lower, more manageable interest rate. In some cases, it may be the only way to obtain an operating loan. The holders of the CD's do have the risk of losing their money if the borrower defaults so they should be cautious about entering into these arrangements until they have checked the financial condition of the farmer and the impacts of the lower interest rate.

## Lengthen Payment Period

Reamortization of the remaining loan balance over a longer time period may be difficult to arrange with the same lender. However, a long-term loan can frequently be obtained from a second lender to pay off an obligation with the first lender. The second lender will certainly evaluate the farm's financial condition and loan repayment potential. This option is open to farmers who have large current and/or intermediate liabilities which are affecting their liquidity and ability to make payments, but who have a low long-term debt relative to the value of their real estate assets. Farmers with sufficient long-term debt servicing capacity can use this method to reduce short-run cash commitments and to bring the structure of liabilities (current, intermediate, and long-term) in line with the farm's ability to pay those liabilities.

The loan payment period can be lengthened by other means. A farmer and
lender could agree that only the interest payments are to be made, thus pushing the final payment further into the future. Some lenders may agree to amortize missed payments over a period negotiated between the lender and farmer-from a few months to a jew years. These options improve the liquidity of the farm and may solve a temporary cash flow shortfall. Farmers carrying more debt than can be serviced with the current income generating capacity of the business may find these methods are insufficient to solve their problems.

## Renegotiate Capital Leases

Lease agreements for machinery, silos, and other equipment also may be renegotiated, but this has not been done frequently. The payment amount, number of payments, and any end-of-lease purchase agreements are variables to be considered. The principal and interest rate may not be explicitly stated, but they affect the farmer's payment and are subject to renegotiation.

## Change Lender

A borrower may have to change lenders to exercise some of the options and alternatives discussed above. As one commercial lender says, ' Once financial trouble has become severe, a borrower cannot go back to the original loan officer, even if he/she remains with the same creditor.'" A new institution may be able to provide a new financial footing on which to begin. The original credit institution may be unable to offer what the farmer needs to survive due to rules and '"damaged'' personal relationships. A change to FmHA, for example, has enabled some farmers to obtain a lower interest rate. FmHA may be the lender of last resort for some farmers. However, FmHA has funding limits placed on it by Congress so it has not been able to meet all applications.

## Choosing Alternatives

The process for restructuring and rescheduling liabilities has been and will be different for almost every farmer who nceds to take this route. The action chosen will probably be a combination of the alternatives discussed. The degree of illiquidity and/or insolvency and the amount of improvement desired will determine the alternatives chosen.

Changing lenders may be necessary to achieve the goal of continuity. Also, management of the liabilities side of the net worth statement cannot be separate from the management of assets and the production practices chosen. If the financial situa-
tion is not repairable, the best alternative route may be to end one business and start another-as discussed in the later section, "Entry/Recycling."

## Restructure Assets

The way assets are controlled and their liquidity is referred to as the structure of assets. Real estate can be controlled by owning, leasing with a multi-year arrangement, or renting on an annual or shorterterm basis. Machinery and equipment can be owned, leased, or custom hired, while breeding stock can often be leased as well as owned. The value of owned assets and the value of longer-term leasing arrangements are included in the net worth statement. When owned real estate has been sold and rented back (as some farmers have done), the value of long-term assets has been reduced and the cash generated has been used to reduce liabilities or increase current assets. Similarly, a few farmers have sold owned machinery and had the operation(s) performed by custom operators; they have reduced the value of intermediate assets and had funds available to reduce debt or increase current assets.

## Selecting the Assets to Restructure

A decision to restructure some assets and not others should depend in part on the operator's goals. Some operators may be willing to quit farming and either retire or obtain off-farm employment. These individuals may want to sell machinery, equipment, and breeding stock, while maintaining ownership of part or all of the land as income producing property to supplement other income.

Other farmers may place a heavy emphasis on continuing to operate a farm business. These farmers may want to restructure low-return/low-liquidity assets such as land, particularly when similar quality land can be rented at competitive prices. In some cases, those selling the land will want to maintain ownership of the farmstead and a limited acreage to be used as a base for future operations with rented land. In addition to maintaining a base of operations, these farmers will want to maintain the intermediate machinery, equipment, and breeding stock assets that have both a high return and high liquidity. Market conditions permitting, farmer debtors can dispose of some machinery and substitute the use of custom hire.

Farmers voluntarily or involuntarily transferring or selling their property to reduce debt may not see income resulting
from these transactions. As a result, they may fail to consider the tax consequences in selecting the assets to be restructured. Often a farmer can use alternative assets to satisfy approximately the same amount of debt, but the tax consequences of the several transactions may be quite different. The potential tax liability associated with the sale or transfer is a second factor to consider in describing which assets to restructure.

The tax code changes frequently and differences exist between the federal and state levels. The following discussion only outlines the general implications of tax considerations at these two levels. Farmers choosing financial options should obtain advice from tax consultants before implementing their decisions.

Farmers restructuring assets may incur several types of income tax liability. The sale or transfer of assets may result in ordinary income, capital gains, or the recovery of investment tax credit. Ordinary income may result from the sale or transfer of property such as grain and livestock held for resale. The transfer to a creditor to partially or completely pay off a debt is considered ordinary income regardless of whether the transfer is voluntary or involuntary. ${ }^{2}$ The recapture of previously claimed tax deductions, including depreciation, soil and water conservation expenses, land clearing expenses, and government cost sharing payments excluded from income, is also considered ordinary income.

Capital gains may result from the sale or transfer of depreciable property and real estate. The sale price less the basis of these assets sold (or fair market value at time of transfer less the basis for property transferred) represents the capital gain income (or loss). In previous years, 60 percent of capital gain income was not taxed. The Tax Reform Act of 1986 states that gain from the transfer of depreciable property and real estate after December 31, 1986, will be taxed at 100 percent of its value; the 60 percent deduction has been eliminated.

The farm debtor must include the ordinary income, capital gains, and investment credit recapture from the sale or transfer of assets in calculating the income tax due. Often, the regular income tax can be offset with net operating loss, depreciation, and investment credit. The Internal Revenue Service requires an individual who has benefited from tax preferences to calculate the alternate minimum tax. Some common

[^1]examples of tax preference items for farmers include accelerated depreciation on real property (buildings and improvements), accelerated depreciation on leased personal property, and the 60 percent capital gain deduction. An experienced lawyer has indicated that the recapture tax imposed by Section 2032A or Section 6166 of the Internal Revenue Code (both of which relate to the payment of the federal estate taxes) has been triggered in some instances.

## Procedures to Use in Restructuring

After the farmer has decided which assets are to be kept, the next step is to develop a plan to maintain control of the desired assets. When loan conditions permit, farmers may want to concentrate machinery payments on those items considered essential to continued operation of the business. The remaining machinery can be disposed of (either sold or transferred) in a manner to achieve the maximum reduction in debt.

Unlike the financing that often exists for machinery and personal property, separate loans exist for real estate and they often exist for separate parcels of real estate. The borrower with real estate loans on each of two or more parcels has several opportunities for asset restructuring. For example, a farmer unable to maintain current principal and interest payments on all real estate loans may concentrate payments on one or more loans. The remaining real estate loan(s) are permitted to go into default. The farmer may be able to renegotiate a lower loan principal based on the current market value of the real estate. If the negotiation effort is unsuccessful, and the lender sells the land, the borrower has the right under Minnesota law to redeem the property within six months after the date of sale. The borrower has up to twelve months to redeem if: 1) the mortgage was signed before June 1,$1967 ; 2$ ) the amount on the mortgage is less than $2 / 3$ of the original amount; or 3) the mortgaged land is more than ten acres. To redeem, the borrower must pay the lender the full amount that the land was sold for at the sale, plus interest.

Farmers facing foreclosure on real estate may want to establish a homestead exemption for the portion of the property which serves as their homesite. Such opportunities are severely limited, however, if the farming operator has previously been granted a second mortgage on the homestead. The 1986 Minnesota legislature increased the maximum size of a rural homestead from 80 to 160 acres. By filing
the homestead property designation, the designated homestead property must be sold separately. The farmer debtor may then redeem the homestead or the remaining property, or both, separately.

Farmers facing bankruptcy may also make use of the homestead designation. Farmers in Minnesota may claim a homestead exemption on an area up to 160 acres in size. Farmers facing bankruptcy would typically be given a lien on all major assets, including the area designated as the homestead. A bankruptcy discharge does not release any property that the debtor retains from any lien the debtor may have been granted prior to filing bankruptcy. In these cases, it may be impractical to retain a larger acreage under the homestead exemption, but the family may be able to retain the house and a limited acreage as a homesite.

The remaining sections discuss several methods which farmers commonly use to restructure assets and liabilities. The general considerations discussed in the two previous sections are emphasized under each method.

## Sale Leasebacks

For some farm operations, the resources can be efficiently utilized by the firm, but the cash flow costs of ownership are excessive given the original terms of the purchases and the current economic environment. In these circumstances, saleleaseback arrangements may be quite appropriate. Such strategies will change the asset composition of the firm and, depending upon how the proceeds are used, the debt load and composition as well.

Farmland, in particular, may be an attractive sale-leaseback asset. Cash flow requirements for annual debt servicing (principal and interest) can frequently be reduced from 10-15 percent of a previously established higher land value to cash rental rates which are 7-9 percent of the land value. Leasebacks with crop share rent result in even lower cash flow requirements for operators. Whereas the cash flow from other enterprises in the operation may have made it feasible to own farmland and the capital gain made it a rational economic decision in the past, the current economic climate may favor renting.

Similar arrangements may be an attractive means of restructuring the ownership pattern of improvements and personal property as well. A carefully structured sale-leaseback can reduce the cash flow pressures for the farmer, and enable the operator to use assets efficiently, generating a competitive rate of return for both lessee
and lessor. A variation of the sale-lease. back of livestock facilities is the transition of farmer-feeders who traditionally have fed their own livestock in their own facilities to custom feeders who lease space and provide feeding services for investors.

The sale-leaseback may be imple. mented in two general ways. One method (as noted earlier) is to arrange for the conveyance of the property to the lender (a deedback or voluntary conveyance) with the borrower leasing the property back from the lender. An alternative is to sell the property to a third party on a leaseback basis and use the proceeds of the sale to reduce the debt load of the firm. The 1986 Minnesota farm bill also provides for leasing back of land which has been foreclosed.

An alternative, either to sale-leasebacks or to liquidating assets that may be more desirable when market values are severely depressed, is to increase the utilization of those assets through custom farming or renting them to other farmers. Opportunities may exist for an operator to do custom farming as a means of increasing machine utilization without incurring additional financial risk. Crop share leasing may be an option to generate cash income from owned land that has limited market value. If operating funds cannot be obtained to plant a crop or produce livestock, the farm could be rented out with the proceeds used to service debt obligations.

A fundamental key to survival for many operators is fixed asset utilization and management. When fixed assets are underutilized and fixed costs are not being spread over adequate levels of production, there are only two options: (1) reduce fixed costs through sale or disposition of fixed assets, or (2) reduce fixed costs per unit of production by expanding volume of business.

## Recapitalization/Equity Infusions

The financial structure of the business could be significantly improved through an infusion of equity from outside the firm, either by a current lender exchanging an obligation for an equity position in the firm, or an outside investor providing additional funds which are used to reduce indebtedness. An equity infusion provided by an outside investor not only increases the cash and liquidity position of the firm: it also reduces the financial risk by increasing the equity capital base. Thus, it may improve the balance sheet and improve the cash flow of the firm when some of the equity is used to satisfy debt. When an equity
infusion occurs through the conversion of debt to equity, the conversion procedure also reduces the debt-servicing requirements. Such a restructuring with an institutional lender may violate Minnesota Statutes Section 500.24, the so-called Corporate Farming Act. Thus, we have not seen any such debt-to-equity conversions in Minnesota.

An equity infusion may at first glance appear to be difficult to orchestrate. Who would want to put equity into a financially troubled firm? In some cases, family members may be willing to provide such an infusion to protect the integrity of a family business. An expected future inheritance of nonbusiness assets could be converted into current cash through sale to other family members. A nonfamily investor might be willing to contribute capital for a larger-than-proportionate share of the ownership of the firm. Some investors may be attracted by the tax shelter available from operating losses; under certain conditions, an operating loss is, in reality, an asset for a high tax bracket investor. And unused tax credits may be available to make the equity infusion more attractive for the investor.

The third source of an equity infusion is a non-institutional lender. In some cases, the financial condition of the firm is such that the lender will incur a significant loss if the note is called, foreclosure occurs, or the operator takes advantage of the bankruptcy procedures. If the firm has current cash flow problems because of high leverage and aggressive growth, but strong management and the potential for reasonable future earnings, the lender may minimize losses or increase the chances for recovery by converting debt obligations into equity. This conversion reduces the current cash flow burden of excessive debt servicing and releases resources (both funds and management) to use in more productive activities that will enhance current and future income. In agriculture, this conversion frequently involves contract indebtedness; many installment land contracts are currently being renegotiated with the seller (equity holder) taking back litle to the property or restructuring the contract into a risk and return sharing arlangement with the purchaser. Other methods to accomplish this conversion are to form either a partnership or corporation. In the case of a partnership, the former lender "ould become a limited or perhaps a genral partner. When a corporation is lormed, the former lender is issued stock. Ineach case, the former lender assumes an equity position. As stated before, institulional lenders in Minnesota will not follow this option due to possible violation of the "Corporate Farming Act."

The option of co-signing a note is a common method to substitute the equity base of one individual for another. This has been a common method for reducing financial stress in the past, but given the current uncertainty about the long-run economic future in agriculture, this option is much less feasible today. Most potential co-signers are unwilling to incur the risk associated with an additional debt load.

## Merger/Acquisition

A final alternative for some firms is to merge and/or be acquired by another firm. This choice is commonly used in the nonagricultural sector where the firm has established a market position, reputation, and general goodwill among its customers which it is believed can be at least partially transferred to another owner. The merger/ acquisition option is less likely to be used in production agriculture because the farm's market position is of little value to another operator. Merger or acquisition may be an option, however, when a smaller farming unit can be absorbed completely by a larger unit. For example, a small (perhaps part-time) farm being operated by a son (or son-in-law) might be acquired by the parents (or parents-in law) who have a larger unit and can easily absorb the smaller farm's resources and debt load. In this situation, the newly merged farm may or may not include all of the former operators of two separate farms-the younger generation might move out of farming completely, or the older generation may retire (at least semi-retire) and leave room for the younger generation to manage the merged business. If the older generation is already retired, a creditor may ask them to "unretire" and become more active in management and equity position (i.e., merge) before more debt capital is advanced.

For larger farm businesses as well as agribusiness firms, the merger/acquisition step is more common, e.g., investor acquisition of financially stressed and bankrupt southern plains cattle feedlots during the 1970s, and the Case-International Harvester merger.

## Entry/Recycling

The improved chances for survival and success for a beginning or recycling farmer today (compared to the last ten years) are the result of at least five changes: (1) the purchase price of capital assets such as machinery and equipment has declined significantly, allowing a beginning or recycling
farmer to obtain the necessary asset base to operate with a significantly lower capital outlay; (2) purchased input prices, including seed, fertilizer, chemicals, and energy, have stabilized and in some cases are declining, thus reducing operating costs as well as the amount of operating capital needed to farm; (3) government programs in the form of the 1985 Food Security Act and the multi-peril crop insurance program administered by the Federal Crop Insurance Corporation provide mechanisms for downside risk protection with respect to both commodity prices and crop yields; (4) land rental options and rental rates are becoming increasingly favorable for tenants; and (5) interest rates are at lower levels and will be less burdensome if they remain at their current levels or continue to fall.

The results of a recent study by Benson and Boehlje indicate that if a crop share rental arrangement is utilized, the risk of not being able to service machinery and operating debt is very low. In contrast, the ownership option of land acquisition results in significantly lower cash incomes after debt servicing and substantially more risk; in fact, with all productivity levels, cash income after debt servicing is negative if land is purchased. This suggests that land purchasing may not be an attractive entry or recycling strategy, but that rental, particularly crop share rental, may provide an attractive option for starting or re-starting in farming.

## Bankruptcy

An important legal vehicle for managing the asset and liability adjustment process is bankruptcy. Although bankruptcy may involve immediate liquidation of the assets and a discharge of the indebtedness of the farm (Chapter 7 of the Bankruptcy Act of 1978, Public Law No. 95-593, 92 Stat. 2549,1978 ), it can also involve restructuring and rehabilitating the business under Chapters 11, 12, or 13 of the bankruptcy law. Thus, Chapters 11,12 , or 13 provide the legal vehicles to implement the asset readjustment methods described if arrangements cannot be made on a voluntary basis. Our focus here will be on the use of bankruptcy to restructure and continue the business.

## Chapter 11

Farmers cannot be forced into an involuntary bankruptcy. A farmer who chooses Chapter 11 bankruptcy proceedings becomes a "debtor in possession"-_generally, the farmer continues to manage and
operate the farm, possibly under the surveillance of a creditor's committee. A trustee to manage the property is appointed only in rare cases, so the farmer can continue to operate the farm as long as he develops an acceptable debt reduction plan.

The key to successful use of the bankruptcy vehicle to restructure the farm and continue the business is the plan for repayment of creditors and the time that is provided by the court to develop and implement this plan. Once a bankruptcy petition is filed, an automatic stay prevents almost all litigation and other actions of lien enforcement on the part of creditors. The debtor is given a period of time (often from 6 to 12 months) to develop a plan for repaying creditors; this plan must be accepted by the creditors and confirmed by the court if the farmer is to continue operating.

The plan may include the rescheduling and extension of the repayments on debt obligations; reductions in interest rates that will leave more cash flow for principal repayment; writing down or writing off unsecured, as well as secured, obligations to reduce the total debt load; renegotiation of lease and other contract obligations to reduce cash expenses; sale or lease of capital assets to increase cash income available for debt servicing; changes in enterprise mix and marketing strategy to improve financial performance; and other appropriate adjustments to improve efficiency and the long-run survivability of the firm. Although most, if not all, of the same adjustments can be made without recourse to the bankruptcy proceedings, the bankruptcy rules provide a vehicle to force decisions about such adjustments if they cannot be made between borrower and lender in a mutually agreeable fashion.

The mandatory mediation provisions enacted recently by the state legislature provide a vehicle and mechanism to facilitate voluntary agreement between borrower and lender concerning appropriate and necessary adjustments to improve the chances of firm survivability. Voluntary or mandatory mediation is an important step in the restructuring process for most farm firms, but it does not preclude access to bankruptcy provisions for restructuring irrespective of the outcome of the mediation.

Congress recently approved, and President Reagan signed, a bill authorizing a new chapter in the federal bankruptcy code written exclusively for farmers. Entitled Chapter 12 , it removes some of the restrictions farmers have faced when reorganizing under Chapters 11 or 13. Chapter 11 is used by larger corporations, but it often does not provide an opportunity for
farmers to reorganize because the individual reorganization plans must be approved by creditors. Some farmers have considered using Chapter 13, which is designed for small businesses. It is unsuitable for many farmers because of its limitations on debt size, $\$ 350,000$ in secured debt and $\$ 100,000$ in unsecured debt, and because it is limited to individuals. Chapter 13 cannot be used by corporations and partnerships.

## Chapter 12

Chapter 12 is intended to help family farmers reorganize their operations. Eligibility is limited to an individual or closely held corporation or partnership whose aggregate debt is $\$ 1.5$ million or less. The filee must derive more than 80 percent of the debt and 50 percent of the gross income from farming.

Chapter 12 has several provisions of particular interest to farmers. First, farmers have 90 days after filing for Chapter 12 protection to submit a plan for reorganization and the bankruptcy court must approve or disapprove it within 45 days. Reorganization plans under Chapter 12 do not require creditor approval. Second, the value of the secured loan would be reduced to the current value of the collateral. This allows the farmer to repay debts based on the current market value of the collateral, not its purchase cost. The difference between the collateral value and the amount of the loan is treated as an unsecured claim. Third, foreclosure by a lender is prohibited if the farmer can pay the equivalent of fair market rent on the asset. Under this provision, farmers whose land values have sunk below the mortgage value can reduce their mortgage payments for three years, which can be extended to five years by the court. Fourth, the legislation permits the court to approve a reorganization plan if the farmer pledges disposable income to the payment of unsecured creditors. Disposable income is defined as the amount in excess of what is necessary for operating expenses and family living. Fifth, the debtor is discharged of remaining debts after completion of payments under the plan. Discharge may be granted even though the debtor has not completed payments if three conditions are met: the failure to complete payments resulted from circumstances for which the debtor "should not justly be held accountable'"; the unsecured creditors do not receive less than they would receive under Chapter 7 liquidation; and modification of the plan is not practical.

Chapter 12 legislation does not deal with one of the major reasons for filing bankruptcy to reorganize the business: to deal with the potential income tax liability
on the disposition of assets. The new law does not create a separate tax entity for Chapter 12 filers for federal tax purposes. This shortcoming may be remedied by additional legislation. Until that is done, Chapter 12 does not offer a fresh start from income tax liability on assets liquidated in bankruptcy.

Chapter 12 of the bankruptcy code became effective November 26, 1986, for a period of seven years. It is untested as this is written, but the provisions suggest that Chapter 12 will enhance farmers' abilities to restructure assets and liabilities.

## Chapter 7

If restructuring under bankruptcy provisions is not successful, a secondary benefit to the creditor of the bankruptcy rules is the exemption of specific property from creditors' claims. Such exemptions are specified by state or federal law with the flexibility in Minnesota to choose either set of exemptions. Exemptions under federal law include " (1) up to $\$ 7,500$ in value of property used by the debtor or dependent of the debtor as a residence; (2) up to $\$ 1,200$ in value in one motor vehicle; (3) up to $\$ 200$ in value per item in all items that are household furnishings, household goods, wearing apparel, appliances, books, animals, crops, or musical instruments held by the debtor or a dependent of the debtor primarily for personal, family, or household use; (4) up to $\$ 500$ in total value of jewelry held for personal, family, or household use; (5) $\$ 400$, plus up to $\$ 7,500$ of the amount not used for the exemption for the debtor's residence in (1) above, in any property; (6) up to $\$ 750$ in total value of implements, professional books, or tools of the trade of the debtor or a dependent of the debtor; (7) any unmatured life insurance contract owned by the debtor except credit life insurance; (9) professionally prescribed health aids; (10) the debtor's right to receive certain benefits and payments, such as social security, unemployment, veteran's benefits, disability, alimony, annuities, stock bonus or similar plans, and certain pensions; and (11) the debtor's right to receive certain compensatory awards, such as awards under crime victims' reparation law and awards for wrongful death, bodily injury, or loss of future earnings'" (Harl).

Under Minnesota law, exempt property includes: (1) personal goods including apparel and household items not exceeding $\$ 4,500$ in value, with this limit indexed to account for inflation; (2) farm machines and implements not exceeding $\$ 10,000$ in value; (3) tools and instruments reasonably necessary in the trade or business of the
debtor not exceeding \$5,000 in value; (4) a homestead comprising up to 160 acres; (5) a motor vehicle not exceeding $\$ 2,000$ in value; (6) any accrued dividend, interest under, or loan value of any unmatured life insurance contract not exceeding $\$ 4,000$ in value; (7) employee benefits under a stock bonus, pension, profit sharing, annuity, or similar plan and benefits payable by selected organizations such as a police or fire department association, fraternal benefit association, etc.; (8) insurance proceeds payable upon death of a spouse or parent not exceeding $\$ 20,000$ plus $\$ 5,000$ for each dependent of the surviving spouse or child and the net amount payable under accident or disability insurance policies; (9) benefits obtained from public assistance and relief programs such as Aid to Families with Dependent Children, General Assistance Medical Aid, Supplemental Security Income, etc.; (10) educational and instructional materials; (11) earnings of a minor child; and (12) money arising from or any claims for damages for sale or wrongful taking or detention of exempt property (Minnesota Statutes, Sections 510 and 550, 1986).

In summary, the reorganization allowed under Chapter 11 or 12 enables the farmer to protect property from most debtors' claims; to buy time to put together a plan that may include the sale of some assets and most likely will include the lengthening of repayment periods and possibly reduction of interest rates; to maintain control of the property for a minimum of at least six months and possibly up to one or two years; possibly to eliminate or reduce the total debt load; and, at a minimum, to
protect exempt property including a residence and personal property up to a specified amount, "tools of the trade," and future benefits and repayments such as social security, disability, alimony, annuities, etc. This flexibility, properly utilized, may enable a farmer to restructure the business and survive rather than liquidate.

## A Final Comment

A farmer's financial problems can be characterized by one or more of the following: lack of profitability, inadequate cash flow, and low equity levels. The adjustments selected should be chosen to respond to the type(s) and severity of these three financial problems.

When low profitability (relative to that achieved on similar farms in the area) is a major problem, the operator should consider adjustments in production and marketing strategies as well as achieving full use of fixed assets. Improving profitability also enhances cash flow and the equity position over time. For this reason, it is important for the farm business to achieve a relatively high level of profitability even when it may seem that cash flow and solvency problems are more pressing.

Many farmers with relatively high profitability will continue to experience inadequate cash flow in the current economic environment. Common ways to reduce cash outflows are to reduce proprietor withdrawals and to reschedule repayment of debt over a longer period. Many farmers supplement cash inflows with off-farm in-
come. Those farmers with strong equity positions can increase cash inflows through borrowing, but this approach may erode the firm's equity position during a period of constant and declining asset values.

A business with inadequate cash flow and a low equity position will need to consider restructuring liabilities and assets. Decisions on which restructuring options to select should be made considering the profitability and cash flow, as well as the impact on the balance sheet. In some cases, restructuring liabilities may have a sizeable impact on the income tax owed and, hence, on the cash flow.

While we have not completely solved the sample farmer's problems (Figure 2), we have shown how the alternatives can be analyzed for their impacts on the three financial statements. Further alternatives may be enterprise selection, better marketing, sale of assets and leaseback, etc. Also, if the analysis shows that no alternatives can improve the farm's problems, the options of liquidation and recycling or alternative employment need to be considered.

The potential impact of the adjustments on the profitability, cash flow position, and solvency of the business over time should be analyzed before a decision is made. While completing the process may seem like a great deal of work, the analysis should enhance the likelihood that the family will achieve more of its goals through the financial adjustments being made.

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[^0]:    'Olson, Kent D., et al., "1985 Annual Report of the Southwestern Minnesota Farm Management Association," Economic Report ER86-1, Department of Agricultural and Applied Economics, University of Minnesota, St. Paul, MN, May 1986, p. 21.

[^1]:    ${ }^{2}$ The methods of decreasing taxable income from debt forgiveness is discussed in the previous section on restructuring liabilities.

