

FARMER MAC

Accelerating Rural Opportunities

Dr. Dave's Ag Lending Midyear Report



July 11, 2024

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Pulse of the Agricultural & Rural Economy Challenges

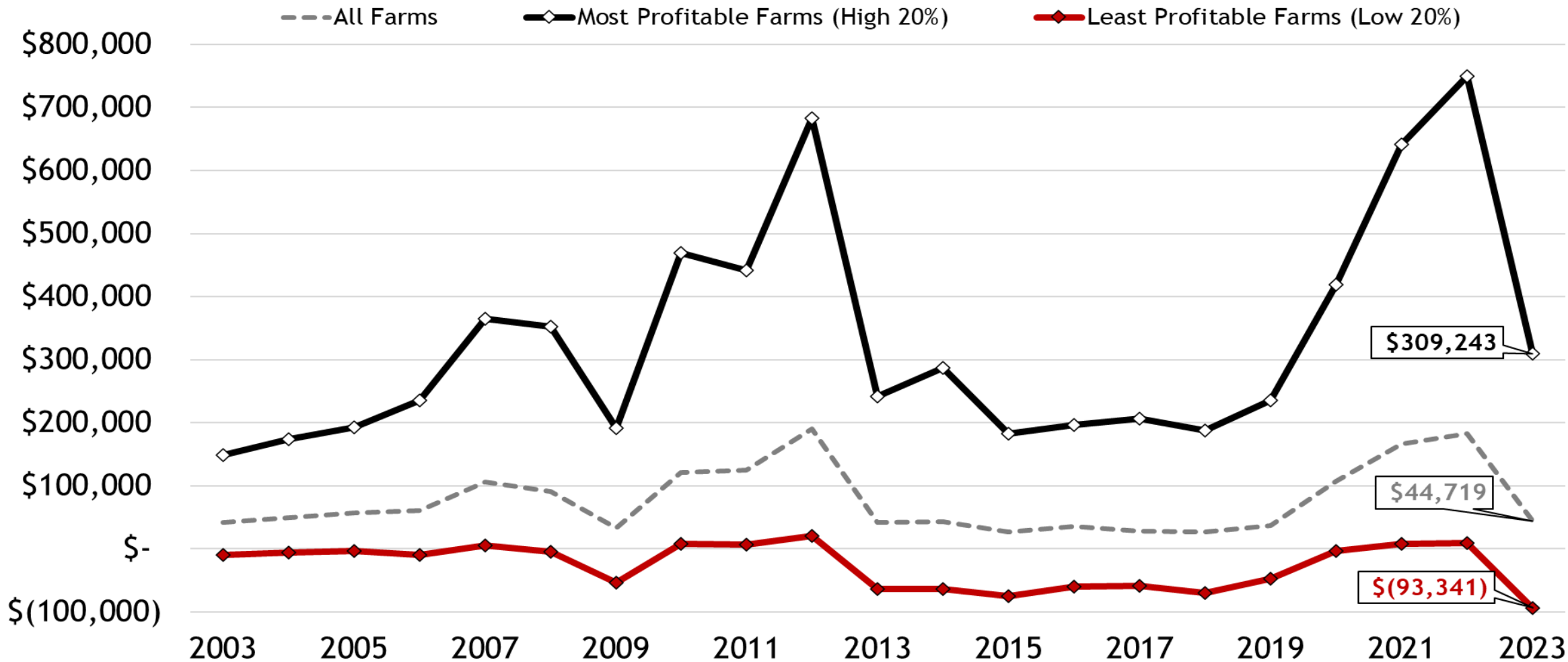
- Margin compression, resilient, inflated cost, lower commodity prices
- Higher interest rates
 - Impact on operating money
 - Possible impact on long term rates- “resets”
- Shrinking working capital and cash positions
- Storage of grain commodities with declining prices
- Protein sector, dairy, poultry & pork margin compressions
- Beef & livestock industries continue to be economically strong
- Land values
 - Reduced number of buyers in some areas
 - Solid demand in other areas
 - Cash rents: resiliently high



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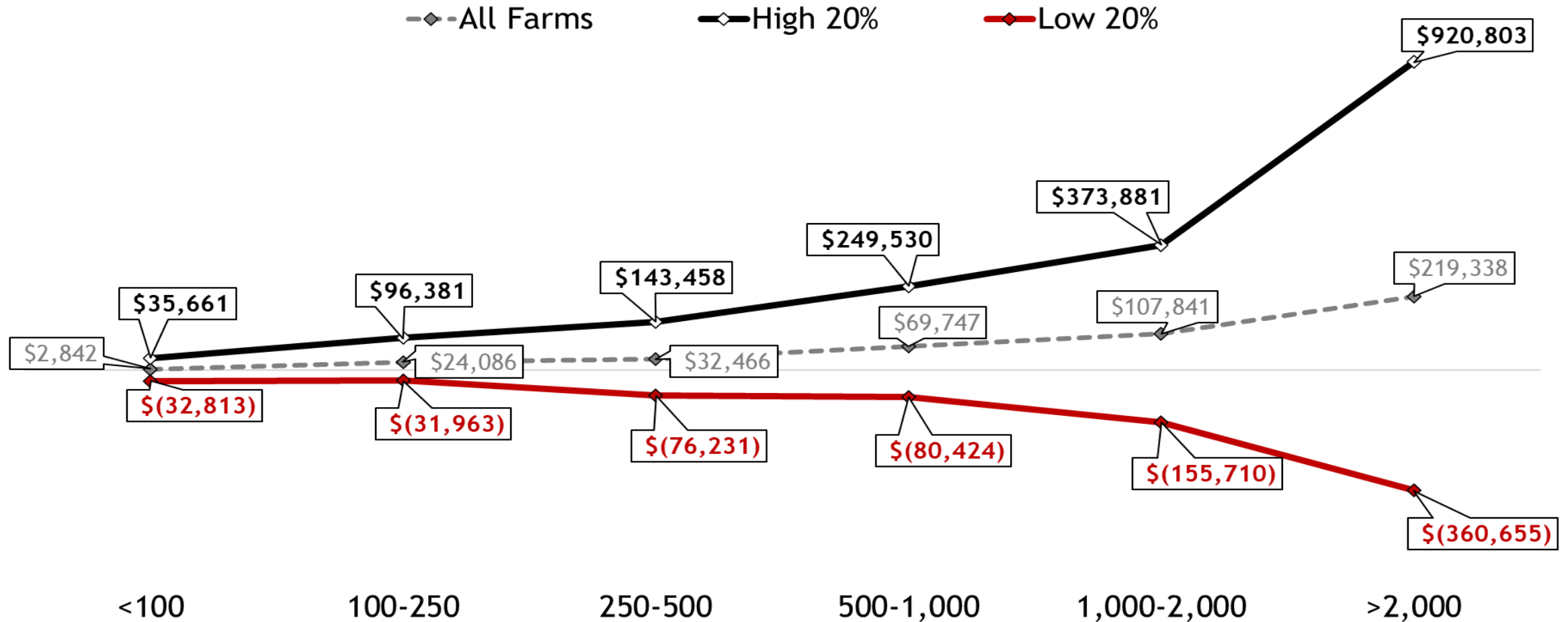
Median Net Farm Income by Profit Group

Data: Minnesota, Sorted by Profitability Group



2023 Median Net Farm Income by Farm Size

Data: Minnesota, All farms, Farm size measured by gross revenue in thousands of dollars



Farm Size in Thousands of Dollars of Gross Revenue



Center for Farm Financial Management
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FINBIN

How Do Farms Stack Up Historically? 2013 - 2023

Historical information for Southwest, South Central & Southeast Minnesota

The source of the green, yellow, and red credit risk rating is from "Weighing the Variables" by David M. Kohl. He considers the six (6) color coded factors below to be key indicators of financial credit quality.

Green	The farm business enjoys a competitive position
Early Yellow	The farm business has some early caution signs
Late Yellow	The farm business has some major caution signs
Red	The farm business could face some major obstacles

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Current Ratio											
Top 10 Percent	2.37	2.12	2.28	2.30	2.24	2.22	2.30	2.69	2.92	3.43	3.27
High 20 Percent	2.40	2.24	2.21	2.21	2.11	2.20	2.20	2.39	2.83	3.29	3.11
Average Farms	2.03	1.79	1.64	1.62	1.57	1.51	1.51	1.98	2.47	2.83	2.31
Low 20 Percent	1.60	1.23	1.23	1.19	1.12	1.07	1.07	1.23	1.75	1.76	1.62
Farm Debt to Asset Ratio (Market)											
Top 10 Percent	39%	42%	38%	39%	40%	39%	40%	40%	41%	38%	37%
High 20 Percent	38%	40%	39%	40%	41%	39%	41%	41%	41%	40%	38%
Average Farms	40%	43%	45%	45%	45%	46%	46%	44%	44%	43%	43%
Low 20 Percent	46%	52%	54%	54%	53%	55%	54%	51%	51%	53%	49%
Rate of Return on Farm Assets - Rent/Lease Majority of Assets (Cost)											
Top 10 Percent	7.8%	12.5%	5.8%	5.8%	6.8%	5.9%	7.8%	12.3%	15.7%	14.4%	7.6%
High 20 Percent	7.4%	10.4%	5.2%	5.6%	6.3%	5.2%	7.2%	11.4%	15.1%	14.1%	6.9%
Average Farms	2.6%	3.7%	0.8%	1.4%	1.9%	1.0%	3.4%	7.8%	11.4%	10.7%	2.1%
Low 20 Percent	-6.2%	-5.5%	-5.2%	-4.0%	-3.8%	-4.0%	-3.4%	-1.7%	-0.4%	-1.7%	-4.7%
Term Debt Coverage Ratio											
Top 10 Percent	236%	336%	197%	199%	215%	233%	273%	403%	574%	562%	326%
High 20 Percent	218%	297%	178%	190%	203%	208%	246%	375%	553%	529%	279%
Average Farms	102%	133%	77%	90%	102%	91%	148%	274%	389%	372%	125%
Low 20 Percent	67%	47%	-46%	-20%	-13%	-21%	3.0%	72.0%	109.0%	85.0%	33.0%
Operating Expense Ratio											
Top 10 Percent	73.2%	73.3%	73.8%	72.7%	72.8%	72.7%	73.3%	67.4%	62.6%	62.0%	73.3%
High 20 Percent	72.5%	73.8%	74.5%	73.8%	74.2%	74.7%	74.3%	68.4%	62.5%	63.4%	73.9%
Average Farms	81.4%	79.8%	84.6%	83.0%	82.3%	84.3%	79.4%	71.2%	66.6%	67.6%	82.7%
Low 20 Percent	99.9%	99.2%	99.6%	96.2%	96.6%	97.4%	95.3%	89.2%	87.9%	88.7%	99.5%
Interest Expense Ratio											
Top 10 Percent	2.9%	2.2%	3.0%	3.3%	3.2%	3.9%	3.4%	2.8%	2.0%	2.0%	2.6%
High 20 Percent	3.1%	2.4%	3.2%	3.5%	3.4%	3.9%	3.7%	3.1%	2.2%	2.2%	2.9%
Average Farms	3.9%	3.7%	4.2%	4.6%	4.8%	5.4%	5.2%	4.3%	3.1%	3.0%	4.3%
Low 20 Percent	4.5%	6.1%	4.7%	5.4%	6.1%	6.6%	7.8%	8.2%	5.1%	5.4%	5.5%



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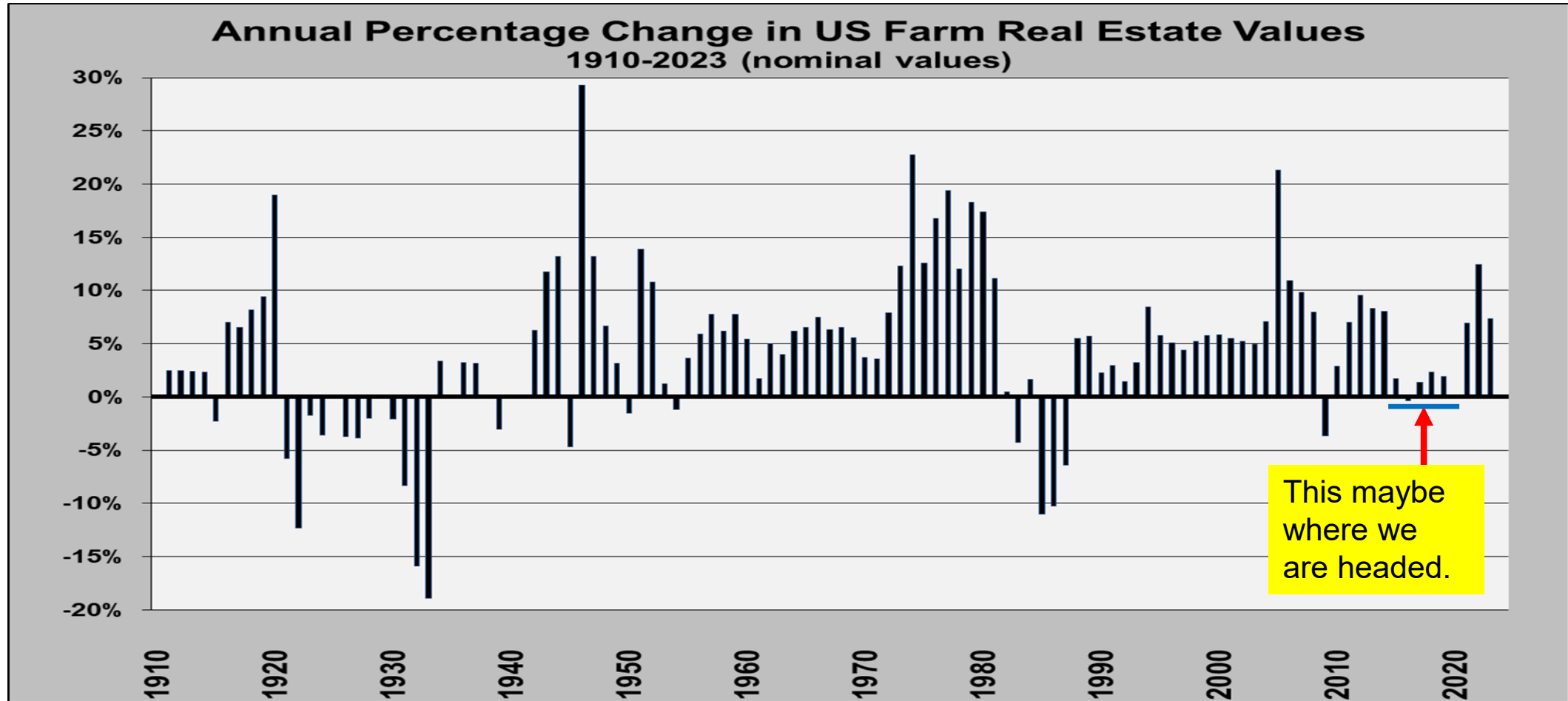


South Central College



RIVERLAND
Community College

U.S. Farm Real Estate Values



Source: Dr. Steve Isaacs, University of Kentucky

Quick Global Economic Assessment

- China
 - Demographic
 - Housing decline
 - Stock decline
 - Sanction/tariffs/trade
- India
 - Farm policy protectionism
- Europe
 - Tourism
 - Green wave



- Mexico/Canada
 - New leader, same policy
 - Canada: slow economy
- Southern Hemisphere
 - Belt & Road Initiative
 - Currency challenges

U.S. Economy Snapshot

- ALICE (asset-limited, income-constrained, employed)
- Government debt \$1 Trillion increase every 100 days
- Credit card debt = \$1.3 Trillion
- LEI, PMI, Consumer Sentiment, Inverted Yield Curve
- Delinquency on credit card debt & auto loans highest level since 2012
- Government money driving A.I. (artificial intelligence) & green energy



U.S. & North American Economy

- 29% of global economy or approximately 5% of population
- Economic expansion longer, recession shorter
- Inflation & interest rates
 - Zero bound over
 - R-Star
- Stock market driven by A.I. and debt
- Federal debt
- Canada & Mexico
 - Natural resource- demographics



Factors for Interest Rate Decline

- Issue of Federal Reserve credibility!
- Core inflation <2.5% instead of 2.0%
- Unemployment false reading!
- Retail/consumer sales decline
- Interest rates globally



Long Term Interest Rates

- Federal Reserve Rate 2.25% - 3.25%
- Prime Rate 5.25% - 6.25%
- Business/individual interest rates generally 1 - 4% above Prime
 - Size of the loan
 - Risk
 - Market perception of risk
- Other



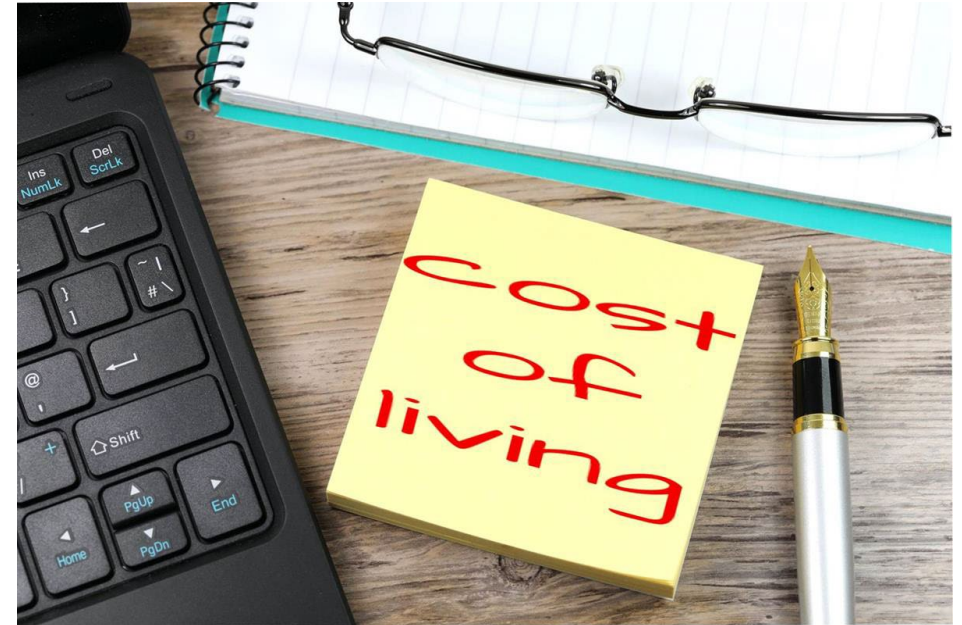


Lenders:
What is Headed Your Way?

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Lower Coverage Ratios

- Operating losses
- Refinances at higher rates
- Substantially higher living costs
- Low 20% negative ratios



Lenders: What is Headed Your Way?

Decline in Working Capital

- Devaluation of inventory
- Operating losses
- Capital expenditure decisions
- Lenders replenish working capital
 - Plan to preserve
 - Burn rate
 - Long term debt obligations



Lenders: What is Headed Your Way?

Monitoring Intensity!

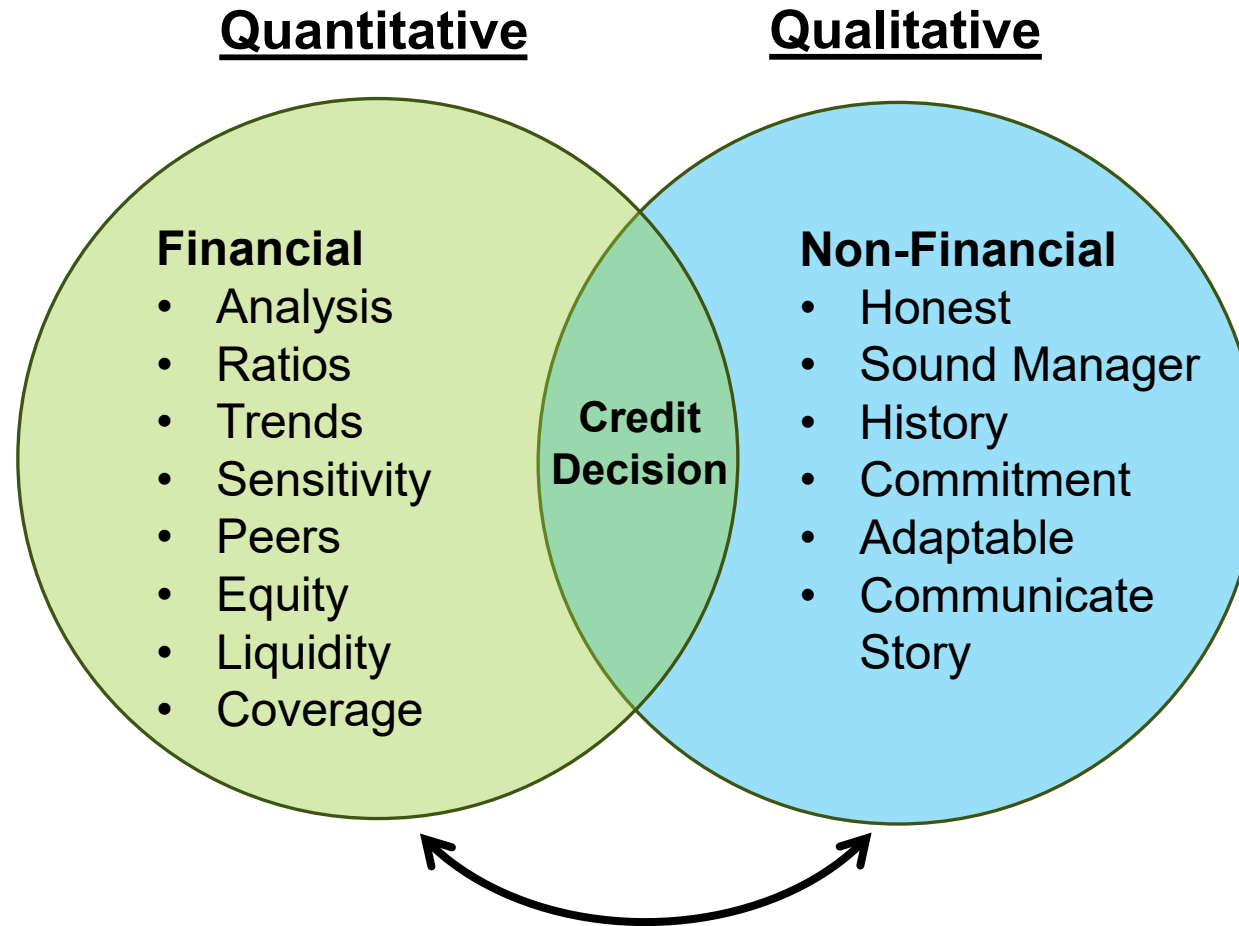
- Once a year is not acceptable
- Accounts payable
- Credit card debt buildup
- Numbers decline, acceleration in larger customers
- Producers seeking new lenders
- Split lines of credit

Lenders: What is Headed Your Way?

Surprises

- Fraudulent activities
- Bills unpaid & left off payables
- Capital expenditures – deferred payments & maintenance
- Non-collectible accounts receivable
 - Custom work
 - Grain/livestock
- Loans from friends and/or relatives
- Machinery & equipment values decline by 50%
- Divorce, depression & disengagement

The Art & Science of Ag Lending



How Do They Link Up? Connect the Dots!

Agricultural Lending Financial Spectrum

Collateral Lender

- Don't know cost of production
- Monitor financials once a year for tax reasons, no ownership of the numbers
- Shoot from the hip, marketing & risk management
- Family living cost issues
- Lender develops the statements
- <25% debt to asset ratio with land collateral

Profit, Cash flow, Sixth C Lender

- Knows cost of production & break evens via enterprise
- Develops & monitors financials & cash flows frequently
- Marketing & risk management plan executed and monitored
- Family living budget separate from the business budget
- Team of advisors
- Aforementioned is critical for producer renting & leasing and > 50% debt to asset ratio.

Bridge & Pier Concept

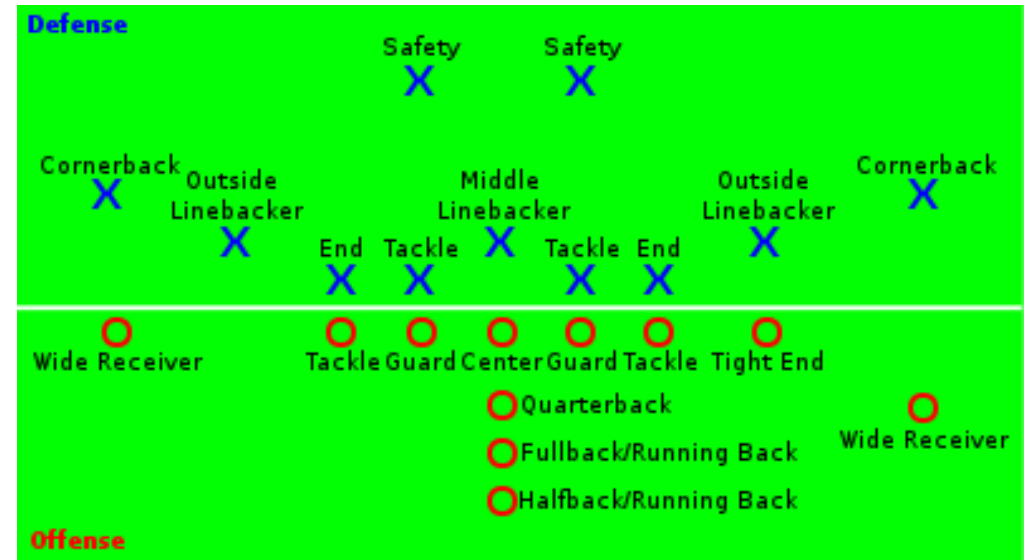
- Are you building a bridge or a pier?

The more you go down the pier, the deeper the water. This increases the need for a higher level of expertise, and there are fewer options.



Playing Defense vs. Risk

- Defensive Line = Cash Flow & Profits
- Linebackers = Working Capital
- Pre-Safeties = Equity
- Safety = Collateral



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Business IQ: Management Factors

Critical Questions for Crucial Conversations

<u>Farmer Checklist</u>	<u>Your Score</u>	<u>Green (3 points or 4*)</u>	<u>Yellow (2 points)</u>	<u>Red (1 point)</u>
1. Knows cost of production		Written	In head	No idea
2. Knows cost of production by enterprise		Written*	In head	No idea
3. Goals - business, family, & personal		Written*	In head	No idea
4. Record keeping system		Accrual adjusted	Schedule F (one & done)	No idea
5. Projected cash flow		Written*	In head	No idea
6. Financial sensitivity analysis		Written*	In head	No idea
7. Understand financial ratios, break evens		Written*	In head	No idea
8. Work with advisory team and lender		Yes*	Sometimes	Never
9. Marketing plan written and executed		Yes	Sometimes	Never
10. Risk management plan executed		Yes	Sometimes	Never
11. Modest lifestyle habits, family living budget		Yes*	Sometimes	Non existent
12. Written plan for improvement executed & strong people management		Yes*	Sometimes	Non existent
13. Transition plan/Business Owner plan		Yes	Working on plan	Non existent/controversy
14. Educational seminars/courses		Yes*	Sometimes	Never attend
15. Attitude		Proactive	Reactive	Indifferent

*Extra Points:

- **Progressive Business** may receive 4 points for #2,6,7,8,14
- **Struggling Business Attempting Turnaround** may receive 4 points for #3,5,8,11,12
(See pg. 2 for Progressive and Attempting Turnaround definitions)

Score

Overall Analysis

35-50

Strong management rating, strong potential for resiliency & agility

24-34

Moderate management rating, potential issues in resiliency & agility

<24

Weak management rating, potential major issues in resiliency & agility

Business IQ Exercise

- After completing the Business IQ: Management Factors Scorecard, what are three areas/points in your business that you will continue and three areas/points for improvement?

Three areas/points to continue:

- _____
- _____
- _____

Three areas/points to improve:

- _____
- _____
- _____

Business IQ Scores & Successfully Navigating Adversity

Business IQ Score	Success Rate in Adversity	Stoplight Indicator
<25	Very low	Red
26-30	Low to moderate	Red
31-39	Average to above average	Yellow
40+	High to very high	Green

The Burn Rate on Working Capital

■ Defensive

Current Assets: \$2,000,000
-Current Liabilities: \$1,000,000
= Working Capital: \$1,000,000

Projected Loss: \$500,000

\$1,000,000 (Working Capital) = **2 Years**
\$500,000 (Projected Loss)

Green >3.0 Years

Yellow 1.0-3.0 Years

Red < 1.0 Year

■ Offensive

Current Assets: \$1,000,000
-Current Liabilities: \$ 200,000
= Working Capital: \$ 800,000

Debt Service Payments: \$160,000

\$800,000 (Working Capital) = **5 Years**
\$160,000 (Debt Service Payments)

Green >5.0 Years

Yellow 2.5-5.0 Years

Red < 2.5 Years

The Burn Rate on Core Equity

(Assume \$500,000 Earnings Loss & 20% land value decline)

Assets- Market Value	Estimated Value	Loan Maximum	Collateral Position	Remaining Principal	Equity Excess Reserves
1. Long Term (20% Decline on Land)	\$6,000,000 \$4,800,000	X 70% X 70%	= \$4,200,000 = \$3,360,000	- \$2,200,000 - \$2,200,000	= \$2,000,000 = \$1,160,000
2. Intermediate	\$3,000,000	X 60%	= \$1,800,000	- \$800,000	= \$1,000,000
3. Current	\$1,650,000	X 80%	= \$1,320,000	- \$860,000	= \$460,000

$$\text{Burn Rate: Land \& Long Term Equity Reserves} = \frac{\text{Excess Reserves}}{\text{Earnings Loss}^1} = \frac{\$2,000,000}{\$ 500,000} = 4.0 \text{ Years}$$

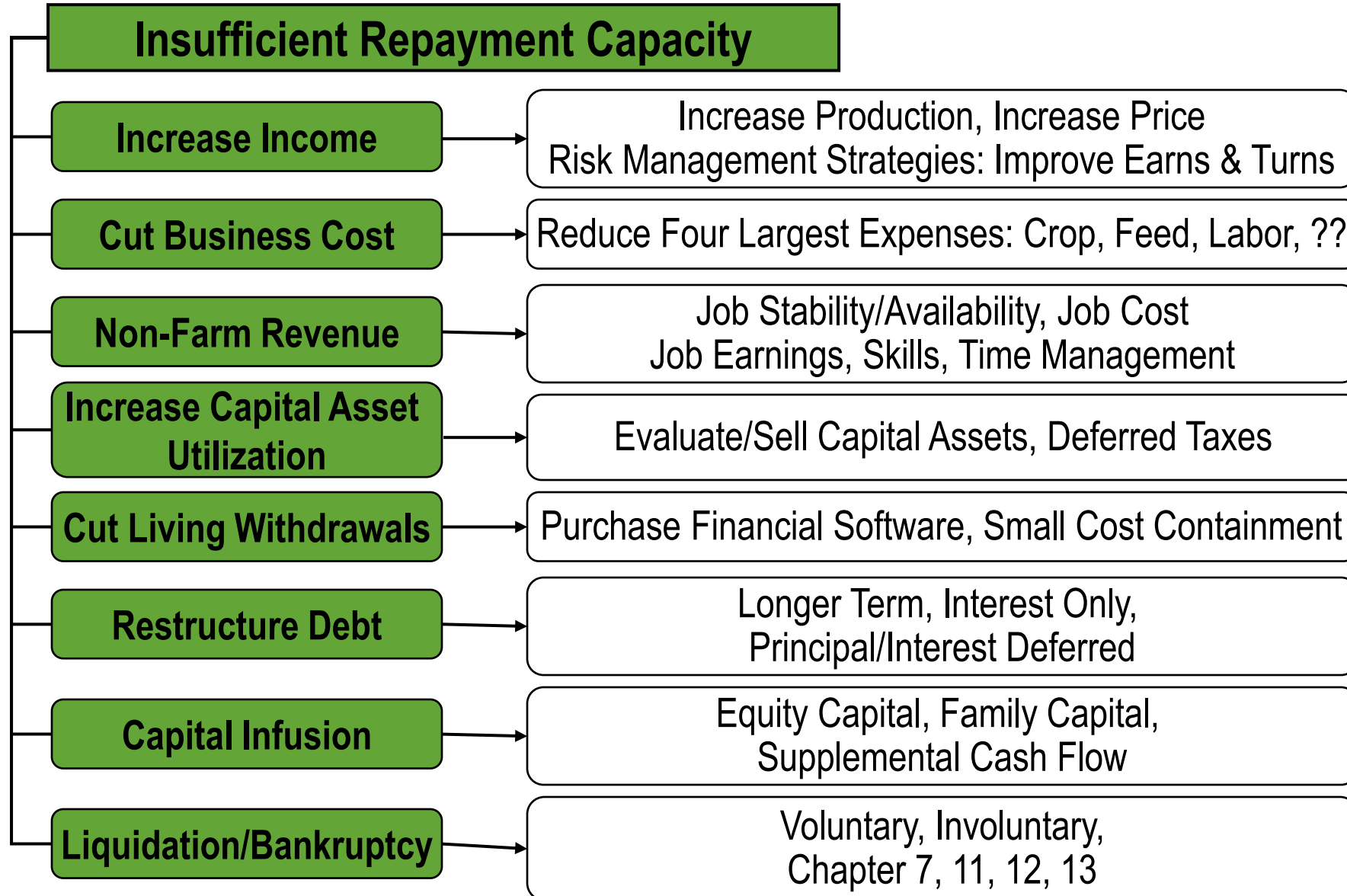
$$\text{Burn Rate: Land \& Long Term Equity Reserves} = \frac{\text{Excess Reserves}}{\text{Earnings Loss}^1} = \frac{\$1,160,000}{\$ 500,000} = 2.32 \text{ Years}$$

(20% land value decline)

Red < 4.0 Years = Vulnerable
Yellow 4.0-7.0 Years = Resilient
Green > 7.0 Years = Agile

¹ Assume Earnings Loss of \$500,000

Trouble Shooting Matrix



Banker & Borrower Engagement: Both Sides Add Value

Borrowers:	Bankers:
Provide up-to-date balance sheets	Monitor financials
Provide quality projected cash flow	Provide feedback on financials
Complete financial sensitivity testing on prices, costs and interest rates	Provide financial benchmarking
Articulate goals	Are part of the advisory team
Fill out a short and long term Business IQ	Fill out the Business IQ Assessment
Use financials & Business IQ for managing the business	Demonstrate the C's of banking

Top Questions

- Is this economic cycle the same as the 1980s cycle?
- What are five positive strategies used for turn arounds in 1980s businesses?
- What are mistakes that lenders are making in the downturn?
- What are the positives of an economic down cycle in ag?

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Q&A