

Summary of Key Ratio Calculations and Benchmarks

Repayment Analysis	Green	Yellow	Red	My Farm	Calculation
Term Debt and Lease Coverage Ratio	>1.50	1.10 to 1.50	<1.10	0.00	$[(NFIFO^* + \text{Gross Non-Farm Revenue} + \text{Depreciation Expense} + \text{Interest on Term Debts and Capital Leases}) - \text{Income Tax Expense} - \text{Family Living Withdrawals}] / \text{Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases}$
Debt Payment / Income Ratio	<0.25	0.25 to 0.50	>0.50	0.00	$\text{Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases} / (NFIFO^* + \text{Gross Non-Farm Revenue} + \text{Depreciation Expense} + \text{Interest on Term Debts and Capital Leases})$
Liquidity Analysis					
Current Ratio	> 1.50	1.00 to 1.50	< 1.00	0.00	Total Current Farm Assets / Total Current Farm Liabilities
Working Capital	compare to business expenses, absolute amount depends on scope of operation			\$0	Total Current Farm Assets - Total Current Farm Liabilities
Working Capital/VFP	> 0.30	0.10 to 0.30	<0.10	0.00	Working Capital / Value of Farm Production
Solvency Analysis					
Debt / Asset Ratio (mostly owned)	<20%	20% to 60%	>60%	0.00	Total Farm Liabilities / Total Farm Assets
Debt / Asset Ratio (mostly rented/leased)	<30%	30% to 70%	>70%	0.00	Total Farm Liabilities / Total Farm Assets
Equity / Asset Ratio (mostly owned)	>80%	40% to 80%	<40%	0.00	Total Farm Equity / Total Farm Assets
Equity / Asset Ratio (mostly rented/leased)	>70%	30% to 70%	<30%	0.00	Total Farm Equity / Total Farm Assets
Debt / Equity Ratio (mostly owned)	<25%	25% to 150%	>150%	0.00	Total Farm Liabilities / Total Farm Equity
Debt / Equity Ratio (mostly rented/leased)	<42%	42% to 230%	>230%	0.00	Total Farm Liabilities / Total Farm Equity
Profitability Analysis					
Rate of Return on Farm Assets (ROA) (mostly owned)	>5%	1% to 5%	<1%	0.00	$(NFIFO^* + \text{Farm Interest Expense} - \text{Operator Management Fee}) / \text{Average Total Farm Assets}$
Rate of Return on Farm Assets (ROA) (mostly rented / leased)	>11%	3% to 11%	<3%	0.00	$(NFIFO^* + \text{Farm Interest Expense} - \text{Operator Management Fee}) / \text{Average Total Farm Assets}$
Rate of Return on Farm Equity (ROE)	look at trends and compare to other farm and non-farm investments			0.0%	$(NFIFO^* - \text{Operator Management Fee}) / \text{Average Total Farm Equity}$
Operating Profit Margin Ratio	>25%	10% to 25%	<10%	0.00	$(NFIFO^* + \text{Farm Interest Expense} - \text{Operator Management Fee}) / \text{VFP}$
Financial Efficiency					
Asset Turnover Ratio	depends heavily on type of operation and whether it is owned / leased			0.00	VFP / Average Total Farm Assets
Operating Expense / VFP Ratio (mostly owned)	<55%	55% to 65%	>65%	0.00	Operating Expenses [excluding interest and depreciation] / VFP
Operating Expense / VFP Ratio (mostly rented / leased)	<65%	65% to 75%	>75%	0.00	Operating Expenses [excluding interest and depreciation] / VFP
Depreciation Expense Ratio	compare to capital replacement and term debt repayment margin			0.0%	Depreciation Expense / VFP
Interest Expense Ratio	<10%	10% to 20%	>20%	0.00	Interest Expense / VFP
Net Farm Income From Operations Ratio	look at trends, varies due to cyclical nature of agricultural prices and incomes			100.0%	NFIFO* / VFP

Modified from David Kohl

* NFIFO = Net Farm Income From Operations excluding gains or losses from the disposal of farm capital assets

These are general benchmarks. You should use Financial Characteristics of Illinois Farms for more detailed peer groups and the respective financial ratios (www.farmdoc.uiuc.edu/finance/).

Value of Farm Production (VFP) = Gross Revenue - Purchased Feed - Purchased Market Livestock