

Doug Johnson, Director, Sales Moody's Analytics | Omaha, NE

March 28, 2019

Agriculture today is at a **crossroads** for both Ag Producers and Ag Lenders alike.

Suppressed commodity markets and financial strain are creating an uncertain future in Agriculture.

- Many Producers are faced with life changing decisions to their operation and they way
 of life: "Do I have the means to continue farming or not?"
- The challenge for **Lenders** is: How long do we continue to financially support these operations, and when do we say it's the end of the line?

The most important aspect Lenders and Producers need to ask themselves is:

Is this operation Sustainable and will it be Relevant for the future?

It's not just about financial viability this year, it's also looking to the future to see if this operation will be viable as technology changes they way we farm.

The partnership between Lenders and Producers: Know What Makes Sense

Presenters



Doug JohnsonDirector – Sales Management
Moody's Analytics



Mike Hinton
Ag Banking Consultant
Midwest Cloud Computing



Jason Kuzel
Training Specialist
Moody's Analytics

Agenda: The Year of Tough Decisions

The challenge for Producers **and** Lenders going forward hinges on four critical aspects:

Financial Acumen

- Understanding the Operation
- Know the Numbers and Have a Plan
- Understanding the Producer: Tractor Drivers or Business minded

Remaining Relevant & Sustainable

- Are they "Surviving" or finding ways to "Thrive"
- Is the Farm "Relevant" today and "Viable" for the Future

Knowing What Makes Sense

- Understand Stress
- Making it Pay: Technology "wants" vs. "needs"

Communicate Early and Often

Be Clear – Be Consistent - Remove Emotion

Who is Moody's





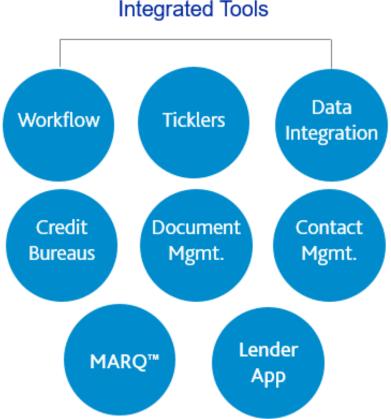


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Moody's Analytics Loan Origination







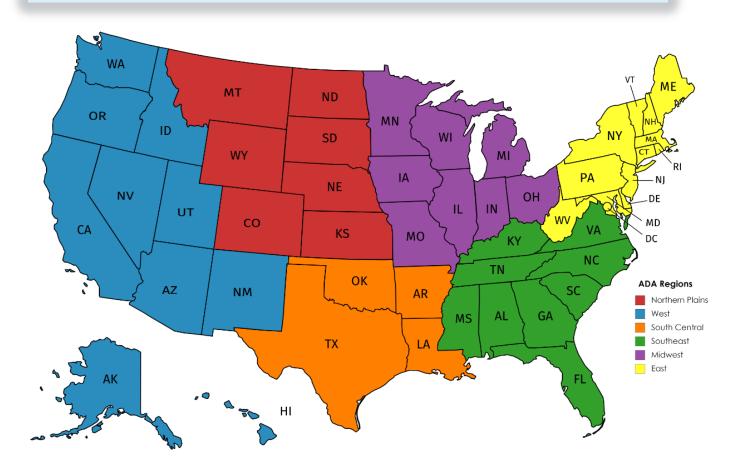
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Ag Peer Comparison: Internal & External



Ag Peer Comparison: Internal & External

Benchmark to Bank | State | Regional | National



MOODY'S ANALYTICS Ag Webinar: March 28, 2019

8

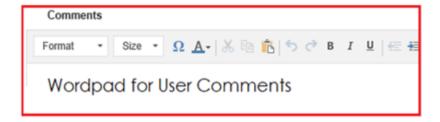
Ag Scorecard

Score Now

8.27 %=PD Risk Rating: 13

Criteria	
Liquidity Ratio	0.91
Debt to Assets	51.29%
Term Debt Coverage Ratio	-0.36
Interest Expense Ratio	4.01%
Return on Assets	-3.98%

Ag Sector Type	Crop
Industry Conditions	Declining
Diversification of Products	Non-Diversified
Years in Relationship	1-3 Years
Conduct of Account	Fair
Farm Conditions	Fair
Experience in Ag	3-15 Years
Financial Reporting and Formal Planning	Poor
Risk Management	Fair



1 to 14 point scale

1 = best | 14 = worst

Iikely to Default next year

Quantitative Factors
Hardcoded
65% Weight

Qualitative Factors

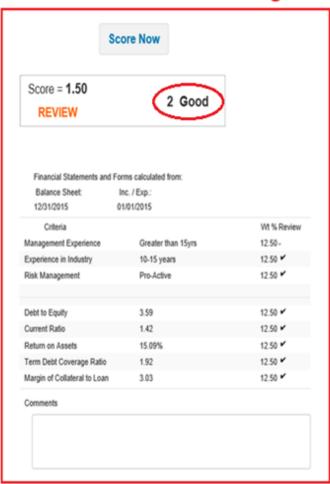
Hard Coded | Manual Answers

35% Weight

Comments

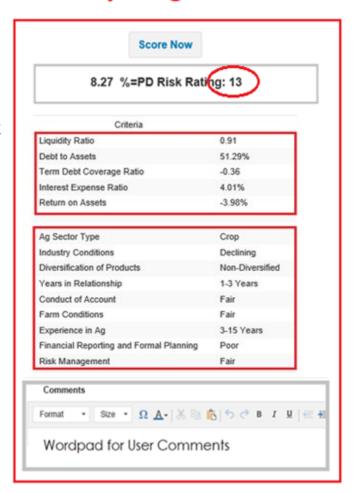
Ag Scorecard

Your Bank Risk Rating



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

Moody's Ag Scorecard



The Great Divide Between Producers

- Partner with those than "Are" and those that "Can" vs. those that "Won't"
 - You <u>can't just look</u> at the numbers you have to look at their behavior
 - Some "ARE" changing
 - Reducing personal spending / Family Living / Vacations
 - Postponing equipment purchases
 - Found off-farm income (2nd job to save farm)
 - Some "CAN" change
 - They "need a push" to help them understand
 - You can't "tell" them you have to "prove" to them
 - Why are some Producers successful and others not
 - Data Data Data
 - Some "WON'T" change
 - Consistently losing money
 - Excuse Game: "Not my fault"
 - Waiting for the Markets to save them

Sustainable Farming: It's not about farming for today. It's about farming for 10 years from now.



What Got You Here Won't Get You There

If you Farm / Ranch for **30 years**, how many years do you have left?



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Do they ever Really Retire?

The Great Divide Between Producers

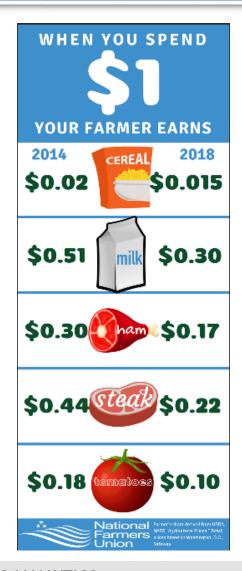
- Financial Acumen
 - Understanding their Operation
 - Do they truly "Understand" today's farming practices
 - Are they Intellectually Curious (constantly learning & active groups)
 - Are they Tractor Drivers or do they run a Business
 - Who do they Partner with (Agronomists / Marketers / Lender / Etc...)
 - Do they Know the Numbers
 - Who do they create Projections for: For You or For Them
 - Are their Projections in line with their historical trends
 - Are they Optimistic or Realistic
 - Is there a WRITTEN Marketing Plan
 - Did they have a Marketing Plan last year and did they stick to it
 - Do they know their Cost of Production
 - Is it Accurate
 - Do they breakdown by Farm
 - Are they willing to walk if Cash Rents don't work

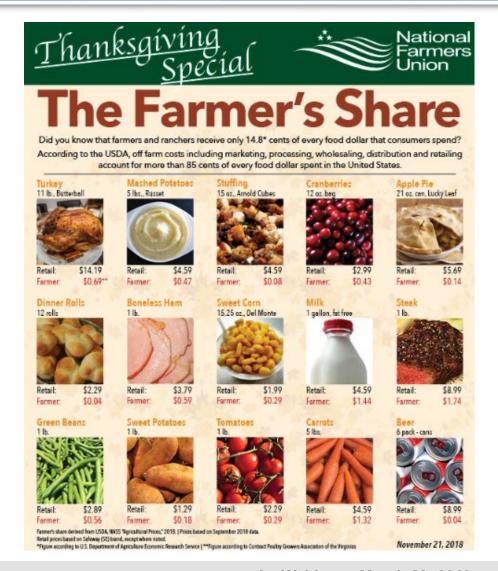
The Great Divide Between Producers

- Remaining Relevant & Sustainable
 - Are they "Surviving" or finding ways to "Thrive"
 - Do they have a plan that shows a 1-5-10 year plan
 - Can they answer:
 - Today: Where are they at today
 - Need: Where do they need to be
 - Want: Where do they want to be
 - Is the Farm "Viable" for the Future
 - Are they taking easy steps to improve their operation
 - Land Health: Are they good stewards
 - Herd Improvement: How & Why
 - Buildings and Equipment condition
 - What options are they exploring if this cycle continues
 - Are they planning for a Generational Transition

The Great Divide Between Producers

- Knowing What Makes Sense
 - Understand Stress
 - Financial limits: how long can they continue like this
 - Emotional limits: watch for "fraud-like" behavior
 - Are they going for a Home-Run
 - Traditional mindset: this is what we've always done
 - Making it pay: Technology "wants" vs. "needs"
 - Competition: Top Producers that are more efficient
 - Markets only part of equation: Efficiency/ Cost of Production critical
 - Markets: Top Producers leverage markets & pull trigger to sell
 - Trying to produce or market way to prosperity
 - Technology: Top Producers leverage technology for efficiency
 - Can they afford what they need vs what they want
 - Did they run the numbers and prove it out
 - Consumer buying patterns: commodity impact & future demands
 - Eating habits / Portion Size / What's Healthy What's Not





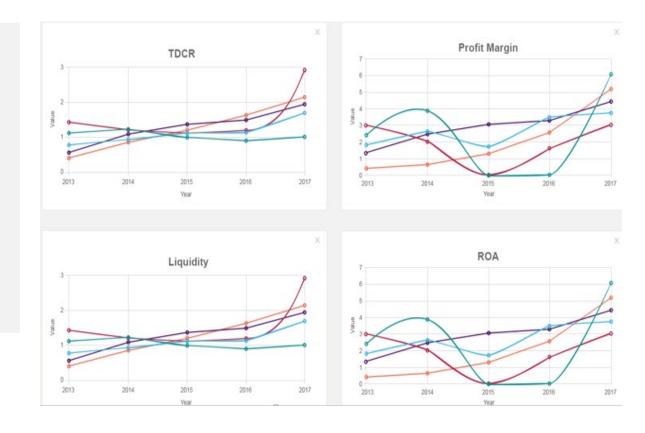
The Great Divide Between Producers

#1 Golden Rule:

- Communicate Early and Often
 - Be Clear
 - Be Consistent
 - Remove Emotion
 - How'd You Go Broke: Gradually or All-Of-A-Sudden
 - Let Data tell your story
 - Present options: show multiple scenarios
 - Show strengths weaknesses

Peer Benchmarking: Where Are You?

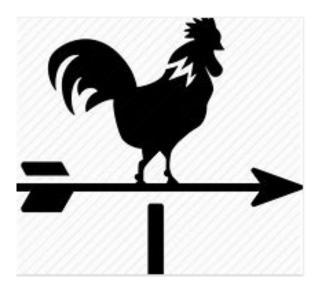
- Ag "Peer Benchmarking"
 - Internal
 - State
 - Regional
 - National
- Tell the Story
- Remove Subjectivity
- You're not the "Bad Guy"
- Create Your Value



This is where it gets dicey...

- When should you hold back?
 - Remain Relevant

- When should you move forward?
 - Remain Sustainable



Changing Technology...



In 1920 Each Farmer fed 19 mouths



In 1970 Each Farmer fed 26 mouths



In 2013
Each Farmer feeds
155 mouths
And counting...

No Farms, No Food, No Future

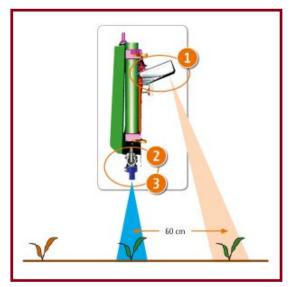
This is the new Amazone AmaSpot weed-detecting sprayer

Sensor detection of weeds during spraying can make significant savings in herbicide usage and promote higher work rates, says Amazone of the new AmaSpot system.



A 24m (78ft) version of the Amazone UX trailed sprayer is the first to be offered with the AmaSpot weed-detecting and spraying system.

Designed for herbicide applications to stubbles post-harvest or to combat weeds before a new crop emerges, the new technique employs chlorophyll-detecting fluorescence sensors positioned 100cm (39in) apart on the sprayer boom and 'looking' 60cm (24in) ahead.





This is the new Amazone AmaSpot weed-detecting sprayer

Sensor detection of weeds during spraying can make significant savings in

herbicide u AmaSpot s



In ag engineering circles, folks are taking the coenough so that Deere and Company erson team in its present bought BRT last fall for a hefty \$305 million. Deere plans location in Sunnyvale, California, as the development process con-

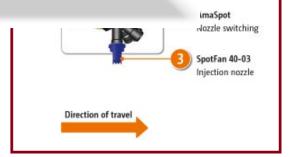
The system includes three major components - a simple digital camera, a computer to analyze and trigger spraying and a set of spray nozzles specifically designed for the technology.



ireenSense)n-line sensor

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VERMEER INTRODUCES FIRST SELF-PROPELLED BALER

By Laurie Bedord 9/13/2017

A few years ago, Vermeer assigned a special engineering group within the company a simple assignment: Develop new machines that don't currently exist in the marketplace. The first fruits of its efforts were introduced at the 2017 Husker Harvest Days farm show in the form of the ZR5 self-propelled round baler prototype – the first of its kind in the hay and forage industry – equipped with technology that offers unprecedented ride quality and maneuverability.



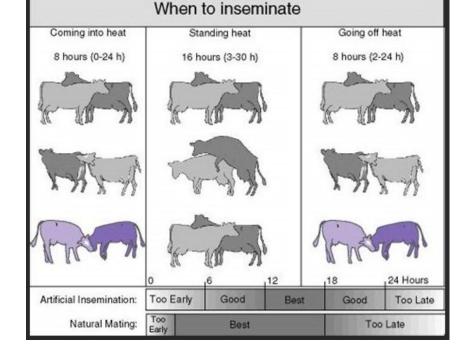
Pulling expertise from the lawn care industry, the ZR5 features zero-radius turning in its steering system for better maneuverability and driving efficiency than seen in a conventional tractor-baler combination. Hydraulic drive on the baler drive, as well as the rear wheels, also provides you with the ability to automatically make real-time adjustments based on field, crop, and operator inputs.

Improve Herd Genetics:

- Implant genetic superior embryo's into cheap cows
- Use as "host"

Microchip & GPS:

- Track Cows Steps
- Movement
- Body Temp
- Health



Not new but being adopted

Blockchain in Agriculture

FSA: Know Your Farmer | Know Your Food



Driverless Cars: Impact to Agriculture

- Your kids may never learn how to drive
- Transportation will be a "Service" vs. "Ownership"



Rapid advancement of technology in the Ag space

How quickly it's spreading across the globe

Computer power DOUBLES about every 18 months



Ag Needs Technology and Experience



Need BOTH to Avoid Pitfalls

Business IQ: Management Factors

Cust	tomer Checklist	Green (3-4 points*)	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.	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	Yes	Sometimes	Non existent
13.	Transition plan/Business Owner plan	Yes	Working on plan	Non existent/controversy
14.	Educational seminars/courses	Yes	Sometimes	Neverattend
15.	Attitude	Proactive	Reactive	Indifferent

*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

Score	<u>Overall Analysis</u>
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

33

Source: Dr. David Kohl

7 Tips for a Strong Marketing Plan

- Know your break-even costs. Factor in all of your costs including input, debt service and family living expenses. To get a better idea of what your yield might be, take your 3-year, 5-year or Olympic average (eliminate the high and low of the last five years and average the rest). You can also find ballpark figures from university agricultural extension services or an advisory firm. Use an excel spreadsheet to add up and track your costs.
- When there's an opportunity to profit, act on it. Once you understand your production costs, you'll have a better idea of when you can sell for a profit. You're not always going to hit the high, but selling at a profit-even a small one-takes some of the risk off the table. One of the biggest mistakes can be inaction because you think prices are going to go up or you're going to miss a rally.
- Set a goal and stick to it. You could set a date to have all of your marketing completed, plan to market 10 percent each month, or set a goal to market 1, 2 or even 3 years out. Creating a plan will help you stay on track. With so much volatility in agriculture, no one can be totally sure what's going to happen, but having an organized plan can help.

Source: ABA American Bankers Association

- Take the emotions out of it. Finding the right person or company to work with can go a long way to remove your emotions from the mix. Talk to your banker for recommendations and understand your options. Whether it's a marketing advisory firm, programs offered by your local co-ops and elevators, or your inhouse financial manager-find someone you trust and are comfortable with,
- Keep things simple. You don't have to do a lot of fancy footwork to make a profit. You may not always hit a homerun but sticking to your marketing plan can help you stay in business. When you do make a decision, accept it and move on. Don't beat yourself up afterward if the market moves one way or another.
- Avoid spot markets. Don't wait until you need to make a loan payment or you need cash. That will leave you vulnerable to what the market can give you at that time. Keep track of your local basis and understand the benefits of forward pricing.
- Understand the tools available. Hedge-to-arrive contracts, forward pricing, marketing loans to cover hedging expenses, hedging lines of credit, the role of crop insurance-it's complicated, but your banker is there to help you make sense of the options. Don't be afraid to ask questions and find the best solution for you and your operation.

Top 12 Lending Tips for 2019

- 1. In today's economic environment "base hits," or incremental improvements, compared to "home runs" will be more sustainable moving forward.
- 2. Have difficult conversations early
 - It is best to deliver bad news early in the conversation rather than dragging it out
 - Do not tell the farmer what to do. Give them choices on what they should do or what the bank is willing to do. The farmer needs to feel in control and making decisions
 - Make sure both spouses or all partners are present at these conversations
- 3. If your producer does not know their cost of production they are not good managers and are farming to produce a crop rather than farming to produce a profit.
 - Must have good financial records and pay attention to the financials rather than letting their accountant or lender do it.
 - Are they more worried about minimizing taxes rather than managing them.
- 4. Family living expense is the one expense the farmer has the most control over but pays the least attention to.
 - Are loan funds being used to support lifestyle?
 - What percentage of family living expenses are comingled in farm expenses?

Top 12 Lending Tips for 2019

- 5. Be on the lookout for excessive credit card debt (alternative financing) and multiple refinancing requests.
- 6. Look closely at a trend analysis because trends often establish a pattern
 - Do not rely on schedule F for trends. Farmers will hide problems by manipulating schedule F to minimize taxes.
- 7. Pay attention to working capital
 - Did they save during the good times to have working capital during the lean times
 - Is the working capital protected? For example, a marketing program for inventory or crop insurance on crops growing in the field
- 8. Look for early warning signs not showing up in the financials.
 - Lack of communication
 - Disinterest
 - Giving up
 - Talking to other lenders
 - Not being truthful

Top 12 Lending Tips for 2019

- 9. Niche farming and value added is becoming more prominent and provides many opportunities for young and beginning farmers.
 - Things you would not even consider in the past you need to look at now.
 - Need to have a well thought out business plan before embarking on niche/value added opportunities.
- 10. Farmers are looking for something of value their lenders provide to them.
 - Interest rate is important but not the only thing
 - Know your borrowers operation and business
 - Show them you are interested in their success
 - Farm visits are key
- 11. Transition planning is becoming more and more important as the next generation moves into farming.
 - Ask your borrower about their transition plans
 - Can the operation support more families
- 12. There will be opportunities for good farm managers who are willing to control expenses, make operational changes, and are constantly educating themselves.

Remember....

Never Confuse

Self-Worth

With

Net-Worth



38

Thank You!





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