



Agricultural and Natural Resources
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This is one in a series of articles produced by University of Wisconsin-Extension agents and specialists to address farming in difficult times. More articles can be found on the Extension Responds website at: www.uwex.edu/ces/ag/farmingindifficulttimes.html

Additionally, the table provides information about farm financial ratios and benchmarks.

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Managing in Difficult Times: Balance Sheet Can Help Signal Which Way to Turn

Madison, Wis. – With so much uncertainty about the depth and length of this current recession, not to mention the sudden and dramatic effect it's had on agricultural markets, farmers should review financial statements carefully looking for signs regarding additional investment or refinancing decisions going forward, according to Greg Blonde, University of Wisconsin-Extension Waupaca County agriculture agent.

While profitability and liquidity are essential for any business to succeed, solvency measures, calculated from the balance sheet or net worth statement, can provide a good indication of the farm business's ability to withstand financial challenges over time. Farms with strong or stable financial positions have a much greater capacity to survive economic downturns because of larger net worth and/or earning capacity. Farms with less owner equity (net worth) and limited cash flow are much more vulnerable. The balance sheet can provide a starting point to look for signs regarding status, direction and even financing options available to each farm business.

Those farms with seventy percent or more owner equity (thirty percent or less debt-to-asset ratio) might see a "green light" when considering additional borrowing. But, with economic uncertainty, and the possibility of further decline in asset values, any additional borrowing will need to improve their earnings in order to help build back equity and maintain a strong financial position in the future. Also, keep in mind that assets are often discounted or depreciated, sometimes as much as fifty percent or more, when added to the balance sheet, which can have a bigger impact on owner equity than initially expected. For example, the cost of a new barn or milking parlor may be discounted as much as fifty percent or more as an asset on the balance sheet to reflect its "current market value" if the operation were sold.

Although farms with 30-70% owner equity, or debt-to-asset ratio, may very well be financially stable, consider this a “yellow” caution sign when considering any additional borrowing. Even refinancing from this position may actually make the situation worse over the long run if the farm has not been able show profitability over time. An alternative to additional borrowing is to talk with your lender about deferring principal and/or interest payments temporarily to help improve cash flow. If the operation has a history of weak earnings, more debt will likely only make the situation worse down the road.

For those with less than thirty percent owner equity (seventy percent or more debt-to-asset ratio), the farm is technically insolvent and may not be able to cover all of the current debt if the assts were liquidated, depending on how accurate the assets on the balance sheet reflect current market values. Consider this a “red light” or stop sign when it comes to borrowing more money, because most lenders definitely will. Exceptions may include those relatively new to the business with exceptional production and profitability performance. Most often however, the best solution in this situation is to liquidate and preserve whatever equity is still available. In the long run, doing nothing, deferring existing payments or even refinancing, will usually only make the situation worse and more painful for everyone involved.

So, make it a point to sit down with your lender and determine what signs are coming from your financial statements.

To access more information and/or tools to help analyze your situation, link to the Extension Responds web page at: www.uwex.edu/ces/ag/farmingindifficulttimes.html

For assistance in making these tough decisions, contact your UW-Extension county agent, your Farm Business and Production Management Instructor in the Technical College or the DATCP Farm Center at 1-800-942-2474.

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File: risk management, farming in difficult times

Farm Financial Ratios and Benchmarks Calculations & Implications

(> greater than; < less than)

| Liquidity Analysis | Calculation | Strong | Stable | Weak |
|--|--|---|-------------|--------|
| Current Ratio | Total Current Farm Assets ÷ Total Current Farm Liabilities | > 1.50 | 1.00 - 1.50 | < 1.00 |
| Working Capital | Total Current Farm Assets – Total Current Farm Liabilities | Compare with business expenses; amount varies by size of operation | | |
| Working Capital Rule** | Working Capital ÷ Total Expenses | > 50% | 20 - 50% | < 20% |
| Solvency Analysis | Calculation | Strong | Stable | Weak |
| Debt / Asset Ratio | Total Farm Liabilities ÷ Total Farm Assets | < 30% | 30 - 70% | > 70% |
| Equity / Asset Ratio | Total Farm Equity ÷ Total Farm Assets | > 70% | 30 - 70% | < 30% |
| Debt / Equity Ratio | Total Farm Liabilities ÷ Total Farm Equity | < 42% | 42 - 230% | > 230% |
| Profitability Analysis | Calculation | Strong | Stable | Weak |
| Rate of Return on Farm Assets (ROA) <i>(mostly owned)</i> | (NFIFO* + Farm Interest Expense – Operator Management Fee) ÷ Average Total Farm Assets | > 5% | 1 - 5% | < 1% |
| Rate of Return on Farm Assets (ROA) <i>(mostly rented or leased)</i> | (NFIFO* + Farm Interest Expense – Operator Management Fee) ÷ Average Total Farm Assets | > 12% | 3 - 12% | < 3% |
| Rate of Return on Farm Equity (ROE) | (NFIFO* – Operator Management Fee) ÷ Total Farm Equity | Look at trends and compare to other farm and non-farm investments | | |
| Operating Profit Margin | (NFIFO* + Farm Interest Expense – Operator Management Fee) ÷ Gross Revenue | > 25% | 10 - 25% | < 10% |
| Financial Efficiency | Calculation | Strong | Stable | Weak |
| Asset Turnover Ratio | Gross Revenue ÷ Average Total Farm Assets | Depends heavily on type of operation and whether it is owned / leased | | |
| Operating Expense / Revenue Ratio <i>(mostly owned)</i> | Operating Expenses (less interest & depreciation) ÷ Gross Revenue | < 65% | 65 - 80% | > 80% |
| Operating Expense / Revenue Ratio <i>(mostly rented or leased)</i> | Operating Expenses (less interest & depreciation) ÷ Gross Revenue | < 75% | 75 - 85% | > 85% |
| Depreciation Expense Ratio | Depreciation Expense ÷ Gross Revenue | compare to capital replacement and term debt repayment margin | | |
| Interest Expense Ratio | Interest Expense ÷ Gross Revenue | < 12% | 12 - 20% | > 20% |
| Net Farm Income From Operations Ratio | NFIFO* ÷ Gross Revenue | Look at trends; varies with cyclical nature of agricultural prices & income | | |
| Repayment Analysis | Calculation | Strong | Stable | Weak |
| Term Debt and Lease Coverage Ratio | [(NFIFO* + Gross Non Farm Revenue + Depreciation Expense + Interest on Term Debts and Capital Leases) – Income Tax Expense – Family Living Withdrawals] ÷ Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases | > 150% | 110 - 150% | < 110% |
| Debt Payment / Income Ratio** | Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases ÷ (NFIFO* + Gross Non-Farm Revenue + Depreciation Expense + Interest on Term Debts & Capital Leases) | < 25% | 25 - 50% | > 50% |

*NFIFO = Net Farm Income From Operations, excluding gains or losses from disposal of farm capital assets. ** Not an official standard or benchmark, but widely used in the financial industry. Developed by Dr. David Kohl, Agricultural Economist, Virginia Tech University. Modified by Greg Blonde, Waupaca County UW-Extension Agriculture Agent. March, 2009.