AGRICULTURAL ECONOMICS & WEATHER- THE SEQUEL

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Road Warrior of Agriculture: www.compeen.com/reducation

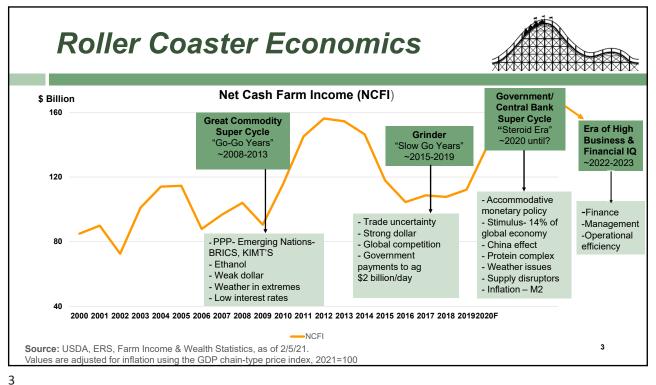
Ag Globe Trotter: https://www.northwestfcs.com/ag-industries/economic-updates/ag-economy-articles

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2020s- The Decade of Economic & Financial Divide

- economic volatility in extremes
- manage the controllables & manage around the uncontrollables
- adapt, innovate, focus & follow the process
- decade of management transition
- decade of the high business IQ





Lenders View of Greatest Threat to Net Farm Income in 2021 & Beyond

Survey average from 1,000 plus ag lenders

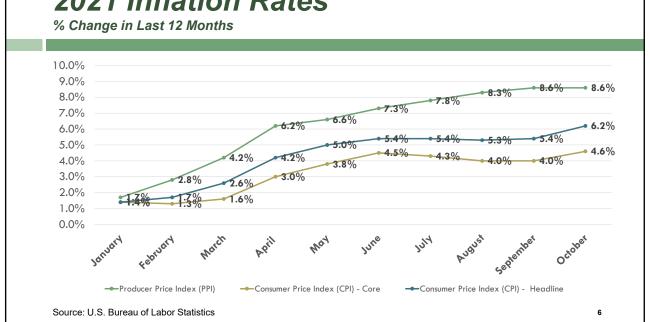
<u>Threat</u>	<u>Percentage</u>
Inflating expenses	75%
Supply & marketing chain issues	48%
Reduction of government supports	46%
Trade issues impacting export potential	41%
Producers' management ability	32%

2021 Inflation Rates

<u>Month</u>	<u>PPI</u>	CPI Core	CPI Headline
January	1.7	1.4	1.4
February	2.8	1.3	1.7
March	4.2	1.6	2.6
April	6.2	3.0	4.2
May	6.6	3.8	5.0
June	7.3	4.5	5.4
July	7.8	4.3	5.4
August	8.3	4.0	5.3
September	8.6	4.0	5.4
October	8.6	4.6	6.2
*Last 12 month	s % change		

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2021 Inflation Rates



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Temporary/Permanent Inflation

- M2 velocity of money
- regional & economic segments of inflation
- spot shortages created by black swans
- U.S. & worldwide consumer confidence
- central banks' interest rate policy
- government budgets & tax strategies
- wages, automation & unemployment



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Macro Dashboard for Business Decision Making for Lenders- 2020-2021

<u>Variable</u>	<u>Green</u>	<u>Yellow</u>	<u>Red</u>
Oil & Energy	X		
Global Competition	X		
Government Payments	X		
Agricultural Trade Challenges	Х		
Supply & Marketing Chain Bottlenecks	X		
Health of U.S. & Global Economy	X		
Interest Rates	X		
Weather in Extremes			X
Inflation	X		
Labor		Х	
Totals:	8	1	1

Impact on Your Portfolio- Risk Ranges:

1-3 Red/Yellow Range = cash flow & profitability issues 4-6 Red/Yellow Range = cash flow, profitability, & liquidity issues

7-10 Red Range = equity deterioration in machinery & livestock first, land equity second

Impact on Your Portfolio- Business Development Ranges:

- 7-10 Green/Yellow Range = strong growth environment 4-6 Green/Yellow Range = modest growth environment
- 1-3 Green/Yellow Range = selective growth environment

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Global Competition		Х	
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Agricultural Trade Challenges		X	
Supply & Marketing Chain Bottlenecks			X
Health of U.S. & Global Economy		X	
Interest Rates		X	
Weather in Extremes			X
Inflation			X
Labor			X
Totals:		5	5
mpact on Your Portfolio- Risk Ranges:	Impact on	Your Portfolio- Busines	s Development Ranges:
I-3 Red/Yellow Range = cash flow & profitability ssues I-6 Red/Yellow Range = cash flow, profitability, & iquidity issues I-10 Red Range = equity deterioration in machinery & ivestock first, land equity second	4-6 Green/	n/Yellow Range = strong g Yellow Range = modest g Yellow Range = selective	rowth environment

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Agricultural Down Cycle-Phase I Economic Downturn 2022-2025

- margin compression/negative margins
- land values- stabilize or slight decline
- government payments supplement income
 - green vs. traditional
- regulations & lender underwriting
 - allow refinancing for liquidity
- supply/demand for land in balance
- strong outside revenue sources/streams
- high business financial IQ for continued growth



Agricultural Down Cycle-Phase II Economic Downturn 2022-2025

- deep margin compression
- regulators and lenders
 - tighten credit standards rapidly
- large market collapse
 - integration
 - industry
 - international trade
- numerous natural disasters
- supply exceeds demand

- machinery/livestock lose 50% of value
- land in certain areas lose 20-40% value
- high business financial IQ producers on sidelines with very selective growth



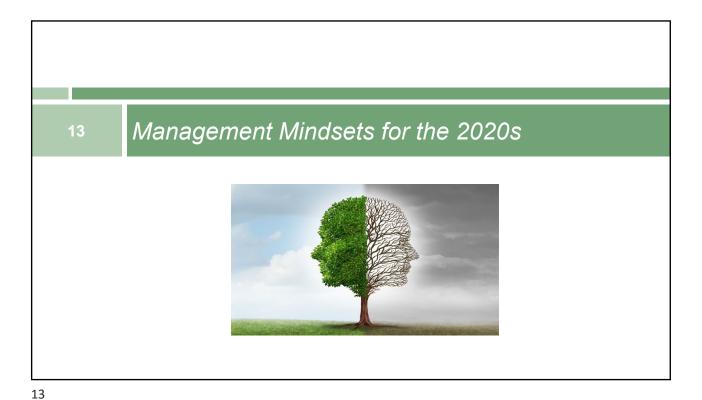
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Why Are Land Values in the 2020s Resilient?

- baby boomer producers and land owners are in later stages of ownership with equity
- interest rates have been stable
- government payments to agricultural sector have been generous
- rural renaissance
- outside investors
 - solar/wind green payments
 - water & mineral resources
 - development for housing industry is strong
 - diversification of investments





Business IQ: Management Factors **Critical Questions for Crucial Conversations** Farmer Checklist 1. Knows cost of production In head No idea 2. Knows cost of production by enterprise 3. Goals - business, family, & personal Written* 4. Record keeping system Accrual Schedule F (one & done) No idea 5. Projected cash flow Written* In head No idea Written* In head No idea 6. Financial sensitivity analysis 7. Understand financial ratios, break evens Written* In head No idea 8. Work with advisory team and lender Sometimes Never 9. Marketing plan written and executed 10. Risk management plan executed Yes Sometimes Never 11. Modest lifestyle habits, family living budget Sometimes Non existent 12. Written plan for improvement executed & strong people management Sometimes Non existent Yes* 13. Transition plan/Business Owner plan Yes Working on plan Non existent/controversy 14. Educational seminars/courses 15. Attitude Proactive Reactive Indifferent <u>Score</u> *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 Strong management rating, strong potential for resiliency & agility 24-34 Moderate management rating, potential issues in resiliency & agility

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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:
·	•
•	•

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How Can Team Members Use Business IQ as a Tool for Producers?

- screener for attitude to improve
- each family member, business partner, spouse complete the Business IQ separately
- assists in prioritizing improvements
- communication tool- internal and external to team of advisors
- customer develops plan for improvement to improve or buy in
- objective way to measure management
- monitoring tool, year over year

Recent Business IQ Scores

<u>Group</u>	<u>Score</u>
TEPAP	38.5
Crop Insurance	29.5
Farm Credit Associations	36.5
Median Score	32
FSA	22
Bank Sponsored Events	36

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Business IQ: Management Factors
Critical Questions for Crucial Conversations

	Farmer Checklist	<u>HUSBAND</u>	WIFE	DAUGHTER	<u>CFO</u>	<u>LENDER</u>
1.	Knows cost of production	3	3	2	3	3
2.	Knows cost of production by enterprise	4	2	2	3	3
3.	Goals - business, family, & personal	4	3	3	3	2
4.	Record keeping system	3	3	3	3	3
5.	Projected cash flow	4	3	2	2	3
6.	Financial sensitivity analysis	4	3	2	3	3
7.	Understand financial ratios, break evens	4	1	2	2	3
8.	Work with advisory team and lender	4	3	2	2	3
9.	Marketing plan written and executed	2	2	2	2	1
10.	Risk management plan executed	3	3	2	2	1
11.	Modest lifestyle habits, family living budget	4	3	4	3	1
12.	Written plan for improvement executed & strong people management	4	2	3	3	1
13.	Transition plan/Business Owner plan	3	3	3	3	3
14.	Educational seminars/courses	3	2	3	3	3
15.	Attitude	4	3	3	3	2
	Business IQ Scores	53	39	38	40	35

2021 Version - Developed by: Dr. David M. Kohl, Professor Emeritus, Ag & Applied Economics, in cooperation with Dr. Alex White, Dairy Science, Virginia Tech

Business IQ Summary: Areas to Continue/Improve

HUSBAND - BUS IQ: 53

3 Areas to Continue 1 Irrigation/manure mgt

3 Areas for Improvement 1Office management using CFO's

2 Intense office management

2 More efficient labor

3 Improve crop/livestock efficiency

3 Executing the marketing plan

WIFE - BUS IQ: 39

3 Areas to Continue 1 Record keeping - ratios, B/E

1 Financing without high interest

2Cost of production (livestock)

2 More seminars on ratios/break-

3 Productivity of crops & livestock

3 Communications & employees'

knowledge of how the business

DAUGHTER - BUS IQ: 38

3 Areas to Continue

1 Researching cost effective crop/livestock mgt practices

2 Diversifying the farm in livestock

3 Searching for a new ag lender with better rates

3 Areas for Improvement

1Employee handbook with written rules and guidelines

2 Lease equipment to avoid high repair bills and subscription fees

3 Crop/livestock KPIs

3 Areas for Improvement CFO - BUS IQ: 40

3 Areas to Continue

1Crop Production

2 Custom Hire

3 Diversifying in livestock

3 Areas for Improvement

1 Debt restructuring-reduce interest expense-improve cash flow

2Lease versus buy equipment

3 Pay invoices within terms to avoid finance charges



LENDER - BUS IQ: 35

3 Areas to Continue

1 Crop production KPIs

2 Using equipment longer before trading 3 Getting outside advice

3 Areas for Improvement

1Cash flow - extending current loan terms

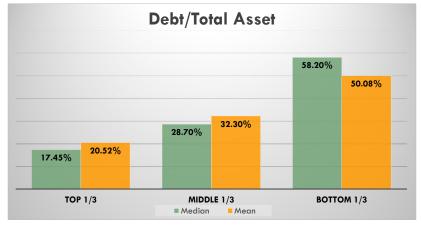
2 Comparison of budget to actual

3 Crop/livestock inventory

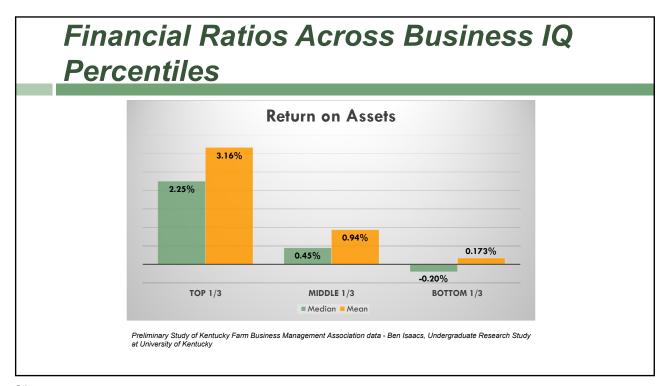
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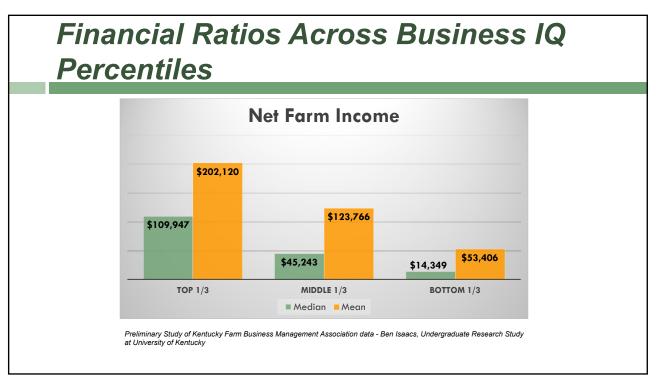
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Financial Ratios Across Business IQ **Percentiles**



Preliminary Study of Kentucky Farm Business Management Association data - Ben Isaacs, Undergraduate Research Study at University of Kentucky





Other Key Ratios

- coverage ratio
 - top third 114%
 - bottom third 10%
- operating expense to revenue ratio¹
 - top third 68%
 - bottom third 90%

¹ excluding interest and depreciation

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Ten Questions for the Renewal Season Pilot Checklist (1)

1.	What percent of net income resulted from government payments in the last four years?
	□ >50%
	□ 25-50%
	□ <25%
2.	What percent of the government payments are reoccurring vs. nonrecurring?
	□ >50%
	□ 25-50%
	□ <25%
3.	What portion of net income is the result of export markets?
	□ High

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AverageLow

Ten Questions for the Renewal Season Pilot Checklist

If the farm/ranch was profitable, how were the profits generated?

Government payments
Following a marketing/risk management plan
Speculative
Production, marketing, & financial operational efficiency
Outside revenues
How were the profits distributed?
Family living dividends
Build working capital
Investment in intermediate & long term assets
Taxes- state & federal
Investments off the farm/ranch

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(2)

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Ten Questions for the Renewal Season Pilot Checklist (3)

- 6. How vulnerable is the farm/ranch to supply and marketing chain issues, vertical integrators, processing, contract issues?
 - Highly
 - Average
 - ☐ Low
- 7. Over the past five years, what portion of net income gain was earned vs. appreciated?
 - ☐ High: >75% earned, <25% appreciated
 - ☐ Average: 25-75% earned, 25-75% appreciated
 - □ Low: <25% earned, >75% appreciated
- Working capital lines of credit used:
 - Increased
 - Stayed the same
 - Decreased

Ten Questions for the Renewal Season Pilot Checklist

(4)

9.	If you are in the senior generation and purchased land, is a transition and estate plan in
	existence, being executed and monitored?

Definitely yes

■ In progress

Definitely No

10. Have you filled out the Business IQ scorecard and developed a plan for improvement?

Yes

■ In progress

■ No

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Favorable Odds for Business Success (1)

- volatility will place a high priority on working capital
 - block adversity
 - capitalize on opportunity
- profitability plan 60-30-10
 - better is better before bigger is better
- profitability & cash flow will require balanced management

Production	Financial
Marketing/Risk Mgt.	Operational Efficiency

- strong business IQ managers:
 - generate a profit in seven of 10 years
 - score about 35
 - write plans for improvement

Favorable Odds for Business Success (2)

- a good defense is a business' best offense
 - profits is your defensive line
 - liquidity is your linebackers
 - collateral is your safeties & cornerbacks
- more zeros and commas on the financial statement requires more focus and intensity
 - ownership of numbers
 - line by line management
 - 5% rule
- family living budgets are just as important as business budgets
 - number of families
 - Corvette Rule

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Favorable Odds for Business Success (3)

- transition plan is more important than an estate plan
 - transitioning the right skill sets
 - 1% Rule
- advisory team is trend of the 2020s
 - your network of people will be equal to your self worth & financial net worth
- DAIRY for life:
 - Discipline
 - Attitude and Accountability
 - Initiative, passion and zest
 - Respectful, Reliable and open to Reason
 - You It's all up to You. "Look in the mirror."

Championship DNA – Lenders/Producers (1) Quotes, Perspectives & Wisdom

- Small business makes small banks which make small rural communities.
- I left \$500,000 of net profit on the table this year by following a marketing plan, however ten of my twelve years in farming have been profitable by following a market plan & the process.
- There is a worker shortage in 2021 but an employment shortage in 2025-30.
- Worry is part of the lender's DNA.
- People lose their way when they lose their why.
- Good economic times are never as great as touted or bad times as bad as they think they are going to be.



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Championship DNA – Lenders/Producers (2) Quotes, Perspectives & Wisdom

- Manage the controllables and manage around the uncontrollables.
- Credit starts in the top of the economic cycle & business development starts in the bottom of the economic cycle.
- Championship lenders have an education in their DNA.
- The vision is way you see your business, the brand is the way your customer sees the business.
- If it grows to fast, it is a weed.
- There is no magic silver bullet, next big thing & A,B,C student.



Game Plan Actions for Year End



Actions: Check when Completed Develop your goals- business, family & personal Short run Long run Business & family complete the Business IQ
□ Short run □ Long run
☐ Business & family complete the Business IQ
☐ Develop year end balance sheet
☐ Develop projected cash flow with three financial sensitivity tests
☐ Personal thank you note to someone who has assisted you in your business or life journey