



Rising Interest Rates and Your Debt Service

Interest rates are on the rise again and the evening news would have us believe that new home buyers are the only ones affected. The fact is, almost everyone is affected, especially capital intensive industries including agriculture. With interest rates generally on the decline since the early 1980's, it is easy to pay less attention to this expense item. The fact remains that interest expense on many farms is the third or fourth highest expense. Paying attention to this important cost area early-on during a period of increasing interest rates can ease the pain of debt service.

A *Primer* on Interest Rates

The loan agreement lists the rates and terms of the loan with your creditor. Many loans to farms and agribusinesses have a variable rate based on a "prime rate." For example, the interest rate for a mortgage may be defined as "prime plus 1.5 percent." Therefore, when the prime rate changes, the interest rate on your loan will change.

Prime rate is an interest rate that a bank charges it's best borrowers. Very best borrowers can sometimes get rates below prime. Most variable rate loans are between prime plus one to prime plus four percent. The riskier the loan, or the more work required to service the loan, the higher the interest rate.

Cost of Funds

Every business that depends on debt capital to help it operate should know the average cost and average term of funds it is borrowing. The average cost of funds is the *weighted average* cost of all monies borrowed. Average term is the amount of time it would take to pay off all debt if you maintain the current level of debt service payments at the current interest rates.

To find out your average cost of funds, follow the example in Table 1. List all loans,

excluding your annual line of credit, but including capital leases since they are a type of financing arrangement. In column (a), put the loan's current principal balance. Column (b) is the interest rate and column (c) is the total annual payment. Column (d) estimates annual interest expense by multiplying the principal balance (a) by the interest rate (b). The average cost of funds is estimated by dividing the total interest expense (d) into the total principal balance (a) and multiplying by 100. In the example, \$62,532 divided by \$718,994 times 100 equals 8.70 percent cost of funds.

Interest Rate, Term and Debt Service

Interest expense is only one component of the cash that leaves your farm business as debt service. The other component is principal. The rate at which you reduce principal balances with creditors can greatly affect your farm's cash flow. Reduce principal too fast and you may not have enough cash to meet operating and family living obligations. Paying off loans over too long a period may increase your interest expense and slow your increase in percent net worth.

One objective in properly structuring loans is to make sure that debt service payments are not more than 20 to 25 percent of gross revenue. Debt service payments are a combination of the interest rates, the original loan amount and the number of payments or term of the loan. The term of the loan influences the debt service payment much more than the interest rate. Table 2 illustrates this based on a \$100,000 loan. Annual payments are reduced by \$6,000 when interest rates drop 150% (from 15% to 6%) Increasing the term by the same percentage, saves \$15,000 per year in payments.

The first step in finding out if your business is paying back principal too quickly is to calculate your average term for all debt. This requires the use of a financial calculator and information from your cost of funds calculations as in the Table 1 example. Using total debt (a), total annual payment (c) and average cost of funds, solve for the number of payments needed to reduce your debt to zero. For example, if this farm continues paying \$172,557 in annual debt service at current interest rates and does not borrow any more money, all term debt will be retired in 5.4 years.

The reality is that all debt will not be paid off in 5.4 years since new equipment, buildings or real estate will probably be financed regularly. Long-term investments such as real estate, new buildings or major improvements financed with short-term loans reduce the average term. This can lead to higher than necessary annual debt service payments and cause cash flow problems for the business. If debt service is 25% or more of the gross income and your average term is below seven years, you may be a candidate for loan restructuring.

Loan Restructuring

Do not think that to reduce your debt payments all you have to do is call your friendly lender and have him or her restructure your loans this afternoon. Restructuring debt is often a major credit decision for a lender due to several reasons. First, bank regulators frown upon lenders who allow unprofitable or marginally profitable borrowers risk depositors' money. If your cash flow problems are due to poor profitability or unwise capital investments, your lender may be looking forward to having you pay your loans quickly. Secondly, refinancing debt over a longer term means, the bank is committing itself to have you as a customer for a longer period. If you have a poor attitude, or lack of financial information or vision for the future, the bank may not want to commit to the future with you. Being an excellent credit risk is much more than having strong equity and never missing a payment.

The Best Defense Is a Good Offense

To keep interest rates as low as possible and have your lender correctly structure your debt, you need to convince your lender that you are a good credit risk. Your lender classifies your risk based on the 7 C's of lending: Character (personal), Capability (management), Capital (%equity and growth), Collateral, Conduct (in handling credit), Capacity (to repay the loan) and Conditions (agreed upon by borrower and lender). Every chance you get, you need to point out to your lender that you have specific goals for improving in each of these areas.