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Current Report

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Financial Survival in the 1980's

Debt, Cash Flow and Interest Rates

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FINANCIAL MANAGEMENT DURING ECONOMIC STRESS

This Current Report concentrates on some aspects of the amount of debt, the cost of debt and the repayment of debt. Each of these areas is manageable to some extent. Present economic conditions require farm and ranch managers to make some decisions concerning these financial areas. For some, these will be hard decisions.

These areas of financial management are highly interrelated. By adjusting one area a manager may very well improve the situation in the others. Thus, while no single action may make a major difference, a simple combination of a few actions may make a considerable difference. All decisions farm and ranch managers make in the 1980's will need to be formulated in the context of the effect on cash flow and financial risk.

Oklahoma farmers and ranchers continue to feel the double punch effects of depressed earnings and double digit interest rates (Figure 1). Depressed earnings reduce dollars available for family living, debt repayment, and ability to

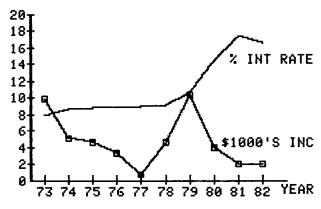


FIGURE 1. AVERAGE INTEREST RATES ON AGRICULTURAL LOANS BY COMMERCIAL BANKS AND OKLAHOMA NET FARM INCOME PER FARM.

handle new debt. Low earnings also tend to reduce unrealized gains, especially through lower rates of asset appreciation (or actual depreciation). Unfortunately, high interest rates adversely affect the same factors as reduced earnings. High interest rates make debt repayment and adding new debt more difficult. At the same time, high interest rates reduce the returns to land, thus reducing the value of that asset.

Some recent results of the returns-interest squeeze are: 1) the lowest rate of repayment on farm loans at commercial banks since 1977 in the Seventh Federal Reserve District (includes Oklahoma), 2) the lowest recorded repayment rate for Federal Land Bank loans nationally, and 3) the first year of declining farm land values in Oklahoma in recent history. The Balance Sheet of the U.S. Farm Sector indicated a debt to asset ratio of 20.1 percent for January 1, 1983. This is up from the 18.5 percent figure a year earlier, which was the first time since 1941 that ratio went above the 17 percent mark.

Debt plays an important role in many commercial farm situations. Managing debt, including the amount, repayment and cost, and understanding the risks involved with debt are important aspects of financial management.

HOW MUCH DEBT

The amount of debt a person has makes a difference in the ability to survive financial problems today. During much of the 1970's leverage (adding debt) seemed to be the road to financial success in agriculture. Producers were able to borrow money at relatively low interest rates, obtain farm earnings and land appreciation that exceeded the rate of interest, and payback the loan principal with cheaper dollars. Financial leverage works well when earnings of the assets are higher than the interest rate on borrowed money. Unfortunately, such a condition could at best be temporary. Even during the relatively prosperous post-war period, farm asset earnings alone seldom have exceeded the going

interest rate. Thus, with the earnings-interest rate relationship in the early 1980's, being highly leveraged is not a desirable position.

Leverage Example

Leverage can serve as a springboard to rapid growth as occurred during the 1970's. But, leverage also represents additional down side risk during hard times. Figure 2 represents a rate of return to owner's equity (net worth) for three different circumstances: A. good earnings, low interest rates; B. good earnings, high interest rates; and C. poor earnings, high interest rates. Since the third situation is typical of the 1980's, we can see that even reasonable debt will mean a potential loss in equity (A leverage ratio of one equals 50% debt, previously considered "safe" by lenders). It is obvious that leverage can be good during good times with low interest. But it is equally obvious that leverage can be bad during hard times or high interest. A second point, although not shown in the figure, is the fact that a progressive income tax causes the extent of poor outcomes from higher leverage to be greater than the extent of good outcomes. Thus, while income taxes limit the upside gains (push the upper line down), they do not limit the down side loss potential equally.

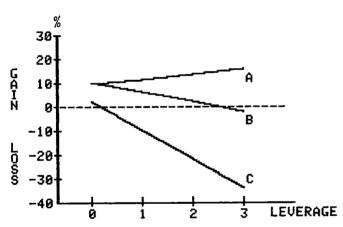


FIGURE 2. RATES OF RETURN TO OWNER'S EQUITY AT DIFFERENT LEVELS OF LEVERAGE FOR THREE ECONOMIC SITUATIONS.

Size up the Situation

A sufficient argument has been made that higher debt was bad during hard times even for those few that did not know. Although hindsight is great, once firms are leveraged there are still some adjustments which could be made to reduce the negative effects. To adequately analyze the situation, good financial records must be available to supply the information for decisions on future actions. These three basic financial statements should be prepared.

1) Balance Sheet or Net Worth Statement
The balance sheet gives a picture of the
financial condition of your operation at a
point in time. (See OSU Facts No. 752).

- 2) Cash Flow -- A cash flow record shows where money came from and where it went. A cash flow projection shows how much and when you plan to take in money and spend money including interest and debt repayment. (See OSU Facts No. 751).
- 3) Income or Profit and Loss -- This shows the amount of profit or loss that your operation made or is projected to make. It adjusts netcash income for depreciation and changes in inventories. (See OSU Facts No. 753).

Just having the information is not enough, but is an important first step. For instance, it is important to consider the mixture of debt and equity, since debt is understood to be less desirable under conditions of low earnings and high interest. And, the balance sheet provides the necessary information. Each producer is likely to take a some what different strategy with respect to amount of debt because their net worth statements are different.

Who Makes the Decisions

In the decision of how much debt to use one important yet often overlooked point needs to be considered. That is, the upper limit on how much is borrowed must be the manager's own decision. During times of strong asset appreciation lenders have a tendency to do "balance sheet lending". In other words, they depend heavily on the collateral available. Although lenders are increasingly hesitant to make loans based only on collateral, it is still done. The farm or ranch manager must realize that the lender typically has first security interest. This means the borrower takes most of the risk. And, the higher the leverage the greater the risk. Since most of the risk is on the borrower, more leverage means less of an equity cushion to absorb that greater risk. What does this mean? It means that lenders may set some upper bound on what they are willing to lend. But managers must make the decision of how much debt their businesses can afford and the risks they want to take. Many times, the manager may decide to borrow considerably less than the maximum after careful analysis of financial statements. Remember you manage your farm or ranch, not the lender.

REPAYMENT OF DEBT - Farm Liquidity

The second primary area of financial management significantly affected by low earnings and high interest rates is firm liquidity. Firm liquidity is the ability of the business to meet its financial obligations as they come due. In other words, does the business have or can it get the cash when it is needed? For most producers, liquidity comes from two sources: annual cash earnings plus current saleable assets and the ability to borrow against equity in intermediate and long term assets (especially land).

Both sources of liquidity have declined during the recent past. We all understand what has happened to Oklahoma cash farm incomes in the early 1980's and while stocks and inventories might be up, their value probably has not increased greatly. But, now the second round effects have also limited liquidity in the form of potential borrowing. Surveys indicate Oklahoma farm land prices declined during the last half of 1982 and the first part of 1983. Futhermore, indications are for little growth in agricultural land prices through 1984. Thus the ability to borrow against land value is reduced.

The liquidity problem translates into, "How do I get the cash when I need it?" This involves the ability to meet cash requirements including interest and principal payments. Obviously, how the farm or ranch is financed makes a difference. During periods of declining liquidity the more cash committed to scheduled debt payments, the less likely those payments will be met. Thus the chance of losing part of one's assets goes up and flexibility in taking on any new payments or risk from other sources certainly goes down.

Restructure Debt

One method to lower payments and reduce present cash flow problems is to restructure debt. Basically, this means working with the lender to change the lengths of the loan repayment periods. Ideally the length of the repayment period should approximate the realistic productive life of the asset. Despite this rule of thumb, the debt for a particular asset very often is scheduled to be repaid over a period considerably shorter than the asset's productive life. For example, a new tractor may be put on a 3 year payback schedule even though any reasonable estimate of the asset's productive life is much longer. Lenders must hold collateral interest in excess of market value. Thus, unless other collateral is available, the lender is not likely to lend on a repayment schedule which is equal to or greater than the expected life.

Most of the time mismatched payback and productive life periods is not a problem. Especially when earnings are high, interest is low or considerable liquidity is available through borrowing on other assets. However, mismatched payment schedules can put even moderately leveraged firms in a difficult cash flow situation with the agricultural economic conditions of the early 1980's.

To better understand what restructuring debt payback can mean from a cash flow standpoint, an example is presented. If \$80,000 were borrowed to purchase a tractor and with payments set up on a 4 year payback, the payment would be about \$27,000 per year at 13% interest rate. But, if that same \$80,000 was financed over 6 years the annual payments would decrease to about \$20,000. That is a \$7,000 difference in annual cash outflow. Similar arguments can be made for longer term debt, like that for land and buildings.

One of the trade-offs of restructuring debt is that over the tractor's loan life about \$12,000 more would be paid, due to the interest for the extra two years. Therefore it becomes a

trade-off between reducing certain cash flow and liquidity problems today for possible lower future income. Thus, managers may decide to sacrifice some future growth to hold on to what they have today.

Refinance Debt

Another way of obtaining a better cash flow situation is to refinance. Basically refinancing means borrowing more long-term money on land and other longer term assets and paying off or reducing outstanding shorter term debt. Restructuring simply adjusts the payback to the life of the asset, but refinancing changes the collateral. Refinancing worked well during the 1970's because land was inflating and interest rates were fairly low. And, long term rates were lower than short term for some periods.

Refinancing often is viewed as a solution to farm financial problems. Under certain circumstances refinancing can be used effectively to reduce short term cash flow problems. But, that may not always be the case. Refinancing sometimes can be a "stay of execution" to the farm business and nothing more. For some situations, it is merely taking present cash flow and repayment problems and putting them off until a later time. With high interest rates, this "buying of time" may mean even more severe financial problems later to the farm business.

The important point to realize is that refinancing is no longer a feasible solution to consider whenever the farm business expands beyond its debt servicing capacity for whatever reason. The real, long-term solution is reducing the size of the operation until the farm's cash flow will service the debt load and keep the farm in a liquid financial position.

Cash Flow

Just as reducing leverage problems means adjusting debt, liquidity problems mean adjusting cash flows. This is where the financial statement, Cash Flow, plays an important role. A good projected cash flow becomes essential to decision making. If you cannot show where the cash will come from for repayment, you need to re-evaluate the proposed situation. No longer can decisions simply be based on earning a return in the long run, but there must be some assurance that the cash will be available in the short run.

Slow repayment and declining land values have caused agricultural lenders to pay more attention to repayment and cash flow. And, if lenders are interested when they take less risk than you, shouldn't you be interested?

COST OF DEBT

The final area of financial management to be discussed is how much farmers and ranchers pay for debt. For the most part this is the interest, but it may also include other money costs. Obviously

paying less interest is better and there are ways, although limited, to reduce overall interest costs. Just as important though, producers often make the loan commitment with no good idea of just how much interest they will have to pay.

Variable Rates

The interest rates agricultural producers pay are more dependent on national money markets than ever before. This is significant because these markets have become more volatile over time. At the same time, agricultural lenders increasingly use financing arrangements which allow for changing interest rates during the life of the loan. Such financing is known as variable rate financing. The interest rate a borrower pays can vary periodically as cost of funds vary. Or, periodic refinancing is required, thus producing the same effect. Therefore, agricultural borrowers are not only borrowing funds which have potential for wide variation, but the borrower takes more risk.

Decisions made using debt financing are more complex because of the increased uncertainty of interest costs. Producers must think in terms of a range of possible interest costs. Each must decide that if rates near the higher end of the range actually occur, just how much will that outcome jeopardize their farm or ranch situation.

Variable Rate Example

Producers must project a cash flow and income statement if they are to fully appreciate what

could happen if the interest rate increases. For example, with a \$100,000 intermediate term loan and a payback of 5 years, an increase of 2 percentage points means a \$100 a month increase in payments. That may not sound too bad. But, if the rate goes up just 2% and stays there for the life of the loan, a borrower pays \$6000 more than planned. That \$6000 very likely is 1/3 to 1/2 of what it costs many farm and ranch families to live one year. Now, understanding the potential risk gets personal. And during hard economic times, the risks are even more threatening.

Unfortunately there is less the individual can do about variable rates than possibly debt structure and cash flow. Obviously the producer should seriously consider the consequences of higher rates in the decision process, as discussed above. The individual also should make it a point to understand how much and how often the rate varies. The manager should also learn if the payback period can be adjusted to keep the payments reasonably the same, even if rates go up. Finally, because agricultural interest rates are more dependent on national and international markets then in the past, following financial developments and government policy may prove profitable. Not only may these developments effect the decision to start or put off projects because of possible changes, but one may actually be able to reduce costs of present commitments. The rates most agricultural lenders charge lag behind changes in the national markets. More importantly the length of the lag may differ from one agricultural lender to another. Thus, in rapidly falling or rising markets the borrower may save money by shopping around, especially for short term credit needs.

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