



*Agriculture & Ag Lending in a
Black Swan Environment
Featuring Dr. David Kohl*

FARMER  AC

July 20, 2020

***AGRICULTURE & AG LENDING
IN A BLACK SWAN
ENVIRONMENT***

Dr. David M. Kohl
Professor Emeritus, Agricultural and Applied Economics
Member of Academic Hall of Fame, College of Agriculture & Life Sciences
Virginia Tech, Blacksburg, VA



(540) 961-2094 (Alicia Morris) | (540) 719-0752 (Angela Meadows) | sullylab@vt.edu

July 20, 2020

Macro Clinic Video Blog: www.compeer.com/education
Road Warrior of Agriculture: www.cornandsoybeandigest.com
Ag Globe Trotter: www.northwestfcs.com
Dave's GPS & Dashboard Indicators: www.farmermac.com

Life From Business Side of Agriculture

- no travel in 4 months, first since 1959
- monitoring cash flows monthly
- documenting any government support for business model post government payments
- evolving business plan as markets shift
- upgrading technology, utilizing AI real-time data
- ice cream and home delivery surges
- major shifts in personnel, right people on the bus
- preparing a business model to operate at 90% economy

3

Black Swan Progression - Dirty Bird



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

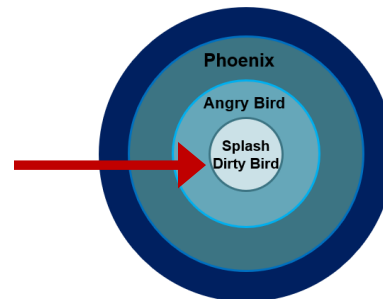
- job losses
- preventative health
- consumer shutdown, back to the basics
- 40% consumer based economy
 - 0-25% of sales
- global economy on life support

Needs:

- time to absorb information
- reality check

Business & Personal:

- shock
- numbness
- anxiety



4

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

Needs:

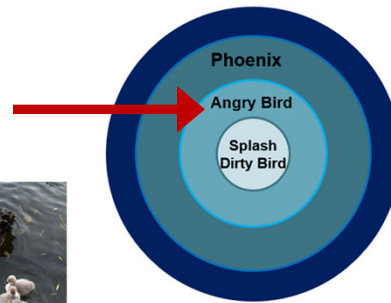
- support
- okay to feel a loss
- collaboration
- critical thinking
- unintended consequences

Personal/Society/Government:

- revenge
- blame
- confusion
- frustration



More baby black swans?



5

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
- AI & privacy balance
- accelerated innovation in health systems
- TSA all the time

Needs:

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

Personal:

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



More baby black swans?



6

Poll #1

- How has the COVID-19 pandemic changed your outlook for the farm economy in the long run, from 2021-2023?
 - a) more optimistic
 - b) more pessimistic
 - c) uncertain
 - d) unchanged



7

Globalization Vs. Localization Disruptor

- globalization- seven decades
 - one in five dollars of net farm income
- deglobalization/regionalization/localization
 - drivers of change
 - government/society
 - business
 - consumer

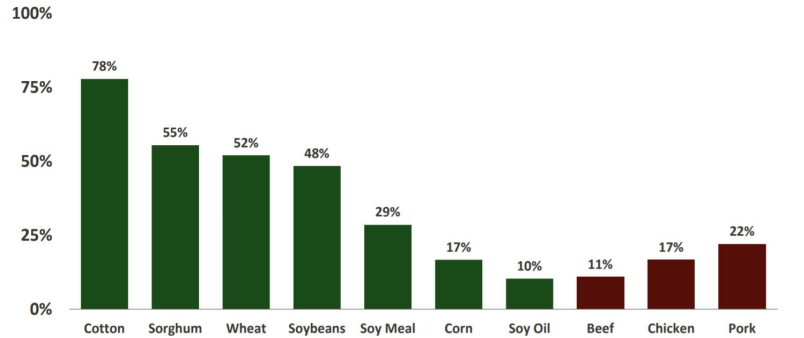
Impact

- extreme volatility
- trade agreement uncertainty
- analysis critical for supply marketing chains

8

Diffusion Index of Agriculture

Importance of Ag Export Markets Export Share of US Production, 2017/18



ILLINOIS
Agricultural & Consumer Economics
COLLEGE OF AGRICULTURAL, FORESTRY
& ENVIRONMENTAL SCIENCES

Source: PS&D, FAS-USDA

farmdoc

9

Economic Growth Projections: 2020-2021

International Monetary Fund (IMF) Projections:

- U.S. (5.9%)
- Europe (7.5%)
- China 1.2%
- global trade down 10-15%



10

Demand Destruction Disruptor

- disjointed- back to normal
- 90% economy
- 50-75% economy
 - schools, universities, sports, entertainment, hotels & travel
- 125% economy- Amazon, buy on-line, etc.
- ethanol, fracking, solar & wind energy vs. Russia/OPEC

Impact:

- alignment of industry segments with consumer shifts
- quick supply/demand shifts
- seesaw consumption

11

COVID Disruptors

- 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



12

Poll #2

Have you read Dave's GPS?

- a) yes
- b) no

Dave's GPS

<https://www.farmermac.com/news-events/daves-gps/>



13

Crop & Livestock/Protein Sector Key Factors on the Radar Screen

- ethanol, fracking
- weather
 - U.S.
 - globally
- economic health of export trading partners
- strength of the dollar
- competitive products
 - plant-based meat alternatives
 - non-dairy alternatives

14

Compare & Contrast 2008-09 to 2020

2020 Pandemic

- sudden impact/shock disruption
- economic behavioral changes/basics
- no pattern corrective action- health
- three D's: Depth, Diffusion & Duration
- Nike swoosh shaped recession with a jagged tail "w"
 - size 6 or size 14-18?
- longer term wealth destruction
- loss of purchasing power
- re emerging bio shocks / cyber attacks
- southern hemisphere bio shocks



15

Disconnect Between Stock Market and the Economy

- sugar high with stimulus and unemployment
 - historical top 10% price to earnings ratio
 - low 10% earnings
- investor
 - high risk takers backed by central banks/government
 - central bank stimulus
 - government stimulus
- large swings in the marketplace
 - institutional investors
 - day traders
- low interest rate environment
- Warren Buffett moves to cash

16

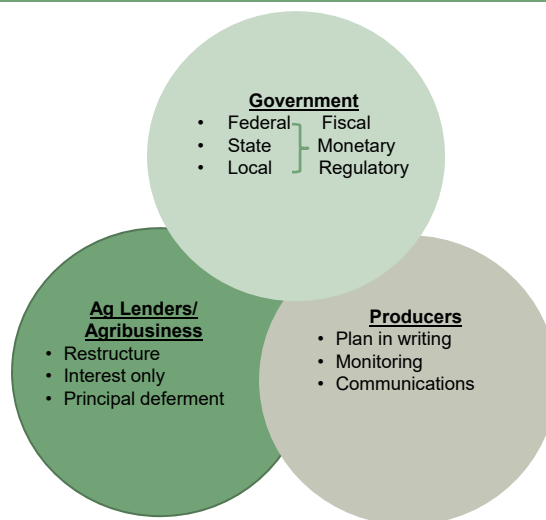
Economic Indicators Dashboard

Indicator	Current
Housing Starts	1,186,000 annually
Interest Rates:	
3 month Treasury CMT %	0.16%
10 yr. Treasury CMT %	0.65%
30 yr. Mortgage Rate	2.16%
Unemployment rates:	
U-3	11.1%
U-6	18.0%
Index of Consumer Sentiment	73.2
Copper Prices	\$2.68/lb.

- be careful of lead economic indicators
 - noise & false signals

17

Bridging Concept: Short or Long Bridge???



18

Poll #3

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

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



19

Lessons Learned

- fragile world economy
- consumer/human behaviors
 - create cycles in extremes
- working capital & liquidity are important
- machine algorithm
 - social media manifests itself
- accelerated social behaviors



20

Top Elements on Ag Lenders' Radar Screen

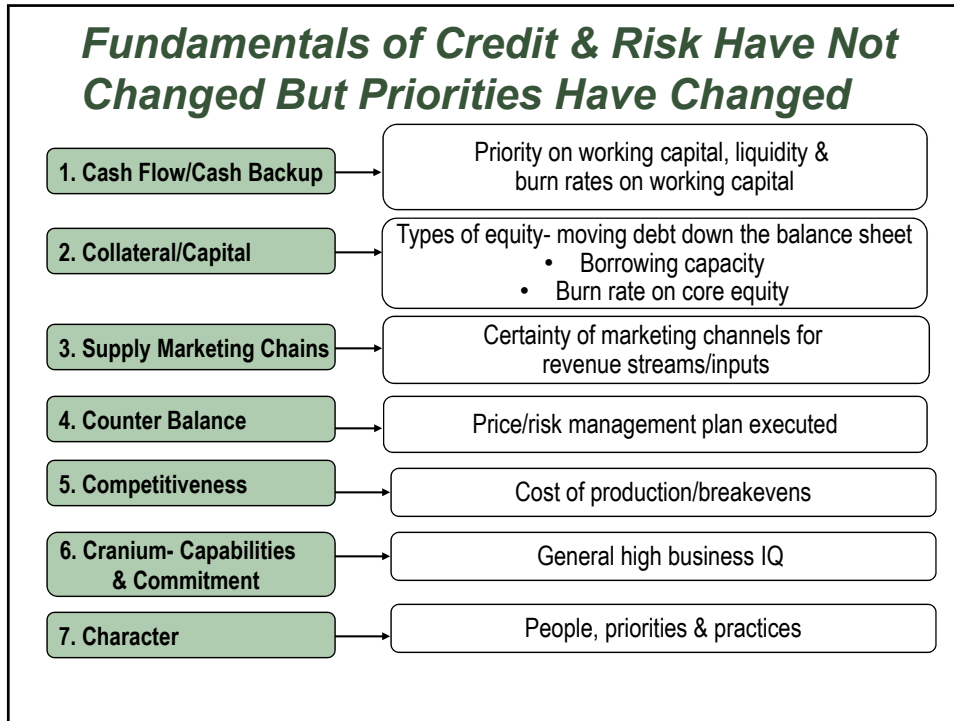
- non-traditional debt
- loss of non-farm income & benefits
- non-reoccurring government payments
- non-responsive customers
- burn rate on working capital if refinance or restructure occurred
- business development opportunities
 - high business IQ
 - strong liquidity
 - market risk management programs
 - equity/capital
- prepare for 2021-2022

21

Seven C's of Credit

1. **Cashflow / cash backup**
2. **Collateral / capital**
3. **Chains- supply & marketing**
4. **Counter balancing**
5. **Competitiveness**
6. **Cranium: commitment & capabilities**
7. **Character**

22



- ### ***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

Poll #4

What is your opinion concerning the future of young people in the agricultural industry at any level?

- a) very optimistic
- b) optimistic
- c) neutral
- d) pessimistic
- e) very pessimistic



25

Five Reasons To Be an Ag Lender

- difficult economic times – relationship lending builds a customer for life
- challenging economic times – opportunity to build financial business literacy
- financial statements don't have the answers but the questions- take the "listening approach"- ask questions about:
 - cash to accrual
 - goals
 - reconciliation of the numbers
- alignment with the proactive/progressive producer - Rule of 4
- three guiding principles of bridging the gap in business acumen/ mental health
 - risk management approach
 - team approach
 - proactive, preparedness approach

26

Positive Lender Dialogue

- understanding & patience
 - customer
 - lender
- team work (analyst / relationship officer)
- team with government assistance programs
 - FSA
 - agribusinesses
 - others
- value added by lenders
 - curbside service
 - assist with technology
 - assist in planning, strategizing, executing, monitoring



27

Dr. Dave Unplugged!

- Why has COVID-19 been such a market disruptor seeing travel bans versus swine flu, SARS and Ebola?
- What is your future outlook on oil prices and other commodities, as well as land prices and specifically farm real estate?
- Now that there is more clarity on the political candidates, what will be some of the major talking points in the next election?
- What are your thoughts on education in general, the future of 4-H and FFA or the workplace in general?

28

FARMER MAC Financing Rural America[®]

Farm & Ranch Rates – 7.17.2020

Products	Term	Amortization	Choice Reset Margin	Standard Rates	Choice Rates
AgEquity VRM	25 30	15 20 25		2.15%	N/A
1-month VRM	15 20 25 30	15 20 25 30		2.14%	1.79%
1-year VRM	15 20 25 30	15 20 25 30		2.21%	1.86%
3-year VRM	15 20	15 20		2.75%	2.40%
3-year VRM	25 30	25 30		2.73%	2.38%
5-year VRM	15 20	15 20		2.84%	2.49%
5-year VRM	25 30	25 30		2.88%	2.53%
7/1 ARM	15	15 25	3.25%	3.58%	3.45%
10/1 ARM	15	15 25	3.25%	3.71%	3.58%
10-year VRM	15 20	15 20		3.25%	2.90%
10-year VRM	25 30	25 30		3.33%	2.98%
15-year VRM	20	20		3.36%	3.01%
15-year VRM	25 30	25 30		3.55%	3.20%
7-year Fixed	7	15 25		2.98%	2.63%
10-year Fixed	10	10		3.13%	2.78%
15-year Fixed	15	15		3.37%	3.02%
15-year Fixed	15	25		3.39%	3.04%
20-year Fixed	20	20		3.66%	3.31%
25-year Fixed	25	25		3.83%	3.48%
30-year Fixed	30	30		3.85%	3.50%

FARMER MAC Financing Rural America[®]



Thank You!

opportunities@farmermac.com

800-879-3276