MOODY'S ANALYTICS

Better, Faster Decisions

Ag Webinar: June 16, 2020 | Doug Johnson

COVID-19 is testing the financial sustainability and management skills of your producers—and the economic challenges they face could be far reaching. Join Dr. David Kohl, Professor Emeritus of Agricultural and Applied Economics, Virginia Tech and Doug Johnson from Moody's Analytics in this upcoming webinar as they discuss the impact of the pandemic and the future of the agriculture industry.

#### Highlights include:

- Identifying and overcoming COVID-19 disruptors
- Exploring lessons learned in the past few months
- Planning for life after COVID-19

We look forward to your entire lending staff joining this complimentary webinar with Dr. Kohl and Doug Johnson from Moody's Analytics

# **Agenda**

- Introductions
- Identifying and overcoming COVID-19 disruptors
- Exploring lessons learned in the past few months
- Planning for life after COVID-19
- Value-Add Methodologies
- Action Plans



#### Quick Access

**New:** CARES Act

Ag Peer Benchmarking

Ag Scorecards





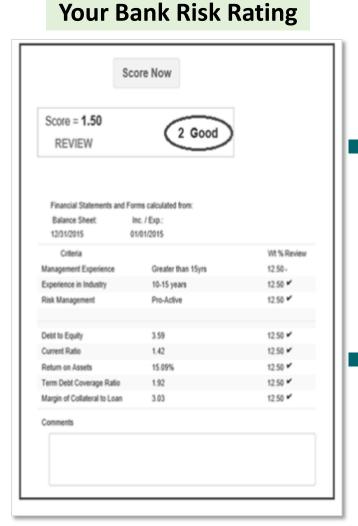
# Ag Peer Benchmarking

- Create Value
- Eliminate Excuses
- Create Opportunities
- Drive Results

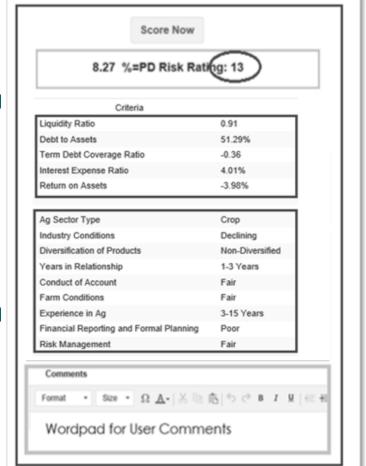


#### **Ag Scorecard**

- 4 Models
  - Crop
  - Livestock
  - New: Feedlot
  - New: Dairy
- Compare Internally
- Model Confidence
- Quicker Decisions



Moody's Ag Scorecard



Moody's can help predict Probability of Default (PD) and identify potential Risk in your portfolio

#### **Presenters**



Dr. David Kohl
Professor Emeritus, Virginia Tech



Doug Johnson

Director – Ag. Strategist

Moody's Analytics Lending Cloud



# **Black Swan Progression - Dirty Bird**

# Dirty Bird or Phase I – Splash (March 1 to May 1, 2020)

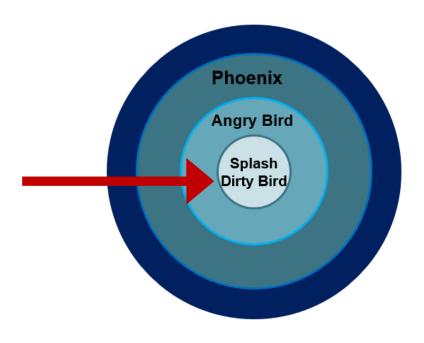
- job losses
- preventative health
- consumer shutdown, back to the basics
- 40% consumer based economy
  - 0-25% of sales
- global economy on life support

#### **Business & Personal:**

- shock
- numbness
- anxiety

#### **Needs:**

- time to absorb information
- reality check





# **Black Swan Progression - Angry Bird**

# Angry Bird or Phase II – Ripple (May 1 to December 31, 2020)

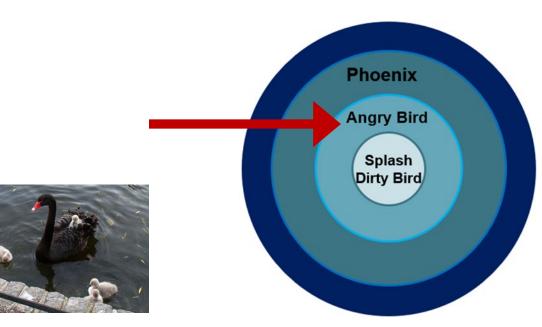
- recovery plan nationally/globally
- realization of job loss
- business failures
- systems of health surveillance
- deglobalization discussions
- trade issues
- volatility based on headlines

#### Personal/Society/Government:

- revenge
- blame
- confusion
- frustration

#### **Needs:**

- support
- okay to feel a loss
- collaboration
- critical thinking
- unintended consequences



# Black Swan Progression - Phoenix "Mythical Bird"

# Phoenix or Phase III – Ripple (January 1, 2021 - 2022 & Beyond)

- commitment to move forward driven by young leadership
- new business models
- question of consolidation:
  - big business vs. small business
- accelerated deglobalization
- Al & privacy balance
- accelerated innovation in health systems
- TSA all the time

#### Personal:

- more energy
- commitment to move forward
- adjustment & focus

#### **Needs:**

- creative leadership
- innovation
- adaptation
- new models for success





# **COVID Disruptors - 1**

- supply & marketing chain disruptors
  - optimization & efficiency
  - diversification & resiliency
- demand destruction in U.S. & globally
  - 70% of rich nations' economies are driven by consumption
  - 40% of demand was from universities, schools, sports, entertainment events, airlines, hotels & restaurants
    - drop to 0-25% of previous demand
  - short run
    - consumption down a total of 14%
    - savings rate in U.S. up to 33%



# **COVID Disruptors - 2**

- trade agreement uncertainty
  - Australia & China
  - Europe, Canada, U.S. & China
  - deglobalization/regionalization
  - Northern Europe/Southern Europe
- government monetary/fiscal support
  - non-reoccurring income
  - short run cure for household & businesses
  - comes with a price for longer term
- relationships- virtual
  - webinars & virtual meetings
  - virtual classes
  - work remote



### **Poll #1**

### How long do you think the recession will last?

- a) <9 months
- b) 9-18 months
- c) >18 months



# Compare & Contrast 2008-09 to 2020 - 1

#### 2008-2009 Financial Shock

- asset bubble paper wealth destruction
- central banks globally quantitative easing
- V shaped recession
- residential & commercial real estate
- flaws in the banking system
- consumer behaviors, temporary shock
- coastal & sand states oriented

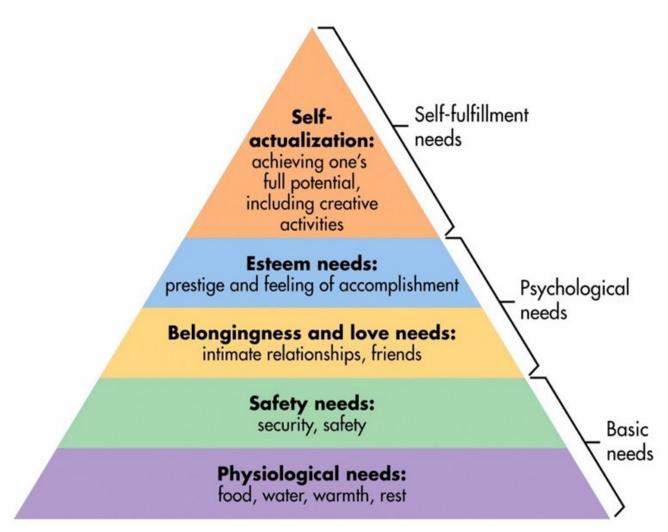
# Compare & Contrast 2008-09 to 2020 - 2

#### 2020 Pandemic

- sudden impact/shock disruption
- economic behavioral changes/basics
- no pattern corrective action- health
- Nike swoosh shaped recession
  - size 6 or size 14-18?
- longer term wealth destruction
- loss of purchasing power
- re emerging bio shocks / cyber attacks
- southern hemisphere bio shocks



# **Maslow's Hierarchy of Needs**



### Post COVID Consumer - 1

#### minimalist

- loss of income/wealth
- increased levels across all demographics
- very basic needs
- pride & esteem on survival

#### frugal

- some loss of income/wealth
- basic needs, selected experiences/expenditures
- 75% spending habits of pre COVID
- pride in budgeting, savings and rainy day fund



### **Post COVID Consumer - 2**

- carefree consumer/pogo stick syndrome
  - impulse & emotionally driven
  - pent up energy & demand
  - hits ground running
  - hit the wall post stimulus
  - live on income, wealth & credit card
- alpha spender / investor
  - strong wealth & income
  - revert to high end purchases
  - risk taker with a focus on discounted opportunities
  - wealth cushion creates shock absorber to future black swan events



# **COVID-19 The Black Swan Disruptor- Positives for Ag**

- importance of a diversified safe food, fiber & fuel source- basics of life
- reassurance of transparency in where food is produced, processed & distributed
- healthy soil & water
  - plants, humans, animals & environment
- local niche markets, agritourism, post COVID boom
- repositioning of the image of agriculture

## **Poll #2**

What specific characteristics are most important to agricultural producers for resiliency & agility? (Select up to 3)

- a) know cost of production
- b) execute a marketing & risk management plan
- c) strong working capital reserves
- d) good communication skills
- e) utilize a team of advisors
- f) modest living costs
- g) proactive attitude & engagement
- h) high percent equity to debt



### **Lessons Learned**

- sound financial and business basics can assist in charting a course
- quarterly sprints: cash flow, profits and monitoring
  - equate to journey for long term sustainability
- marketing and risk management are high priorities in this volatile market
- working capital & cash flow are both considered to be queen
- preservation of working capital in restructure
- ratios & benchmarking trend analysis
  - pre-COVID
  - COVID with government supports
  - post-COVID
- understanding, patience & empathy through communications is critical
- documentation of government support programs

### Life After COVID

- government checks are not a reoccurring income source
- post-COVID action plan with a focus on structured business
   IQ
- importance of working capital
  - timing & cash flow
- importance of broadband internet service
  - profitability & viability of agriculture
- focus on young farmer & rancher programs
- benchmarking
  - trend
  - peers
- advisory team: meetings & monitoring

# **Business IQ: Management Factors Critical Questions for Crucial Conversations**

	Farmer Checklist	Your Score	Green (3 points or 4*)	Yellow (2 points)	Red (1 point)
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	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
	Total				

*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

<u>Score</u>	Overall Analysis
35-50	Strong management rating & viability
20-34	Moderate risk & viability; will most likely show previous refinancing
<20	High risk & lack of long term viability

# **Business IQ: Management Factors Critical Questions for Crucial Conversations - 1**

#### **Progressive Business Characteristics:**

To be considered a "Progressive" Business, farms must score in the green in four of these five checklist items (#2, #6, #7, #8, #14).

**#2 Know cost of production by enterprise:** Know the cost of production by enterprise and are able to readily explain which enterprise is the most profitable.

**#6 Financial sensitivity analysis**: Know how changes in price, production, cost and/or interest rates affect the bottom line. Complete different scenarios in their cash flows to test this for their business/operation.

**#7 Understand financial ratios:** A dashboard of financials (5 to 7 ratios) that they do a 3 to 5-year trend analysis on their business? Second, benchmark these ratios to other businesses like the Illinois FBFM or University of Minnesota's FINBIN.

**#8 Work with an advisory team and lender:** Establish an advisory team consisting of a lender, crop or livestock consultant, and possibly a financial planner, etc. If so, do they meet 2 to 4 times a year?

**#14 Educational seminars/courses:** Attend or take five educational seminars or courses a year. One should be outside of the industry of agriculture.

Developed by: Dr. David M. Kohl, Professor Emeritus, Ag & Applied Economics, Virginia Tech

# **Business IQ: Management Factors Critical Questions for Crucial Conversations - 2**

#### **Struggling Business Attempting Turnaround Characteristics:**

To be considered attempting a successful turnaround, farms must score in the green in four of these five checklist items (#3, #5, #8, #11, #12).

#3 Goals - business, family & personal: Written business, family and personal goals.

**#5 Projected cash flow:** Completed a cash flow.

**#8 Work with an advisory team and lender:** Exhibit willingness to be coached by an advisory team and lender.

**#11 Modest lifestyle habits, family living budget:** Take modest family withdrawals and have a family living budget.

**#12 Written plan/business owner plan:** Developed and executed a one-page written plan on how they will improve cash flows, profits and what is the likelihood of the turnaround of business. If not, problems can continue.

# People First Organization- Human Resources

- 37% of jobs are not location dependent
- measurement of productivity
- decentralized team
- work place alignment in the future
  - employees remote
  - hybrid model
  - office centric/critical task
- communications
  - staff interface
  - customer interface



# **Characteristics of Remote Employees**

- enjoys independence with occasional interaction with team members/customers
- self disciplined/focused & self motivated
- good time management skills & know your most productive hours
- task/project oriented & ability to prioritize tasks- short & long run
- strong organizing skills/works independently
- good communication skills- written & verbal
- enjoys both high tech & high touch
- lifelong learner
- other



# **Working Remote Work Culture**

- investment in tools & technology for office productivity
- broadband internet access
- relationship of trust with employer/employee
- dedicated space/office location for focus, free of distractions
- sufficient training & expectations, scope of work
- metrics for productivity
- clear communication regarding assignments, projects & responsibilities/periodic feedback
- five hour productive work days- finding most productive hours
- "indistractable" periods
- periodic interface with team members & stakeholders
- culture of learning
- mode of contact



# Working Remote Practices That Reduce Productivity

- require set hours arbitrarily
- micro manage from afar
- overloading productive employees = burnout
- hall monitors/work culture
- environment of distractions



# What IF.... This is now the Norm...

# Weather | Yields | Prices | Trade | Disruptors (COVID-19)

- Easier choices have already been made
- More tough choices have to be made
- Tougher ones coming

# Your Time vs. Your Value

If you don't take care of the good borrowers, you'll only be left with the bad

# **Moving Producers to Managers**



# Marketing vs. Production:

- 1. 10% of Producers always "find a way" to lose money
- 2. <10% Farmers have & execute on Marketing Plans
- 3. Historically majority sells crop at bottom 1/3 of markets
- 4. Stored grain should not be the Checkbook
- 5. Home Run Mentality: "I'll make it back next year"

# The Answers aren't in the Financial Statements

The Questions are

# **Moving the Needle**

Producer to Manager Mindset





# Multi-Year Journey: Blazing the Trail



## **Customer Take-Home Packet**

- Basic Education
- Explains Why

Provide Options

Create Value





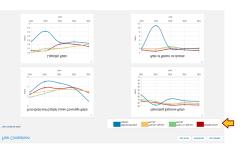




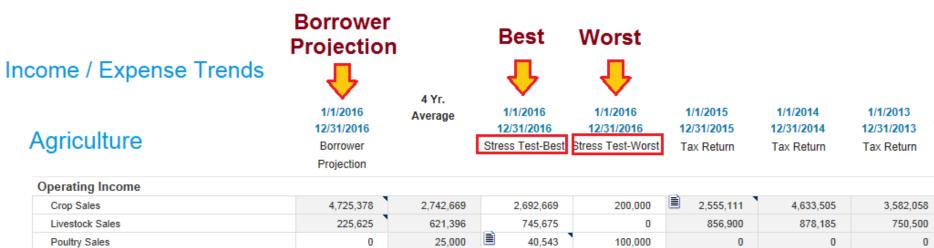




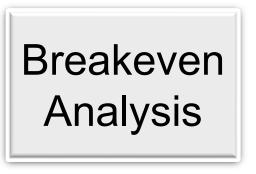




60 Second Stress Test



Crop Sales	4,725,378	2,742,669	2,692,669	200,000	2,555,111	4,633,505	3,582,058
Livestock Sales	225,625	621,396	745,675	0	856,900	878,185	750,500
Poultry Sales	0	25,000	40,543	100,000	0	0	0
Dairy Livestock Sales	220,000	220,121	258,494	0	321,561	246,411	312,511
Example of a SubTotal	220,000	245,121	299,037	100,000	321,561	246,411	312,511
Dairy Cull-Cows - Form #4797	0	0	0	0	0	0	0
Milk Sales	3,205,000	1,011,158	1,213,390	0	1,202,611	1,761,511	1,080,511
Ag Program Pmts	50,000	50,000	38,000	50,000	50,000	50,000	50,000
Crop Insurance Proceeds	15,000	56,575	13,500	50,000	26,300	65,000	85,000
Custom Hire Income	0	25,000	0	100,000	0	0	0
Other Income	100,000	230,246	100,000	620,982	100,000	100,000	100,000
Coop Distributions	0	12,500	0	50,000	0	0	0
Total Operating Income	8,541,003	4,994,664	5,102,271	1,170,982	5,112,483	7,734,612	5,960,580
Livestock Sal:Purch For Resale	0	0	0	0	0	0	0
Purchases for Resale	0	23,975	0	95,900	0	0	0
Purch. For Resale Livestock Sales	463,134	0	0	0	0	0	0
Donald Car Daniel Daine Liverstein Calan	0	0	0	0	0	0	0



#### **Producer Projection**

Margin Breakeven

#### Scenario 1:

Yield 🛖

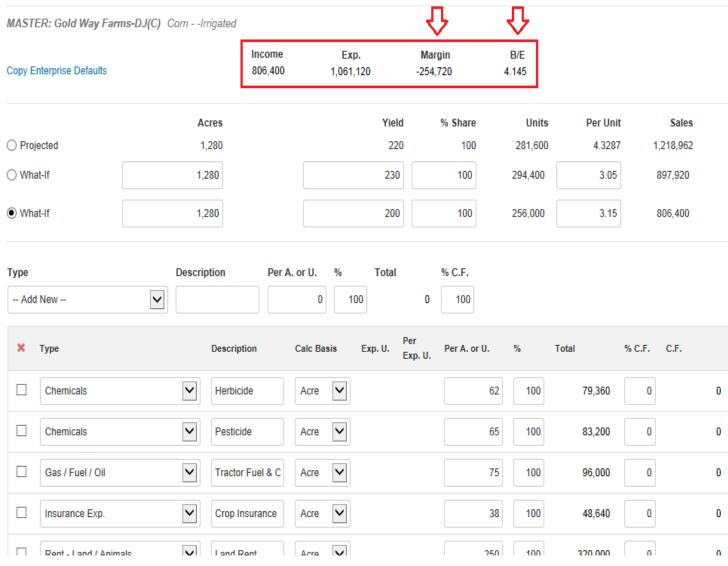
Price .

#### Scenario 2:

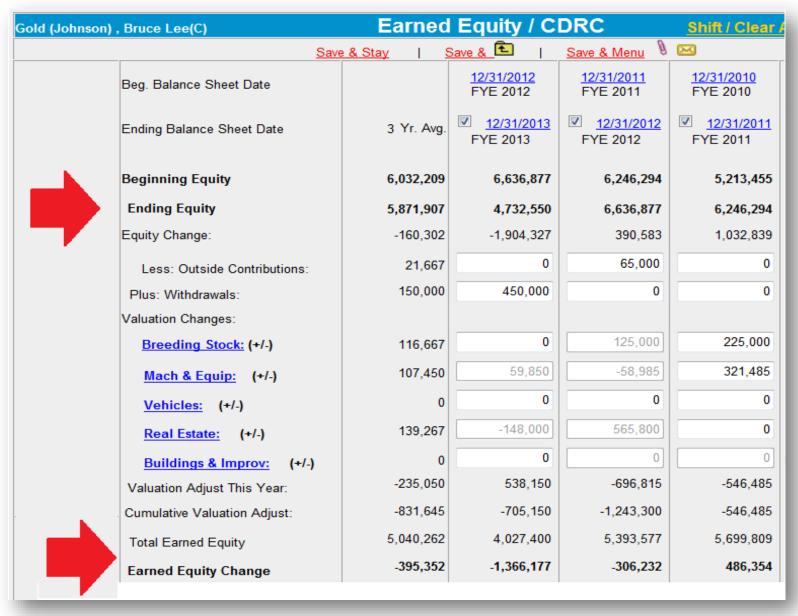
Yield 🖊

Price 🖊

#### Enterprise Analysis



Earned Equity
Analysis





#### Look at the "Direction" vs. the "Direct" Result

# Directional Accrual

#### **Accrual Adjustments**

Description	Beginning Bal. Sht.	Ending Bal. Sht.
	12/31/2015	12/31/2016
Agriculture		
Accrued Interest	5,700	0
Crop Inventory	186,300	112,500
Growing Crops	36,000	36,000
Market Livestock	536,250	499,538
Account Receivable	450,000	285,000
Prepaid Expenses & Supplies	165,000	165,000
Cash Value of Life Insurance	15,000	15,000
Breeding Stock	2,100,000	2,100,000
Accounts Payable	10,000	15,000
Income Taxes Payable	12,500	0
Commercial		
Accrued Interest	2,300	0

Income Sta	tement
VFP	
Crop Cash Sales	4,725,378
+/- Adjustment	-73,800
Total Crop Sales	4,651,578
Mkt Lvstk Sales	445,625
+/- Adjustment	-36,712
Total Mkt Lvstk Sales	408,913
Livestock Products	3,205,000
+/- Adjustment	0
Total Lystk Prod. Sales	3,205,000
Gov't Program Pmts	50,000
Rsd Brdg Stk Change	0
Gain/Loss Brdg Stk	0
Change in Acct Rec	-165,000
Other Farm Income	115,000
+/- Adjustment	0
Total Oth Farm Inc.	115,000
Gross Revenues	8,265,491

Dr. Kohl's Outlook On Today's Ag Environment - June 2020

## FFSC Ratios

- **Education:** Share your analysis
  - Help Borrower understand Risk

#### **Current Ratio**

This ratio (usually expressed as XX:1) indicates the extent to which current farm assets, if liquidated, would cover current farm liabilities. The higher the ratio, the greater the liquidity.

Computation:

Total current farm assets

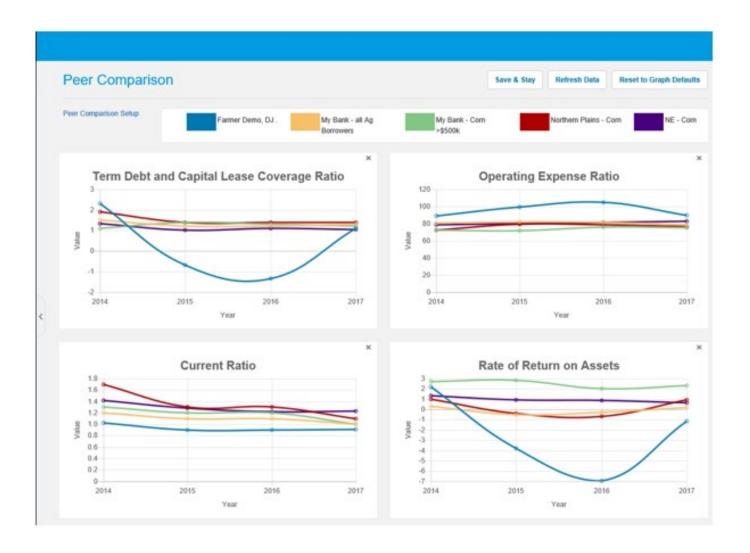
- + Total current farm liabilities
- = Current Ratio

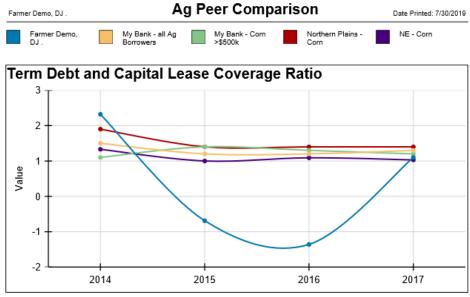
#### **Debt To Asset Ratio**

This ratio measures financial position. The debt/asset ratio compares total farm debt obligations owed against the value of total farm assets. This ratio expresses what proportion of total farm assets is owed to creditors. This ratio is one way to express the risk exposure of the farm business. It can be calculated using either the cost or market value approach to value farm assets. If the market value approach is used to value farm assets, then deferred taxes on the assets should be included as liabilities. This ratio is most meaningful for comparisons between farms when the market value approach is used to value farm assets. The higher the ratio, the more risk exposure of the farm business. Computation:

Total farm liabilities

- + Total farm assets
- = Debt/Asset Ratio





(TDCR VALUES)	Farmer Demo, DJ .	My Bank - all Ag Borrowers	My Bank - Corn >\$500k	Northern Plains - Corn	NE - Corn
2014	2.32	1.50	1.10	1.90	1.33
2015	-0.69	1.20	1.40	1.40	1.00
2016	-1.36	1.20	1.30	1.40	1.09
2017	1.10	1.30	1.20	1.40	1.03

(TDCR COUNTS)	Farmer Demo, DJ .	My Bank - all Ag Borrowers	My Bank - Corn >\$500k	Northern Plains - Corn	NE - Corn
2014	0	249	14	39	1783
2015	0	250	12	38	1720
2016	0	235	11	30	1564
2017	0	184	9	23	806

## **Customer Take-Home Packet**

- **Basic Education**
- **Explains Why**

**Provide Options** 

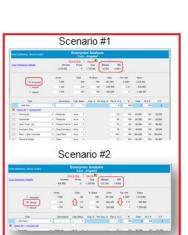
**Create Value** 









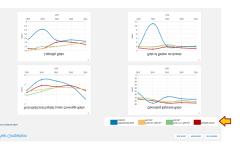


Scenario #3









## **Action Items**

- Define your Value-Add goals
  - Top Producer Needs
  - Bottom Producer Needs
- Leverage Business IQ worksheet
  - Lender do on Producer
  - Producer do on Producer
- Discuss strengths/weaknesses
  - Help them understand what that means
- Provide a "Take Home Packet" Binder
- Fill out Post Webinar Survey



# Doug & Dr. Dave Unplugged



## **Top Five Questions From the Road:**



- Where do you see agricultural lending going in the next five to ten years?
- Has the fundamentals of ag lending changed?
- What are top elements that should be on any ag lenders radar screen?
- How does the agricultural industry rank compared to others economically post-COVID?
- What are five good reasons to continue to be an ag lender?

Remember....

Never Confuse

Self-Worth

With

Net-Worth



## Keeping Farmers Farming & Ag Lenders Lending



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