Western Beef Resource Committee *Third Edition*

Cattle Producer's Handbook

Finance Section 917

Financial Ratio Analysis: What Do the Numbers Mean?

Robert R. Loucks, C. Wilson Gray, and Neil R. Rimbey
University of Idaho

In 1991 the Farm Financial Standards Task Force (FFSTF) suggested standardized methods of developing balance sheets (950) and income statements (951). They also recommended the use of financial ratios from these standardized documents for use in agricultural financial analysis. Financial ratios provide alternative methods of measuring financial position (liquidity, solvency) or financial performance (profitability, repayment capacity, efficiency).

Financial ratios are the result of a comparison of two elements of financial data. They may be expressed either as a percentage (e.g., 45.1 percent) or as a comparison to one (e.g., 2.2:1). A discussion of financial ratios and the suggested method of calculating them follows.

Measures of Financial Position

Measures of Liquidity

Liquidity is defined as the ability to convert current assets to cash to meet short term debt as it becomes due. FFSTF recommends two measures of liquidity.

1. Current Ratio = Current Assets ÷ Current Liabilities*

Current Ratio is usually expressed as a comparison to one. A "standard" value for creditworthiness is usually 2:1 or greater. The higher the ratio, the greater the liquidity. As a practical matter, this ratio has limitations in usefulness in that it does not recognize that not all current farm assets can be liquidated instantly and that not all Current Liabilities are due instantly. Normally, balance sheet ratios are prepared from year-end balance sheets. If balance sheets are not prepared at the same time each year, the ratios are not directly comparable.

2. Working Capital = Current Assets - Current Liabilities

Working capital is a measure of the amount of funds available to purchase inputs after satisfying all Current Liabilities. It is expressed as a dollar amount. It has little value for livestock ranches where so much of the value of Current Assets is feed inventory, especially in the case of calendar year balance sheets.

Measures of Solvency

Solvency refers to the operation's ability to remain viable or retire debt over an extended period of time. A ranch is said to be solvent if its assets exceed its liabilities. Solvency differs from liquidity in that it is a long-run concept and assumes that all assets will be liquidated and all liabilities will be paid. FFSTF suggests three measures of solvency.

1. Debt/Asset Ratio = Total Liabilities ÷ Total Assets*

This ratio measures financial position. Obviously, the lower the percentage of debt to assets the more solvent the business. From a lender's perspective, the higher the ratio the more risk exposure.

2. Equity/Asset Ratio = Total Equity ÷ Total Assets

This ratio is also called percent equity at fair market value and Net Worth/Asset Ratio. As with all ratios, it is most meaningful as a comparison between accounting periods for an individual ranch business. It is not particularly meaningful as a "benchmark" at a single point in time.

During the 1980s many unprofitable agricultural operations had Equity/Asset Ratios below 60 percent. In addition, a substantial number of operations that failed had Equity/Asset Ratios below 40 percent. This led some financial analysts to the conclusion that agricultural operations with less than 40 percent equity

*Most important/most often used ratios.