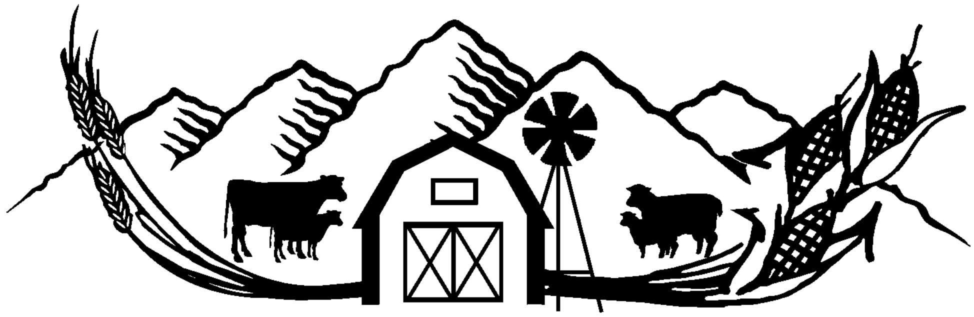

Risk and Resilience in Agriculture

From Risk to Resilience in Agriculture: The Financial Resource

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Liquidity Measures:

Risk ◄- - - - - - - - - - - - - ► Resilience

1. Current Ratio
Risky - Less than 1.0
Greater than 1.5 - **Resilient**

2. Working capital
No risk or resilience guidelines. The amount of working capital is related to the size of farm business.

Poor liquidity measures may indicate poor management of cash and/or debt payments are not in line with payment ability. To improve these measures the manager should:

1. Improve marketing.
2. Keep tighter control of cash inflows and outflows.
3. Restructure debt payments to ability to pay and timing of cash inflows.
4. Re-examine crop and livestock enterprises currently being produced.

Profitability Measures:

Risk ◄- - - - - - - - - - - - - ► Resilience

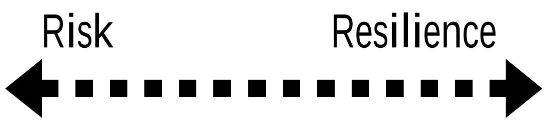
1. Rate of Return on Equity
Risky - Less than 5 percent
Greater than 10 percent - **Resilient**

2. Rate of Return on Assets
Risky - Less than 3 percent
Greater than 8 percent - **Resilient**

3. Net Farm Income
This measure is an absolute amount, so it is difficult to compare across farm businesses. It

is also impossible to establish a target amount for all farm businesses as well.

Solvency Measures:



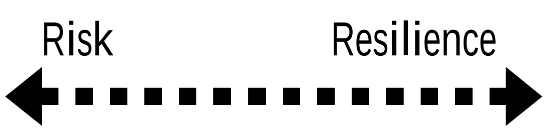
1. Debt to Asset Ratio
Risky - Greater than 50 percent
Less than 35 percent - **Resilient**

2. Equity to Asset Ratio
Risky - Less than 50 percent
Greater than 60 percent - **Resilient**

3. Leverage Ratio
Risky - Greater than 1:1
Less than .75:1 - **Resilient**

Solvency measures may indicate growth was too fast, poor management, capital expenditures increased too rapidly. Some ways to improve these measures are to restructure debt, modify enterprise selection, control capital expenditures, control family living expenses, control operating costs, etc.

Financial Efficiency Measures:



1. Operating Expense Ratio
Risky - Greater than 80 percent
Less than 65 percent - **Resilient**

2. Asset Turnover Ratio
Risky - Less than 10 percent
Greater than 20 percent - **Resilient**

These measures are industry standards, and depending on the type of operation and production system(s), these numbers could vary. A single set of numbers make analysis somewhat difficult. A starting point would be to compare your ratios to those of the industry to compare with similar firms. But this is only part of the picture, an important part of the analysis relies on the firm's past history and trends. Ideally, you should have at least three years of good financial records with which to do a proper analysis - the more, the better. Studies have shown that in a majority of cases, resilient indicators will show a negative trend for several years before deteriorating to risk levels.

These risk to resilience indicators provide an early warning system for potential problems. By studying past indicators, as well as comparing with standard guidelines, any changes from expected levels can alert managers to problems that may be developing.