

Farm Financial Measures Worksheet

Jack B. Davis, CPA | SDSU Extension Crops Business Management Field Specialist

Information needed

The following items can be taken from the farm's beginning and ending net worth statements (balance sheets), using the fair market value. For items C, D, and G find the average of the beginning and ending values.

	Beginning	Ending	Average
A. Current farm assets			
B. Current farm liabilities			
C. Total farm assets			
D. Total farm liabilities			
E. Accrued Interest			
F. Farm liabilities due in 12 months (fixed), plus accrued interest (fixed)			
G. Machinery and equipment value (market)			

The following items can be taken from the latest net income (profit and loss) statement and/or income tax records.

H. Gross farm revenue (accrual)	
I. Net farm income from operations (accrual) (excluding capital gains and losses)	
J. Farm capital gains and losses	
K. Farm interest expense (cash interest paid - beginning E + ending E)	
L. Farm depreciation expense	
M. Non-farm income received (take-home)	
N. Family living and income tax expenditures	
O. Value of operator and unpaid family labor and management	

The following item can be taken from crop production records.

P. Total crop acres farmed (owned, rented, custom)	
--	--

Financial Performance Measures

Liquid measures	Your farm	Comparison
1. Ending current ratio [A/B]	_____ %	_____ %
2. Ending working capital [A/B]	\$ _____	\$ _____
3. Working capital to gross revenue [line 2/H]	_____ %	_____ %
Solvency measures		
4. Ending debt to asset ratio [D/C]	_____ %	_____ %
5. Ending net worth [C-D]	\$ _____	\$ _____
6. Net worth per crop acre [line 5/P]	\$ _____	\$ _____
Profitability measures		
7. Net farm income [I + J]	\$ _____	\$ _____
8. Rate of return on farm assets (ROA) [(I+K-O)/average C]	_____ %	_____ %
9. Rate of return on farm equity (ROE) [(I-O)/(average C - average D)]	_____ %	_____ %
10. Operating profit margin ratio [(I + K - O)/H]	_____ %	_____ %
Financial efficiency ratios		
11. Asset turnover ratio [H/average C]	_____ %	_____ %
12. Operating expense ratio [(H - I - K - L)/H]	_____ %	_____ %
13. Depreciation expense ratio [L/H]	_____ %	_____ %
14. Interest expense ratio [K/H]	_____ %	_____ %
15. Net farm income ratio [I/H]	_____ %	_____ %
(Sum of lines 12, 13, 14, 15 should be 100%)		
16. Machinery investment per crop acre [average G/P]	\$ _____	\$ _____
Repayment capacity measures		
17. Capital debt repayment capacity ratio [(I + K + L + M - N)/F]	_____ %	_____ %
18. Capital debt repayment capacity [(I + K + L + M - N) minus F]	\$ _____	\$ _____
19. Average interest rate on farm debt [K/average D]	_____ %	_____ %

Five-year trend worksheet for farm financial measures

Year	_____	_____	_____	_____	_____
Liquidity					
Ending current ratio	_____	_____	_____	_____	_____
Ending working capital	_____	_____	_____	_____	_____
Working capital per \$ of gross revenue	_____	_____	_____	_____	_____
Solvency					
Ending total debt-to-asset ratio	_____	_____	_____	_____	_____
Ending net worth	_____	_____	_____	_____	_____
Net worth per crop acre	_____	_____	_____	_____	_____
Profitability					
Net farm income	_____	_____	_____	_____	_____
Rate of return on farm assets	_____	_____	_____	_____	_____
Rate of return on farm equity	_____	_____	_____	_____	_____
Operating profit margin ratio	_____	_____	_____	_____	_____
Financial efficiency					
Asset turnover ratio	_____	_____	_____	_____	_____
Operating expense ratio	_____	_____	_____	_____	_____
Depreciation expense ratio	_____	_____	_____	_____	_____
Interest expense ratio	_____	_____	_____	_____	_____
Net farm income ratio	_____	_____	_____	_____	_____
Machinery investment per crop acre	_____	_____	_____	_____	_____
Repayment capacity					
Capital debt repayment capacity ratio	_____	_____	_____	_____	_____
Capital debt repayment capacity	_____	_____	_____	_____	_____
Average interest rate on farm debt	_____	_____	_____	_____	_____