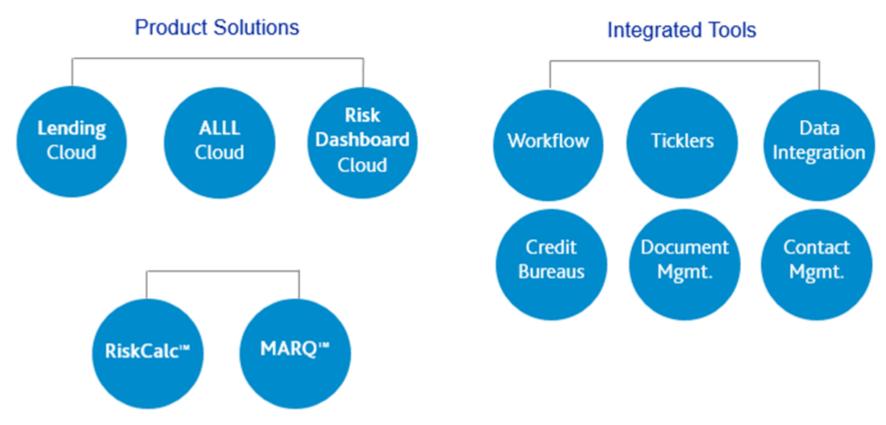


Dr. Kohl's Views on the Latest Ag Trends and Borrower Behaviors

Loan Lifecycle Management in One Solution



Moody's Analytics SaaS Platform



What's Coming for Ag

- "Peer Benchmarking" for Ag (similar to RMA)
 - Internal
 - State
 - Regional
 - National



» Ag Scorecard

- Better Risk Assessment during downturn
- Pre-Screener
- Use alongside internal Risk Rating

Presenters



Doug Johnson

Director – Sales Management

Moody's Analytics Lending Cloud



Dr. KohlProfessor Emeritus, Virginia Tech
Blacksburg, VA

DR. KOHL'S VIEWS ON THE LATEST AG TRENDS AND BORROWER BEHAVIORS

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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

Top Credit Risks: International Trade

- NAFTA
- CPTPP
- 20% of net farm income is export driven
- Canada \$20 billion of agricultural export trade
- Mexico \$18 billion of agricultural export trade
- 47% of Mexico's population under 25 years old
- tariffs prompt retaliation toward agriculture
- China \$30 billion in agricultural trade potential
- China's Belt and Road Initiative/Marshall Plan
- in innings one or two, volatility in extremes





NAFTA's Trading Partners

| Country | Size of Economy in 2017 (Trillion Dollars) |
|---------|---|
| U.S. | \$19.4 |
| Canada | \$1.64 |
| Mexico | <u>\$1.14</u> |
| Total | \$22.18 |

- 28% of world's economy
- 47% of Mexico's population under 25 years old
- 400 million people with money

TPP Trading Partners

| Country | Size of Economy in 2017 (Trillion Dollars) |
|-------------|---|
| U.S. | \$19.4 |
| Japan | \$4.08 |
| Canada | \$1.64 |
| Australia | \$1.39 |
| Mexico | \$1.14 |
| Malaysia | \$0.31 |
| Singapore | \$0.31 |
| Chile | \$0.25 |
| Vietnam | \$0.22 |
| Peru | \$0.21 |
| New Zealand | \$0.20 |
| Brunei | \$0.01 |



Top Credit Risks: Oil & Energy

- 911 tragedy
- U.S. is globe's major energy producer
- drive towards efficiency
- solar, wind, and electric
- 2040 Germany & France
- electric vehicles
- 2025 one fourth of cars in China will be electric
- Central Africa will become the new Saudi Arabia



IMPACT: 80% of ag expenses are energy related

Top Credit Risks: U.S. Economy

- 100-plus months
- 106 & 120 months
- urban and coastal economies and the fly over states
- central bank driven U.S. and abroad
- wealth effect
 - consumer investing
 - consumer spending



IMPACT: killers of economic expansions

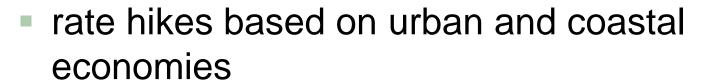
Killers of Economic Expansion

- expansions don't die/killed off
- Central Bank tightening strategies
- oil prices
- stock market decline
- bubbles
- trade issues



Top Credit Risks: Interest Rates

- factors impacting interest rate hikes:
 - unemployment
 - growth of economy
 - inflation
 - consumer sentiment







Top Credit Risks: Farm/Ranch Land

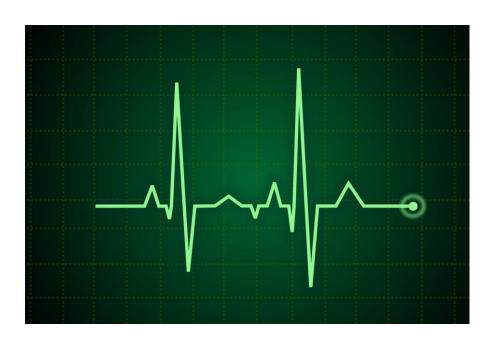


- farm land values "resilience"
- 1980's & 2020 perspectives
- baby boomer farm/ranch
- regional & local pockets
- \$2.8 of \$3.5 trillion farm balance sheet land

- valuation of land
 - productivity
 - water & minerals
 - old money
 - land in transition
 - technology compatibility
 - organic, local, natural markets
 - operating money & refinancing

IMPACT: complacent - you've got the dirt, you can't get hurt

Pulse of the Lender & Borrower



Biggest Financial Stresses in Agricultural Portfolio

Ranking

- 1. farm profitability & cash flow
- 2. high family living expenses
- 3. open accounts trade debt
- 4. loss of experienced staff
- 5. competition
- 6. growth & expansion

What Percent of Portfolio Showed Negative Profit in 2016-2017?

| Answer Choices | <u>Responses</u> |
|----------------|------------------|
| <10% | 45% |
| 10 to 25% | 35% |
| 26 to 50% | 20% |

Source: Ag Lenders Survey – May 2018

Bankers Perspective:

| 2006-2012 | 93% of portfolio was profitable |
|-----------|--|
| 2013-2017 | 63% of portfolio was profitable with smaller margins |

What Percent of Portfolio Sought Refinancing in the Last Two Years?

| Answer Choices | <u>Responses</u> |
|----------------|------------------|
| < 10% | 55% |
| 10 to 25% | 40% |
| 26 to 50% | 5% |

Source: Ag Lenders Survey – May 2018

Results Could Vary By:

- geographical region
- enterprise
- lender philosophy

What Percent of Your Customer Base is Losing Equity on the Balance Sheet?

| Answer Choices | <u>Responses</u> |
|----------------|------------------|
| <10% | 40% |
| 10 to 25% | 45% |
| 26 to 50% | 15% |

Source: Ag Lenders Survey – May 2018

Earned net worth versus appreciated net worth

What Percent of Your Customer Base is Seeking Expansion Opportunities?

| Answer Choices | <u>Responses</u> |
|----------------|------------------|
| <10% | 45% |
| 10-25% | 35% |
| 26-50% | 10% |
| >50% | 10% |

Source: Ag Lenders Survey – May 2018

Issues & Answers



Schedule F & Scorecard Lending

- Schedule F is not a true reflection of earnings
- scorecard lending
 - lack of critical thinking
 - issues start outside the numbers



- infrequency of monitoring
- scorecard lending is a tool, not the answer



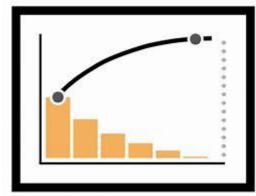
Accrual Analysis

Seven Major Questions/Answers for Accrual Analysis

| Question | Positive | Negative |
|--|----------|----------|
| 1. What is the direction of inventory value? | | |
| 2. What is the direction of aging accounts payable? | | |
| 3. What is the direction of accrued expenses? | | |
| 4. What is the direction and aging of accounts receivable? | | |
| 5. What is the direction of amount of prepaid expenses? | | |
| 6. Operating lines of credit vs. inventory/receivables | | |
| 7. Are current assets quick to cash? | | |

Concentration

- 10-12% of producers generated 80% of production
- 10-12% of producers carry 65% of farm debt
- business growth exceeds management skill base
- third party/counter party risk



IMPACT: too big to fail

Passive Management/Character

- production oriented
- skills transfer
- accountant: drive by financials
- fraud examples
- intellectual capital will be as important as financial capital

IMPACT: analysis of management factor is critical

Signs a Business is in Trouble

- accounts payable
- credit card debt
- real estate taxes
- operating lines of credit refinanced
- split lines of credit
- interest cost >10% of revenue
- borrow from friends & relatives
- rob Peter to pay Paul
- inaccuracy of assets and liabilities
- can't meet payroll



Refinancing Request Filter Questions

Questions to ask before refinancing a customer:

| Refinancing Request Filter Questions | Yes | No |
|--|-----|----|
| Poor lifestyle habits (family living, killer toys)? | | |
| Poor management habits? | | |
| Poor marketing and financial habits? | | |
| Failure to build working capital in good times? | | |
| Uncontrollable events (macro or micro)? | | |
| Repeating refinance cycle multiple times? | | |
| Poor quality collateral assets (land, machinery, livestock)? | | |

Critical Financial Performance Index

| <u>Criteria</u> | <u>Vulnerable</u> | <u>Resilient</u> | <u>Agile</u> | <u>Customer</u> <u>Ranking Code</u> |
|--|-----------------------|-----------------------------|-------------------------|--|
| Coverage Ratio | <110% | 110-150% | >150% | |
| Working Capital/Expense | <10% | 10-33% | >33% | |
| Debt/Asset Ratio | >70% | 40-70% | <40% | |
| ¹ Operating Expenses/Revenue | >85% | 75-85% | <75% | |
| EBITDA/Revenue | <10% | 10-25% | >25% | |
| Term Debt/EBITDA | > 6:1 | 3:1- 6:1 | <3:1 | |
| Burn Rate/WC | <1 Year | 1-3 Years | >3 Years | |
| Burn Rate/CE | <2 Years | 2-5 Years | >5 Years | |
| Family Living | High Maintenance | Moderate to High | Low to Moderate | |
| Сар Ех | Postponed >3 Years | Postponed 1-3 Years | Continuous Upgrading | |
| Cost of Production | No idea | Mental & by whole operation | Via Enterprise | |

¹ Operating Expenses (excluding interest & depreciation)

Bottom of Cycle Perspectives

- monitor financials monthly or quarterly
- one page plan
- be careful of technology: lender liability
- large specialized farm issues
- DISC personality profile: know communication styles
- build better business in down cycle



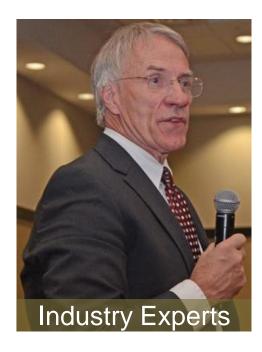
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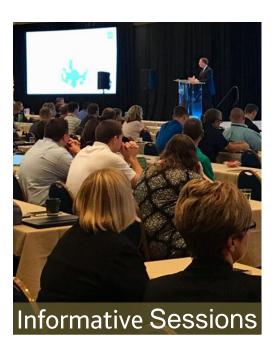
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