

South Dakota State University

Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

Extension Extra

SDSU Extension

12-1-2002

Your Annual Financial Check-up

Jack Davis

South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/extension_extra

Recommended Citation

Davis, Jack, "Your Annual Financial Check-up" (2002). *Extension Extra* . Paper 171.
http://openprairie.sdstate.edu/extension_extra/171

This Other is brought to you for free and open access by the SDSU Extension at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Extension Extra by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.



Your Annual Financial Check-up

Jack Davis, Extension area management specialist

The drought has affected production this year; it may also have a negative impact on the financial health of your business. So, as you wind down the production year it is a good time to take the annual financial check-up.

If the drought has caused severe damage to your business you may need to do some triage:

- 1) Identify the hole. Is the business still able to make money? Assess quickly where it is losing money.
- 2) Plug the wound. Preserve cash; a good practice is to have 25% of next year's expenses in working capital (Current Assets – Current Liabilities). Decrease capital expenditures, do not purchase equipment from cash flow, arrange for term financing. Reduce family expenses, monitor expenditures, and develop a family budget. Arrange for emergency financing.
- 3) Assess the future. Prepare cash flow projections. Is the business able to survive? Is it time to exit? Discuss alternatives with your family, lender, and those involved in your business.
- 4) Follow the doctor's orders. Cut overhead costs—depreciation, interest, taxes, insurance, family draw. Selling assets is hard to do, but it is sometimes necessary to solve a serious financial problem. If you can, sell non-productive assets first. Increase your marketing skills to help increase revenue. Implement alternatives evaluated in step three.

One method of assessment is financial analysis using financial ratios. Use numbers from your balance sheet, income statement, and cash flow to calculate the ratios. The ratios fall into five categories: liquidity, solvency, coverage, profitability, and efficiency.

Liquidity ratios

Liquidity ratios measure the capacity of the business to meet its short-term liabilities, either by using cash or by converting current assets into cash. Creditors and other lenders favor liquidity ratios that tend to reveal financial strength or weakness. The **current ratio** is current assets divided by current liabilities and has long been the primary test for creditworthiness. The larger the ratio, the greater the protection for short-term creditors. A ratio of less than 100% or a declining trend can signal problems in liquidity.

Solvency ratios

Solvency ratios measure the extent to which a business is financed by debt. Lenders of long-term funds and equity investors have an interest in solvency ratios. The **debt to asset ratio** is a way of evaluating the degree of asset financing creditors provide. A higher ratio indicates greater financial risk and lower borrowing capacity. A ratio of less than 30% is considered strong.

Coverage ratios

Coverage ratios predict ability to meet recurring obligations. **Term debt coverage ratio** suggests how solidly the business can cover its contractual fixed obligations. If this ratio has declined for multiple years, it is a signal of financial problems. Wide swings in farm income or net margins from year to year should also serve as warning signs that problems may exist. If the farm is expanding or making major capital adjustments it would be prudent to maintain this ratio at 150% or greater.

Profitability ratios

Profitability ratios measure ability of the business to generate a satisfactory profit. These ratios are typically a good indicator of management's overall effectiveness. The **return on assets (ROA) ratio** measures the profit-generating capacity of total assets of the business. It measures the

farm's effectiveness in using the available total capital—both debt and equity. The ratio keys in on operations—the effectiveness of resources used in generating a profit. The focus is on how well the assets are being used.

A useful way to use ROA is to break it into separate components of profit margin and asset turnover. The Du Pont Company used this method to evaluate its divisions in the early 1900s. The Du Pont analysis breaks ROA into profit margin multiplied by asset turnover.

$$\text{ROA} = (\text{Net Income} + \text{Interest Expense} / \text{Sales}) * (\text{Sales} / \text{Total Assets})$$

$$\text{ROA} = (\text{Profit Margin}) * (\text{Sales} / \text{Total Assets})$$

The operating profit margin is a measure of the operating efficiency of the business. It measures how effectively the business is controlling expenses relative to its value of output. A high profit margin indicates good cost control.

The profit margin is an income statement ratio and asset turnover is a balance sheet ratio.

$$\text{ROA} = (\text{Profit Margin}) * (\text{Asset turnover})$$

A high asset turnover ratio demonstrates efficient use of the assets on the balance sheet.

It is important to examine the productivity of assets. Consider selling low return assets or improve their productivity. Improving efficiency and/or asset turnover increases return on assets.

Different industries have different operating and financial structures. In the heavy capital goods industry the emphasis is on a high profit margin with a low asset turnover whereas in food processing, the profit margin is low and the key to satisfactory returns on total assets is a rapid turnover of assets. In production agriculture, a grain or rangeland

livestock operation will tend to have low asset turnover, especially if land is owned and valued at current market value. On the other hand, livestock feedlots or dairies may have considerably higher asset turnover and a lower profit margin on sales.

Efficiency ratios

For efficiency ratios look at **operating expense ratio** and **interest expense ratio**. Low efficiency can be a result of low prices, high operating expenses, production problems or a combination of the three. The best major enterprises have consistently high efficiency over time.

To improve the operating expense ratio, increase prices through more effective marketing and/or better control of expenses. It is important to closely monitor major expenses, concentrating on the top four or five expenses.

Reducing debt and/or negotiating a lower interest rate can improve the interest expense ratio.

When working with ratios, these rules are important:

- 1) Ratio trends calculated consistently over time will provide better information.
- 2) The definition of ratio components may differ from analyst to analyst, thus yielding inconsistent results.
- 3) Differing accounting policies, overall business size, and maturity of the business impact ratios.
- 4) Ratios supplement but do not replace sound business judgment. Individual business ratios are more meaningful when compared to industry statistics and trends. Trade associations are good sources of comparative financial data for specific industry groups.

This publication and others can be accessed electronically from the SDSU College of Agriculture & Biological Sciences publications page, which is at <http://agbiopubs.sdstate.edu/articles/ExE5046.pdf> or from the Extension Service Drought Information Website at <http://sdces.sdstate.edu/drought/>



Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the USDA. Larry Tidemann, Director of Extension, Associate Dean, College of Agriculture & Biological Sciences, South Dakota State University, Brookings. SDSU is an Affirmative Action/Equal Opportunity Employer (Male/Female) and offers all benefits, services, and educational and employment opportunities without regard for ancestry, age, race, citizenship, color, creed, religion, gender, disability, national origin, sexual preference, or Vietnam Era veteran status.

ExEx 5046: 150 copies printed by CES at a cost of 11 cents each. December 2002.

This material is from the Master Business Manager (MBM) program. If you are interested in learning more about MBM offered by SDSU Cooperative Extension Service, contact your local Extension educator or Jack Davis, management specialist, at 605-796-4841 or davis.jack@ces.sdstate.edu.

Table 1: Financial Ratios Guide		
Financial Ratio	Guideline	Your Ratio
Liquidity:		
Current Ratio: Current Assets ÷ Current Liabilities	Comfort: >150%	Comfort:
	Caution: 100 to 150%	Caution:
	Danger: < 100%	Danger:
Working Capital: Current Assets – Current Liabilities Higher working capital puts businesses in position to survive downturns or take advantage of opportunities.	10 to 25% of projected operating expenses.	
Solvency:		
Debt to Asset Ratio: Total Liabilities ÷ Total Assets	Comfort: < 30%	Comfort:
	Caution: 30 to 65%	Caution:
	Danger: > 65%	Danger:
Profitability:		
Return on Assets (ROA), Du Pont Analysis: Profit Margin Ratio × {(Net Income + Interest) ÷ (Sales)} × Asset Turnover (Sales ÷ Total Assets)	Determine if Profit Margin or Asset Turnover is helping ROA.	
Operational Ratios:		
Operating Expense Ratio: Total Operating Expense (less interest & depreciation) ÷ Gross Revenue	Comfort: < 65%	Comfort:
	Caution: 65 to 70%	Caution:
	Danger: > 70%	Danger:
Interest Expense Ratio: Total Interest Expense ÷ Gross Revenue	Comfort: < 10%	Comfort:
	Caution: 10 to 20%	Caution:
	Danger: > 20%	Danger:
Coverage Ratio: {(Net Income + Personal Income + Depreciation + Interest on Term Loans) – (Withdraws & Income Tax)} ÷ (Principal & Interest Payments on Term Loans)	Comfort: > 1.50	Comfort:
	Caution: 1.10 to 1.5	Caution:
	Danger: <1.10	Danger: