AGRICULTURE & AGRICULTURAL LENDING HALFTIME REPORT



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July 7, 2023

Quote for the Quarter Century

"The opportunity for business and personal prosperity is not about the size, the enterprise or the next big thing. It is about being a 'fivepercenter,' meaning being a little better in many components of production, operational efficiency, marketing, risk management, finance, human resources and in the focus on your values and goals."



Juggling the Triple Play

Prices

- Geopolitical agendas
- Manage the controllables, manage around the uncontrollables
- Extreme volatility
- Deglobalization
- Trade policy





Interest Rates

- Fastest rise since early 1980s.
 "Doubled in one year"
- 1% rise in interest rates means 200,000 fewer people qualify for home mortgages
- 1% rise in interest rates means 500,000 fewer people qualify for car/truck loans
- Alternative investments: CDs, treasury bills

Sticky Inflation

- Energy: oil, energy major input
- Increase real estate taxes
- Labor shortage vs. work ethic shortage



Post Super Cycle/Post Pandemic Strategies 2013 & 2023 Comparisons

- Post super cycle quick drop in prices, elevated costs, however low interest rates
- Low interest rates resulted in increase of land values
- Six cash flow profit grinder years until 2020
- Post pandemic positive cycle slower correction with elevated costs & interest rates
- Higher interest rates will alter investment returns & stabilize land values

Economic Radar Screen

- Weather
- Global economics health
- Hog industry & other protein industries
- Fossil fuel to green energy transition
- Al



Global Walk Around - China

- Declining population
- Median age: 39
- Chinese citizens saved \$2.4 trillion during the 3 year lockdown
- 4-2-1 issue
- Consumes 10 to 15% of global oil & energy
- China's annual GDP per capita \$12,732
- China's female workforce >60% (similar to U.S.)
- Two-thirds of workforce live in cities
- 25% of population live on small family farms



Total Debt to GDP: Deleveraging

- China 295%
- U.S. 257%
- Eurozone 258%
- China household debt to GDP 110%
 - similar to 2008 U.S. Financial Crisis
- China's growth rate as a result of deleveraging:
 - **2000-2010** 10.6%
 - **2010-2020** 6.2%
 - 2020-2030 2-4% estimated

Global Walk Around - India

- Surpassed China in population
 - Demographic divided
- Median Age: 29
- 5th largest economy globally
- 3rd largest economy by 2029
- India GDP per capita \$2,280
- Only three-fourths of the population is literate
- Females in the workforce: 23%
- One-third live in cities
- >55% of population are farmers and live on small family farms



Global Walk Around - Europe

- 20% of world economy
- Germany is in a recession
- European Union is in a recession
- Core inflation & headline between 5-7%
- Russia-China trap
- NATO & European unity long game strategy
- Watch weather, interest rates, climate, & social changes
- Tourism
- Export policy



Global Indebtedness

- \$305 Trillion Global Debt Q1 2023
 - \$45 Trillion increase since 2020
- \$100 Trillion Debt in Emerging Nations
 - 20% increase in the last three years
 - China, Mexico, Brazil, India & Turkey posted biggest increases
 - 250% of GDP in Emerging Nations
- 14% of companies in U.S. are "zombies"
 - "Zombie" companies are earning enough to pay expenses & service interest but not able to pay principal

Source: Data Compiled by IIF (Institute of International Finance- Washington, D.C.)



Fed Funds Rate Hikes in 2022-2023

<u>Date</u>	Change in Basis Points
March 17, 2022	25 bps
May 5, 2022	50 bps
June 16, 2022	75 bps
July 27, 2022	75 bps
September 21, 2022	75 bps
November 2, 2022	75 bps
December 14, 2022	50 bps
February 1, 2023	25 bps
March 22, 2023	25 bps
May 3, 2023	25 bps
June 14, 2023	0 bps



Regional & global banking issues = 100 to 150 bps increase

<u>Rate</u>	Percent
Fed Funds Rate	4.25% to 5.5%
Prime Rate	7.25% to 8.5%
Your Rate	Depends on Risk

Financial Stress 2024-2026

- Regional banks/large global bank
 - Upside down bond market
 - High tech financing
 - Cryptocurrency
- Expect tightening regulations impacting agriculture
- Impact on agricultural financing
 - More information/monitoring
 - Focus on cash flow & profitability
 - Focus on working capital & liquidity
- Slow down interest rate increases



Factors for Interest Rate Decline

- Inflation
 - Headline 4.0%
 - Core 2.0%
- Unemployment
 - U-3: 4.5%
 - U-6: 7.5%
- Two quarters of negative GDP
- Yield curve flat to positive



R-star: The Natural Rate of Interest

- R* is the short term interest rate that would exist when inflation and unemployment are at levels that do not stimulate or restrain the economy.
 - 2.25% to 3.25% Fed funds rate
 - 5.25% to 6.25% Prime rate
 - Days of zero-bound interest rates (2008-2020) are in the rear view mirror.
 - Fiscal policy has an instantaneous impact with checks in the mail
 - Monetary policy (Fed action) has a lag effect of 8 to 18 months



Lender & Business Dashboard Watch List

Indicator	Range	<u>Light</u>
Copper Prices	\$3.75 to \$5.00/Pound	Red
Consumer Sentiment	50.0 to 72.8	Red
LEI / Diffusion Index	Downward trend	Red
Purchasing Managers Index	High 40's	Yellow
Housing Starts	>1.5 Million Green 1.63	Green
Unemployment	3.7% U-3/ 6.7% U-6	Green
Factory Utilization	75% - 80%	Green
Federal Debt	Approximately \$32 Trillion	Red
Oil Prices	\$65 to \$125/Barrel	Yellow
Yield Curve	Flat to Inverted	Red



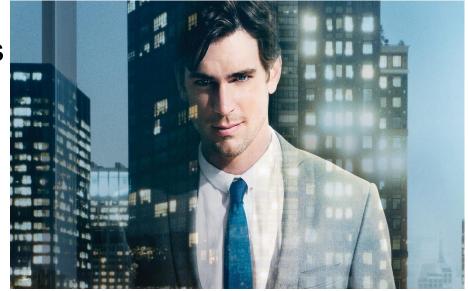
Storm Cloud Disruptors



- 38% of commercial banking loans with commercial real estate
- Commercial real estate values in urban areas down 20% to 80%
- GDP: 1st quarter was 2.0%, down from 2.6% in 4th quarter of 2022 (investment very low)
- Ocean freight traffic moves 90% of goods globally: traffic very slow in the Pacific
- Trucking traffic slowdown by more than one-third in U.S., operating at 75% of capacity
- Manufacturing orders down 30% to 40%, year over year

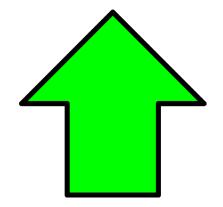
White Collar Recession

- Peak of need for knowledge workers
- AI is eliminating many:
 - Accountants
 - Software programmers
 - Lawyers
 - Human resource professionals
- Companies are eliminating managerial layers
- Layoffs
 - 80% in information sector
 - 55% in finance & insurance sectors
- Blue collar service jobs are in growth mode
 - Two-thirds of all new jobs



History of Land Values 1910-2022 Perspectives on "Booms"

- Large appreciation: WWI, WWII, Korean War, 1970s
- Yearly appreciation peaked > 20% annually
- Strongest sustainable growth was the 1970s decade which saw > than 10% growth about 70% of the time
- Rule of 79 since 1910
- Rule of 88 since beginning of WWII



History of Land Values 1910-2022 Perspectives on "Busts"

- In the 1920s, land values declined 5% to 10% annually
- In the early 1930s during the Great Depression, land values declined 10% to 20% annually
- In the 1980s, land values declined 5% to 10% annually for five years
- In 2009 during the Great Recession, farm land values declined 5% annually
- Other declines nationally: 1% to 3% annually for 1 year

Ag Lenders Watch List Circa 2023

- Account payables
- Credit card debt
- Interest rate increases
 3%, 4%, 5%
- Lines of working capital
- Once a year financials
 Tax reasons
- Fraudulent activities
- Split lines of credit
 - Rule of 5 to 7
- Hog industry & other protein industries
- Shadow lenders



Financial Crisis 2024-2026

COLLATERAL LENDER

- Don't know cost of production
- Monitor financials once a year
- Shoot from the hip marketing and risk management
- Family living cost questions
- Lender develops statements

PROFIT OR CASH FLOW LENDER "SIXTH C"

- Knows cost of production & break evens
- Develops & monitors cash flow often
- Marketing & risk management plan
- Modest family living cost
- Team of advisors

Economic Cycles:

Resiliency/Agility/Nimbleness

Financial liquidity/cash/the bridge

- Shock absorber- cash flow profits
- Preserve wealth or liquidity fallback
- Proactive positioning opportunity capital



"Cash is queen on a chessboard".

Economic Cycles: Resiliency/Agility/Nimbleness

Projected cash flow (financial sensitivity analysis)

- Best, average & worst case scenarios "best of the best"
- Monitor more than annually- "variance analysis"
- 10-10-5 financial sensitivity



Cash flow & financial sensitivity analysis are the "financial guardrails".

Economic Cycles: Resiliency/Agility/Nimbleness

Profitability

- 60-30-10 profit plan
- Term Debt to EBITDA
 - <3:1 Green (moderate agility/resiliency)</p>
 - 3:1 to 6:1 Yellow (some resiliency, little agility)
 - >6:1 Red (low agility/resiliency)
- Earns & turns
 - Margin X capital turnover = ROA

"Profit is the oxygen of the business."



Economic Cycles: Resiliency/Agility/Nimbleness

The Art & Science of Business Success

- Three ways you will be 5% better
- Sixth "C" of credit is the most important
- Net worth in financials & quality of life is equal to your network of people.

"Success is measured by dollar signs, significance is giving back to others in life."





Q&A with Dr. Kohl

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Online Articles:



Road Warrior of Agriculture <u>https://www.farmprogress.com/road-warrior</u>

• Ag Globe Trotter

https://agwestfc.com/education-and-resources/industry-andeconomic-insights/economic-updates/agricultural-trends

 Dave's GPS & Dashboard Indicators <u>https://www.farmermac.com/news-events/daves-gps/</u>