



**Farm Credit Services
of America**

Ag Lending - 2017

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Agenda



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- Environment – 1980's vs. Today
- Land Values
- Interest Rates
- Agricultural Perspective



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ENVIRONMENT – 1980'S VS. TODAY



Comparison to Prior Cycles



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- The 1980s represented a leverage crisis driven by:
 - High real estate prices
 - High levels of debt relative to asset values
 - High interest rates and variable rate loans
- The current challenge is a cash flow shortage, driven primarily by:
 - Declining grain prices
 - High cash rent
 - Machinery and equipment investments
 - Living expense

Average Real Estate Data



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	2016	2015	2014	2013	2012	2011
Financial Position						
Current Ratio	2.34	2.49	2.44	2.61	2.53	2.49
Debt to Asset	33%	34%	35%	34%	35%	34%
Debt Coverage Ratio	2.09	2.24	2.45	2.41	2.35	2.23
Loan Conditions						
Loan Term	20 years	19 years	18 years	17 years	17 years	16 years
Loan to Collateral Value	50%	49%	46%	43%	46%	48%
Average Size	\$442,856	\$423,098	\$396,974	\$411,292	\$419,976	\$321,393
Annual Loan Volume	\$2.0B	\$2.0B	\$1.9 B	\$2.5 B	\$3.1 B	\$1.9 B

Interest Rates



- High variable vs. low fixed

Debt	Interest Rate	Payment
\$3,000	5%	\$213
\$3,000	13%	\$409

Ave \$ / CSR



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2011	\$121.74
2012	\$145.21
2013	\$137.18
2014	\$118.05
2015	\$113.92
2016	\$111.20
7-1-2017	\$110.70

1980's vs. Today Summary



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- This is NOT the 1980's.
- This IS a period of adjustment.
- FCSAmerica is taking the long view.
- Agriculture will adjust. Always has. Always will.



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LAND VALUES



Benchmark Farms



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- Most comprehensive agricultural real estate data base in the state of Iowa
- Nearly 70 full-time appraisal specialists
- Typically analyze 3,000 + transactions per year
- 71 Benchmark Farms
- Values Updated Semi-Annually (January 1st and July 1st)

Benchmark Trends

(based on 7/1/2017 Values)



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State	6 Month	1 Year	5 Year	10 Year
Iowa (21)	0.4%	-0.4%	-2.2%	99.1%
Nebraska (18)	0.0%	-3.3%	10.1%	164.7%
South Dakota (23)	-1.8%	-4.9%	36.8%	115.6%
Wyoming (2)	0.7%	0.7%	35.1%	45.0%

Iowa Buyer Types



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Type	2012	2013	2014	2015	2016	2017
Farmer / Rancher	79%	81%	79%	77%	77%	75%
Local Investor	11%	10%	9%	12%	12%	10%
Out of Area Investor	8%	7%	9%	8%	8%	10%
1031 Buyer / Other	2%	2%	3%	3%	3%	5%

Iowa Method of Sale



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Method	2012	2013	2014	2015	2016	2017
Public Auction	50%	47%	48%	43%	41%	40%
Realtor	18%	18%	20%	24%	20%	24%
Private	24%	30%	26%	26%	34%	30%
Sealed Bid	8%	5%	6%	6%	5%	6%
Other	<1%	<1%	<1%	1%	<1%	<1%

Iowa Real Estate Sales



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	2013	2014	2015	2016	2017
Real Estate Sales	932	860	651	651	234

These numbers may change as additional sales are found and analyzed

Avg. \$ / CSR



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- The data used to create the chart was taken from Farm Credit Services of America's real estate sales database
- It includes Iowa sales that are at least 85% tillable, improved or unimproved, and 40 acres or greater in size
- This provides the most accurate reflection of value as it combines price and quality

Average Cropland Inventory Values for Iowa With Avg. CSR and Avg. \$ / CSR



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2012	1	\$8,247	\$122.66	247	70.0
	2	\$8,451	\$124.70	147	70.6
	3	\$9,232	\$135.24	274	71.3
	4	\$9,691	\$145.21	389	70.1
2013	1	\$9,468	\$143.78	141	68.0
	2	\$9,929	\$146.89	121	70.4
	3	\$10,050	\$143.05	189	72.5
	4	\$9,802	\$137.18	262	75.0
2014	1	\$8,826	\$122.36	185	75.3
	2	\$9,857	\$130.79	147	78.4
	3	\$8,929	\$118.09	166	78.7
	4	\$8,671	\$118.05	209	77.4
2015	1	\$8,299	\$114.78	155	75.3
	2	\$8,245	\$111.83	100	77.2
	3	\$8,346	\$111.39	147	78.2
	4	\$8,508	\$114.00	195	78.1
2016	1	\$8,094	\$107.84	183	78.2
	2	\$8,117	\$107.69	101	78.6
	3	\$7,787	\$108.02	136	75.9
	4	\$8,391	\$111.24	215	78.4
2017	1	\$7,793	\$107.60	143	75.8
	2	\$8,158	\$110.70	63	76.6

Final Land Value Perspective



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Land values have stabilized in the first half of 2017

Positive land value support factors:

- Lower supply of land for sale
- Continued low interest rates
- Excellent 2016 harvest results – bushel impact

Final Land Value Perspective



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The stabilization of land values is providing two very important dynamics:

- Balance sheet stability
- Asset equity options



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INTEREST RATES



Interest Rates



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- We are currently in a rising short-term and stable long-term interest rate environment
- Interest rates remain a positive for agriculture
- Short-term rates are going from historic lows to low
- Long-term rates are still very reasonable – 10 year treasuries in the mid-2s
- Refinancing / restructuring debt is still a very viable option

	Prime	10 Year Treasury
2015	3.25	2.38
12-15	3.50	2.22
12-16	3.75	2.54
3-17	4.00	2.46
6-17	4.25	2.33

Interest Rates



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- This is a time for **amortization** focus
(term or length of the loan)
- Amortization drives repayment and cash flow
- Longer amortizations are appropriate for real estate, facility and machinery and equipment debt

160 acres; \$500,000; \$3,125 / acre



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Term	Interest Rate	Annual Payment	Per Acre
15	5%	\$48,171	\$301
20	5%	\$40,121	\$251
25	5%	\$35,476	\$222
30	5%	\$32,526	\$203

160 acres; \$500,000; \$3,125 / acre



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Interest Rate	Term	Annual Payment
4%	15	\$44,970
5%	20	\$40,121
6%	30	\$36,324

Interest Rates



Debt service amortization evaluation questions:

1. What is the average amortization of your total real estate debt?
2. What is the average amortization of your total machinery / equipment debt?

Interest Rates



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- Debt service cash flow is primarily driven by two things:
 - The amount of your debt
 - The amortization of your debt
- Re-amortization of debt helps reduce cash flow payment requirements, while still retaining flexibility to pre-pay debt in future years



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AGRICULTURAL PERSPECTIVE



Agricultural Perspective



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- Ethanol industry
- Machinery / equipment utilization
- Migration of livestock production
- Land ownership and control



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ETHANOL INDUSTRY



Ethanol Industry



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“The rumors of my demise have been greatly exaggerated”

Premise – The ethanol industry will continue to be an important domestic demand driver for our corn crop while also producing a very competitive feed source and needed octane.

Trend – Significant speculation about the future of the bio-fuels industry, particularly ethanol.

Ethanol Industry



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The ethanol industry will remain viable for the foreseeable future.

- We believe that eventually, facts and science win over myths / emotion.
- Ethanol is the cheapest source of octane in the market today.
- There is a base demand for octane. Octane is essential for engine performance.
- The ethanol industry is not a subsidized industry any longer – it stands on its own.

Ethanol Industry



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- Over time – it has been proven that ethanol does not harm engines or vehicles.
- The food vs. fuel debate has subsided.
- Consumer demand / understanding / acceptance is slowly changing (for the better.)
- Ethanol usage has broken through the 10% blend wall (10.87 national blend rate.)

Ethanol Industry



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- Summary:
 - E15 Reid Vapor Legislation is in process
 - Ethanol infrastructure expansion is accelerating.
 - Growing E15 acceptance and consumer demand / understanding is positioning the ethanol industry for long-term viability.

Ethanol Industry



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Why does this matter?

- Think what another 1% increase in the national blend rate would do to our supply / demand balance
- Another 400 million bushel steady, reliable, domestic demand driver



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MACHINERY / EQUIPMENT UTILIZATION



Machinery / Equipment Utilization Business Models



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Premise – Machinery / equipment utilization business models will evolve, change and grow due to a “tighter” grain production margin environment.

Trend – Farmers will begin to prioritize capital allocation to the top and bottom of their balance sheet first.

Machinery / Equipment Utilization Business Models



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- Farmers generate profits by utilizing machinery and equipment, not necessarily owning it.
- Machinery / equipment leasing volume and interest is up significantly since 2014.
- There is a growing trend toward having acres custom farmed.
- We have customers who are already doing different kinds of “sharing / pooling” of their equipment / machinery.
- We see business models like MachineryLink.

Machinery / Equipment Utilization Business Models



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- Summary:
 - Declining grain production margins will force capital allocation choices by farmers.
 - Farmers will prioritize capital allocation to the top (inputs and production costs) and the bottom (land ownership and control) of their balance sheet.
 - This is another way U.S. producers will adapt and remain cost competitive in the face of domestic and global competition.

Machinery / Equipment Utilization Business Models



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Why does this matter?

- If over investment in machinery / equipment during the boom years is one of our cost issues, then creative utilization business models may be one of our solutions
- Think beyond a pure ownership business model



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MIGRATION OF LIVESTOCK PRODUCTION



Migration of Livestock Production



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Premise - Eventually economics and business models play out. In agriculture, like many industries, low cost production wins in the long run.

Trend – Each cycle and each business event (drought, regulation, feed costs, processing infrastructure, etc.) continues to drive the industry toward efficiency.

Migration of Livestock Production



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A trend of livestock concentration . . .

- This is upper Midwest trend – Iowa is certainly in the middle of this geographic region and “has and will” benefit from this trend.
- The trend has a fairly broad scope – including swine, eggs, broilers, turkeys, dairy and cattle feeding.
- The principal drivers include: Cheaper and more ready feed sources, favorable livestock and agricultural policy and regulations, access to processing facilities and agricultural land for manure utilization.

Migration of Livestock Production



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- Summary:
 - We see agricultural diversity including grain production, livestock production and associated processing as a long-term positive.
 - Livestock helps support local demand for grain.
 - Farm ground is the greatest natural resource we have in the state of Iowa. If you enhance the value of the grain, you will enhance the value of the land. The economic impact and ripples are significant.

Migration of Livestock Production



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Why does this matter?

- Livestock production is a critical component of the total agricultural economic integration value chain; land, grain production, ethanol, feedmills, DDG's, livestock production, processing facilities
- It takes the entire integration to optimize the agricultural economic impact



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LAND OWNERSHIP AND CONTROL



Land Ownership and Control



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Premise - Land ownership and control will continue to be driven by farmers and local investors.

Trend – Over the past decade, the share of buyers of Iowa farm ground that are farmers / local investors has consistently been above 80% of the market.

Land Ownership and Control



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- Outside Capital – out of state
 - They tend to have higher return and appreciation expectations.
 - They tend to have a shorter “holding period” time line.
 - They tend to have more access to and be more comfortable with alternative investment options and other asset classes.
 - They tend to not be emotionally involved or motivated by this asset class.

Land Ownership and Control



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- Local Capital – Farmers / Local Investors
 - They tend to have very patient capital and return expectations.
 - They tend to have a much longer “holding period” for this asset class.
 - They tend to view this asset as a “legacy or multiple generation” asset.
 - They tend to be more motivated by control and location factors.
 - They tend to be less comfortable with alternative investments and other asset classes.
 - They tend to view this asset class as part of their long-term retirement and wealth building plan.

Land Ownership and Control



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- Summary:
 - The contrast in the basic ownership drivers and motivations has made it difficult for outside capital to compete with local capital.
 - Farmers / local investors will continue to allocate capital toward the bottom of their balance sheet.
 - Farmers and local investors will continue to dominate land ownership and control.

Land Ownership and Control



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Why does this matter?

- Local capital investment and local ownership keeps the economic impact and benefits local too – supporting our communities, schools, churches and businesses.
- Local ownership matters.

Closing Comments



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- This cycle requires proactive adjustments.
- Understand and use the power of amortization.
- Land value stability is a gift.
- The upper Midwest remains one of the most productive, viable, sustainable agricultural areas in the world.



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