Farm Record Checkup Time

Winter is the time when many farm business owners catch up on bookwork. While everyone keeps some type of records for income tax reporting, business managers analyze and utilize those records for business decisions. One of the best ways to measure the financial health of a farm business is to look at selected balance sheet and income statement ratios.

The National Farm Financial Standards Task Force, a committee comprised of lenders, farmers and educators, developed a set of uniform financial statements and ratios for farming. Financial statements and financial ratios are interconnected. Ratios are categorized into five areas: liquidity, solvency, profitability, repayment capacity and financial efficiency. A group of these ratios have become known as the “Sweet 16” ratios.

The liquidity ratios indicate the ability to meet obligations as they become due. The solvency ratios are a measure of the ability to pay all debts. The profitability is the difference between value and cost of goods sold. The repayment capacity ratios are an indication of the ability to repay term debts on time. The financial efficiency ratios are a measure of how effectively assets are used to generate income.

The key to utilizing ratios involves not only calculating the ratios, but also understanding their relevance and relationships. An annual review of these ratios is valuable in determining trends, strengths and weaknesses. A visual way to look at ratios is to record them on a scorecard. An easy to use scorecard can be found at http://www.cffm.umn.edu/Pubs/vermont.pdf If you do not have computer access, take this article to your county extension center and they can print it for you.

The equations for the “Sweet 16” ratios are listed below:

**Liquidity**

1. **Current ratio** = total current farm assets/total current farm liabilities  
   (desirable range: 1.5 - 2.0)
2. **Working capital** = total current farm assets - total current farm liabilities  
   (desirable range: positive, stable)

**Solvency**

3. **Debt/asset ratio** = total farm liabilities/total farm assets  
   (desirable range less than 0.4)
4. **Equity/asset ratio** = total farm equity/total farm assets  
   (desirable range greater than 0.6)
5. **Debt/equity ratio** = total farm liabilities/total farm equity  
   (desirable range less than 0.66)

**Profitability**

6. **Rate of return on farm assets** = (net farm income from operations + farm interest expense - value of operator and unpaid family labor)/average total farm assets  
   (desirable range over 4%)
7. **Rate of return on farm equity** = (net farm income from operations - value of operator and unpaid family labor)/average total farm equity  
   (desirable range greater than ROR on farm assets)
8. **Operating profit margin** = (net farm income from operations + farm interest expense - value of operator and unpaid family labor)/gross revenue  
   (desirable range 20% - 30%)

9. **Net farm income**  
   no standard

### Repayment Capacity

10. **Term Debt and Capital Lease Coverage Ratio** = (net farm income from operations + total non-farm income + depreciation expense + interest on term debt and capital leases - total income tax expense - family living withdrawal)/principal and interest payments on term debt and capital leases  
    (desirable range greater than 1.25)

11. **Capital replacement and term debt repayment margin** = net farm income from operations + total non-farm income + depreciation expense - total income tax expense - family living withdrawal (including total annual payments on personal liabilities) - payment on prior unpaid operating debt - principal payments on current portion of term debt and capital leases  
    (desirable range at least 25% more dollars than scheduled payments on debts & leases)

### Financial Efficiency

12. **Asset turnover ratio** = gross revenue/average total farm assets  
    (desirable range greater than 25% - 30%)

13. **Operating expense ratio** = operating expense-depreciation/gross revenue (desirable range less than 65%)

14. **Depreciation expense ratio** = depreciation expense/gross revenue  
    (desirable range less than 15%)

15. **Interest expense ratio** = interest expense/gross revenue  
    (desirable range less than 15%)

16. **Net farm income from operations ratio** = net farm income from operations/gross revenue  
    (desirable range greater than 15%)

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**Taxation Tidbits: Employee Wage Statement**

The end of the calendar year provides an excellent opportunity for employers to analyze the costs of hired labor and to communicate this information to their employees. Too many employees and employers fail to recognize the total benefits/costs of hired labor. Substantial labor costs are in the form of fringe benefits and other non-taxable benefits. Since a W-2 must be provided to each employee in January, take this opportunity to complete and include an “Employee Wage and Benefits Statement” with the employee’s W-2. Click here to view statement.