




The Farm Financial Situation

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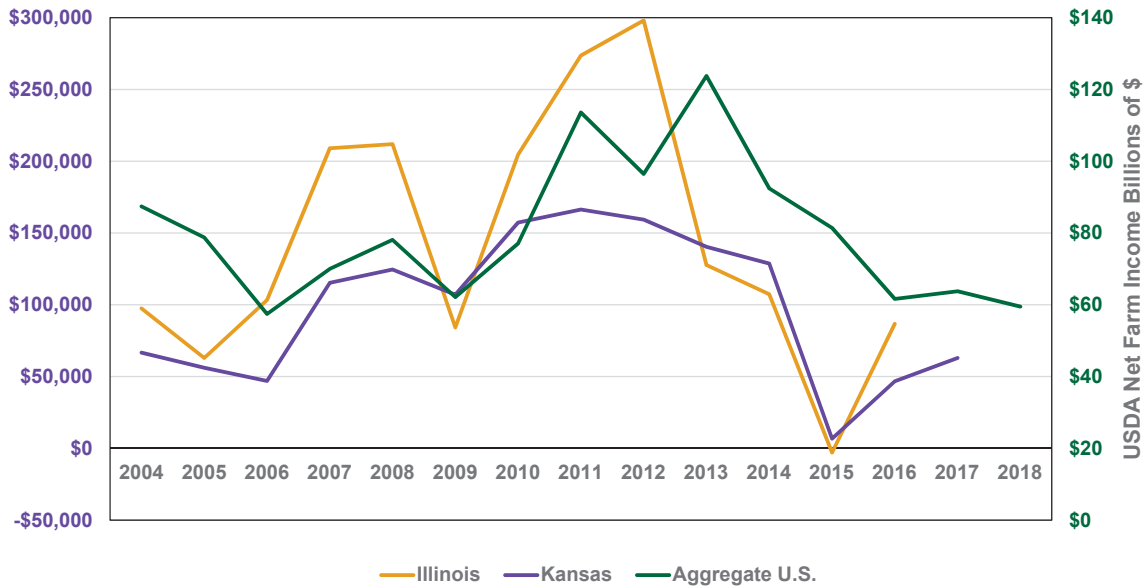


Introduction



- A Struggling Farm Economy
 - Repayment Considerations
 - Debt Considerations
 - Interest Rate Environment
 - Conclusions
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Net Farm Income



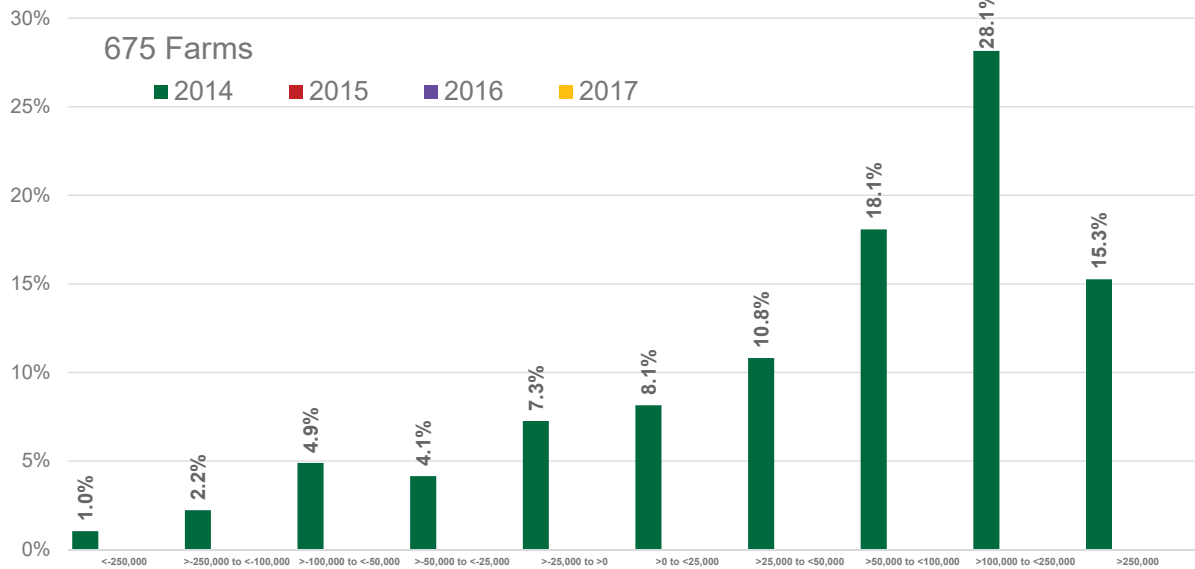
A Struggling Farm Economy

	2014	2015	2016	2017
Net Farm Income	\$128,731	\$6,744	\$46,717	\$62,944
Government Payments	\$15,390	\$21,259	\$28,636	\$27,689
Government Payments as a Percent of Income	12.0%	315.2%	61.3%	44.0%

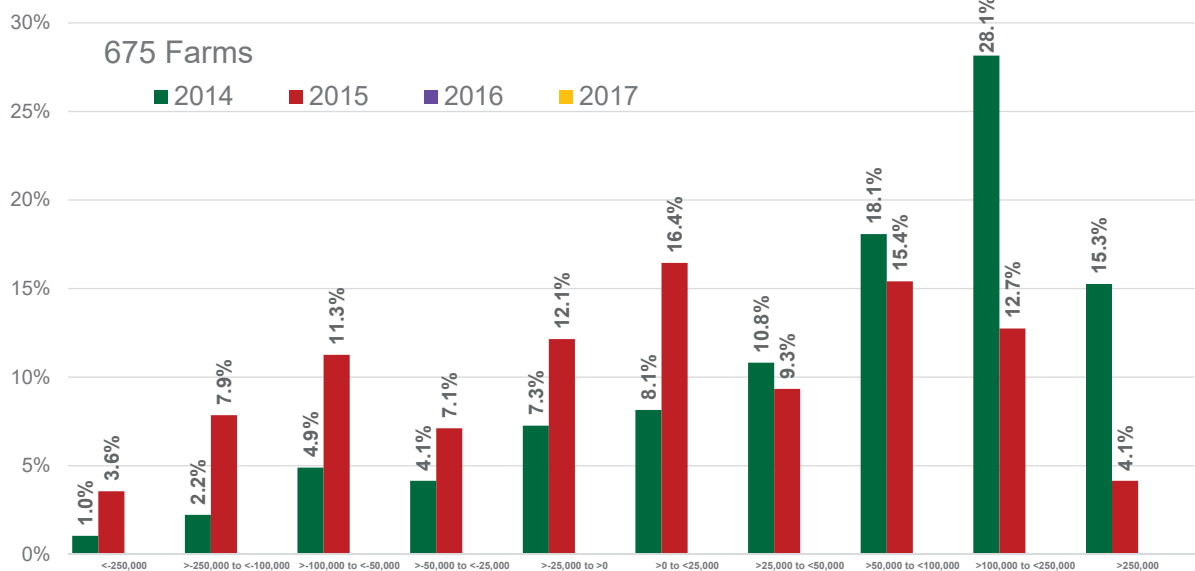
Government payments are important as a percentage of income.



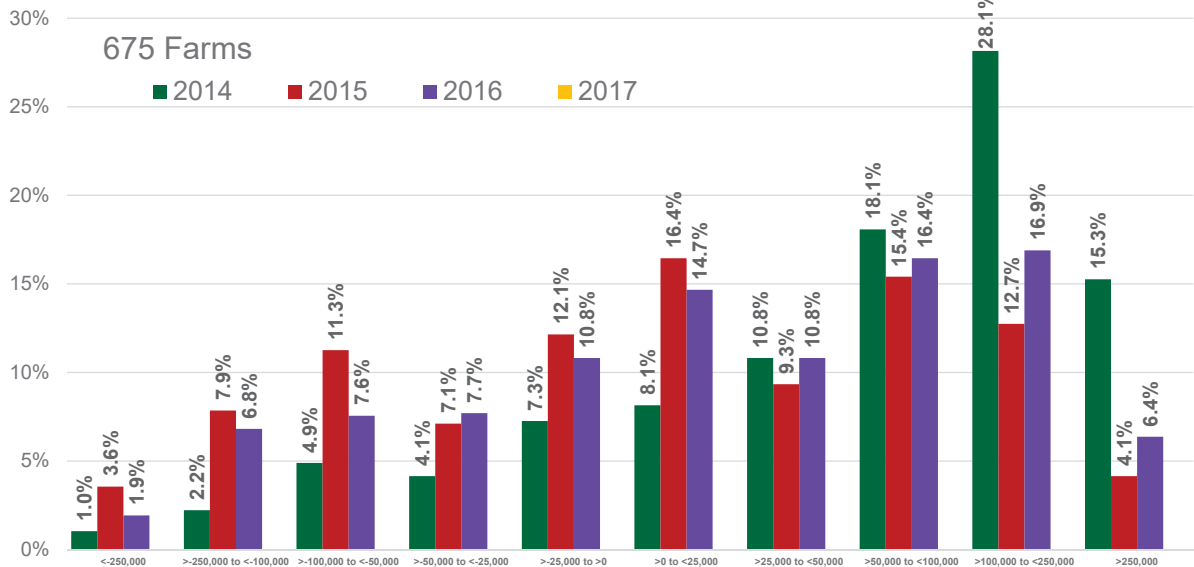
Distribution of Four Years of Net Farm Income



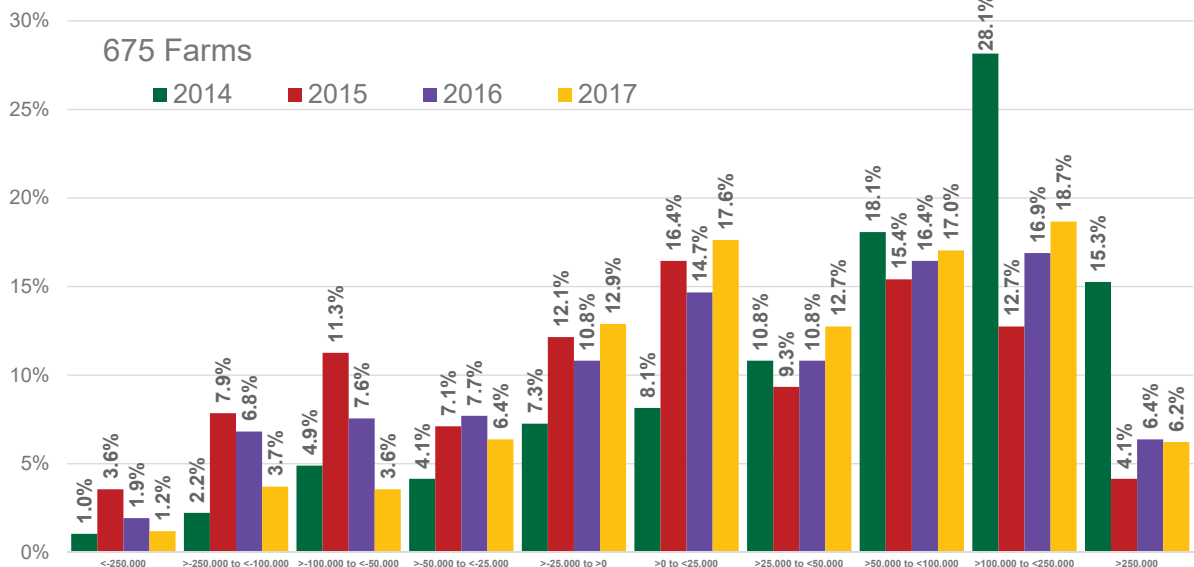
Distribution of Four Years of Net Farm Income



Distribution of Four Years of Net Farm Income



Distribution of Four Years of Net Farm Income



Distribution of Net Farm Income

	2014	2015	2016	2017
Negative Income	19.0%	42.6%	35.7%	29.9%
Less than \$50,000	38.8%	66.8%	61.0%	58.4%

A number of farms are struggling



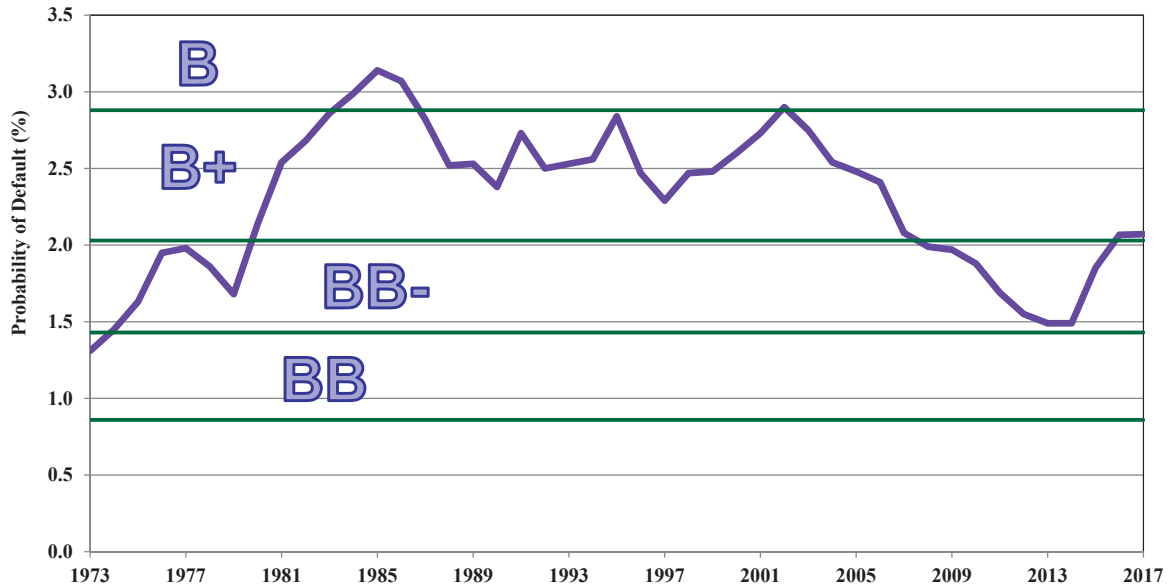
Consistency of Profit and Losses

- Farms that had negative income in 2016 and in 2017
 - 16.0%
- Farms that had positive income in 2016 and in 2017
 - 50.3%
- Farms that had negative income in 2015, 2016, and 2017
 - 11.2%
- Farms that had positive income in 2015, 2016 and 2017
 - 37.2%
- Farms that had negative income in 2014, 2015, 2016, and 2017
 - 4.3%
- Farms that had positive income in 2014, 2015, 2016 and 2017
 - 32.9%

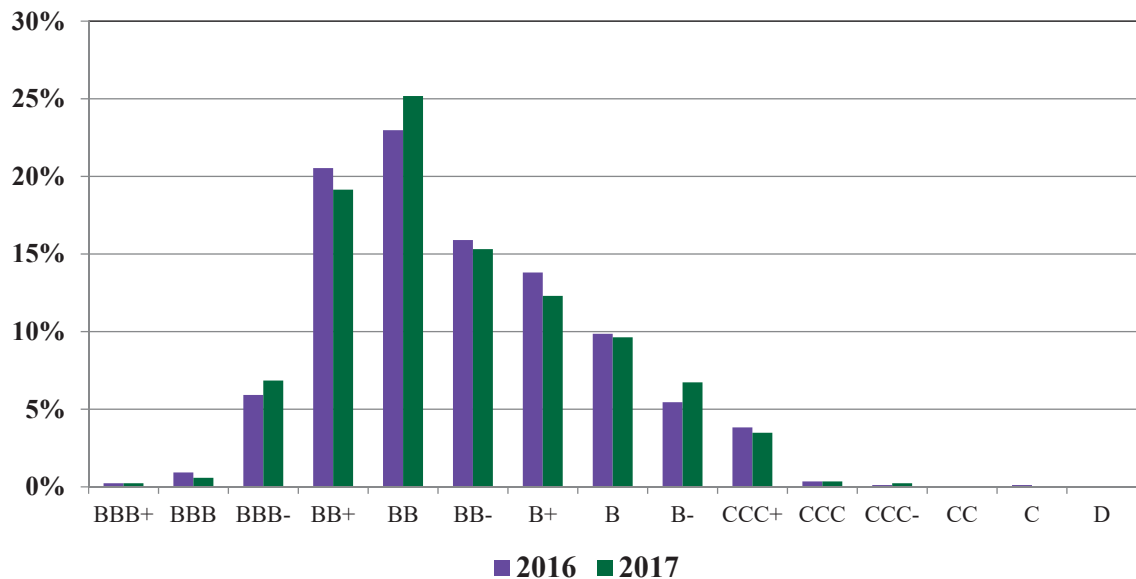
A number of farms are positioned for opportunity



Default risk is relatively low and it did not increase in 2017



Change from 2016 to 2017



Non-Irrigated Cost of Production per Acre

Year	Corn	Soybean	Wheat
2017	\$276	\$236	\$149
2016	\$279	\$232	\$176
2015	\$312	\$225	\$180
2014	\$322	\$229	\$172
2013	\$308	\$224	\$182
2012	\$325	\$202	\$183
2011	\$281	\$192	\$158
2010	\$268	\$176	\$148
2009	\$267	\$173	\$160
2008	\$265	\$167	\$153
2007	\$231	\$145	\$117
2006	\$191	\$125	\$98
2005	\$188	\$118	\$95



2017 Enterprise Information - Crop Mix Shift?

- Corn – 2017 Yields 21% above previous 5 year average
 - Revenue - \$351 per acre
 - Variable Cost - \$276 per acre
 - Total Cost - \$386 per acre
- Soybeans – 2017 Yields 2% above previous 5 year average
 - Revenue - \$316 per acre
 - Variable Cost - \$236 per acre
 - Total Cost - \$342 per acre
- Wheat – 2017 Yields 11% above previous 5 year average
 - Revenue - \$187 per acre
 - Variable Cost - \$149 per acre
 - Total Cost - \$224 per acre

Soybeans no longer profitable



Shifting Crop Mix

Crop	2015	2016	2017	2018	3-Year % Change
	Acres Harvested (Thousand)				
Corn	3,920	4,920	5,200	5,100	30%
Sorghum	3,200	2,950	2,360	2,650	-17%
Soybean	3,860	4,010	5,100	4,810	25%
Wheat	8,700	8,200	6,950	7,300	-16%
Total	19,680	20,080	19,560	19,860	1%

Shifting Crop Mix to Find Profitability?

Kansas Farm Economy

- The financial situation in the agricultural economy has changed considerably over the last 42 months
- 2015 farm income in Kansas was the lowest since 1985
- What about 2018?

Kansas Farm Economy 2018 Projections

Crop	2017	2018	2017	2018
	Yield (Bushel per Acre)		Acres Harvest (Thousand)	
Corn	132	129	5,200	5,100
Sorghum	82	87	2,450	2,650
Soybean	37	36	5,110	4,810
Wheat	48	38	6,950	7,300

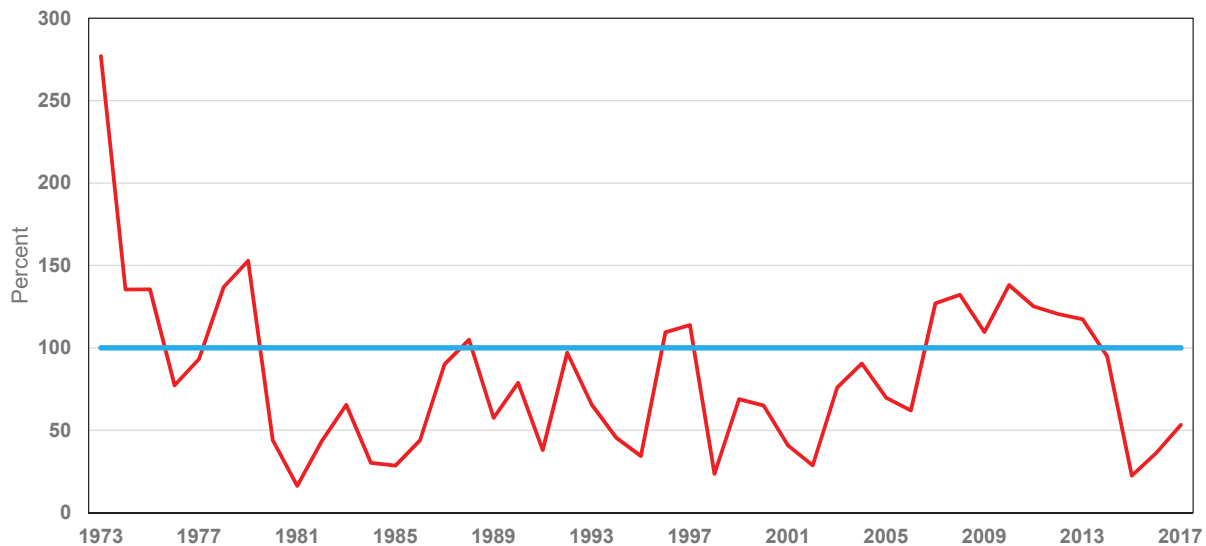
Kansas Farm Economy 2018 Projections

Crop	2017	2018
	Price (\$ per Bushel)	
Corn	3.43	3.55
Sorghum	2.92	3.02
Soybean	9.47	8.43
Wheat	4.36	5.42

Kansas 2018 Revenue	\$6.19 billion	\$5.99 billion
Illinois 2018 Revenue	\$13.50 billion	\$14.02 billion

Expected Change in Gross Revenue in Kansas of **-3.1%**
 Expected Change in Gross Revenue in Illinois of 3.9%

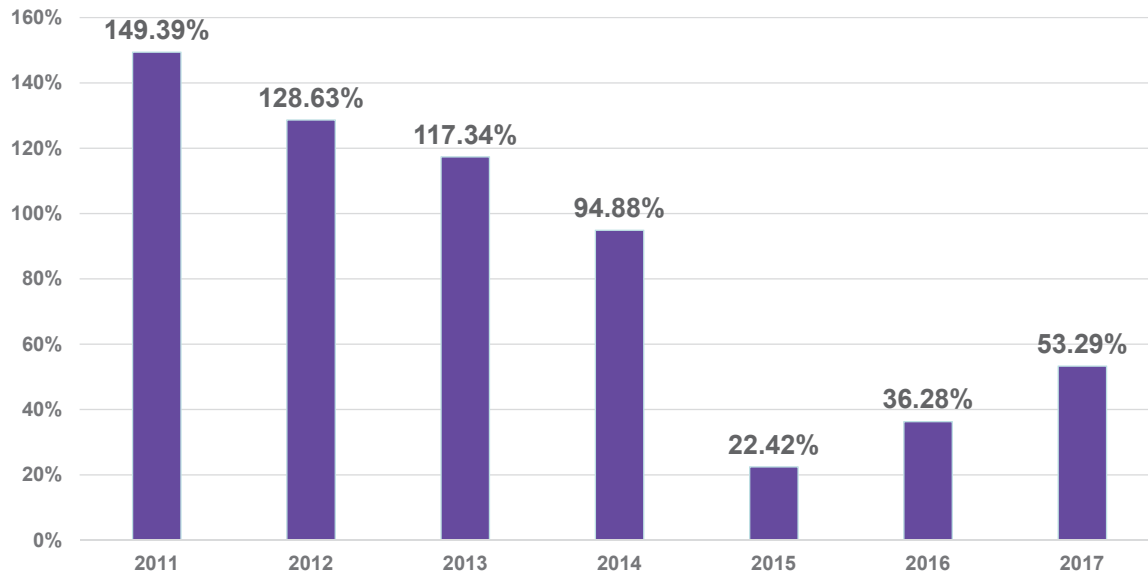
Changing Kansas Farm Economy - Repayment Capacity



Repayment Capacity

- Repayment capacity is key
 - Fell from 152.8% to 16.3% from 1979 to 1981
- Two key factors
 - Increase in interest payments by 65.3%
 - Decline in value of farm production by 15.7%
- Land values could no longer be supported
- Repayment capacity has improved since the low in 2015

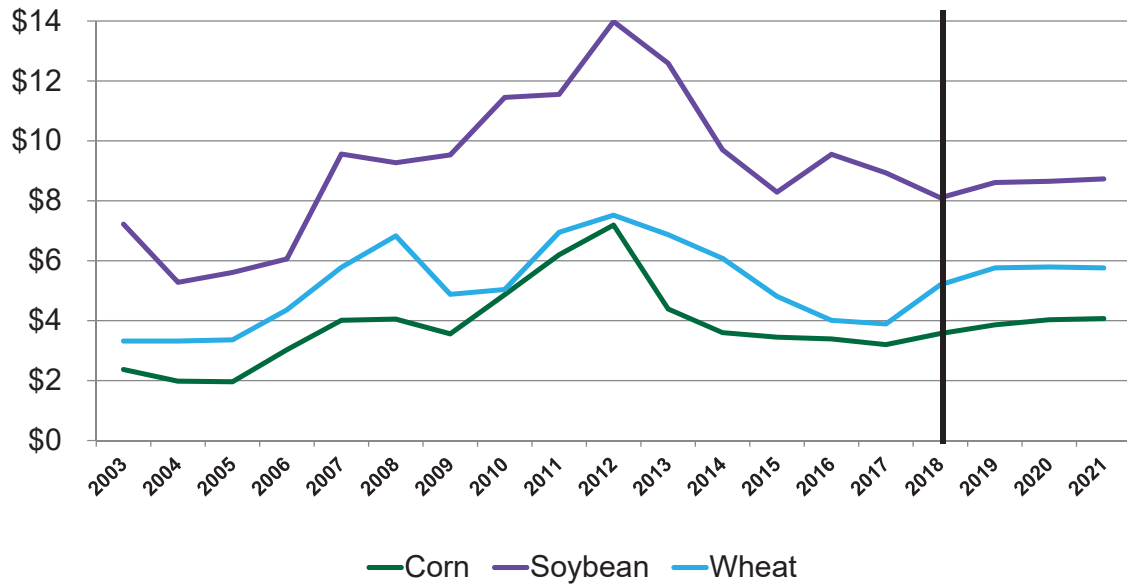
Repayment Capacity



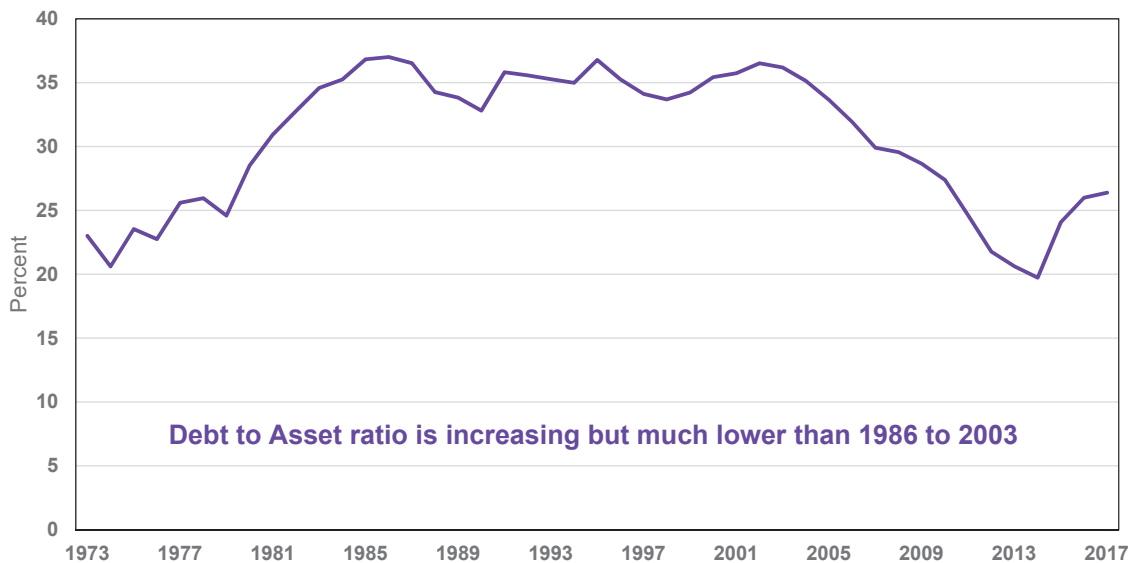
Kansas Farm Economy

- Repayment capacity is an important issue
- 2017 was an improvement from 2016
- 2018 is uncertain though likely to be close to 2017

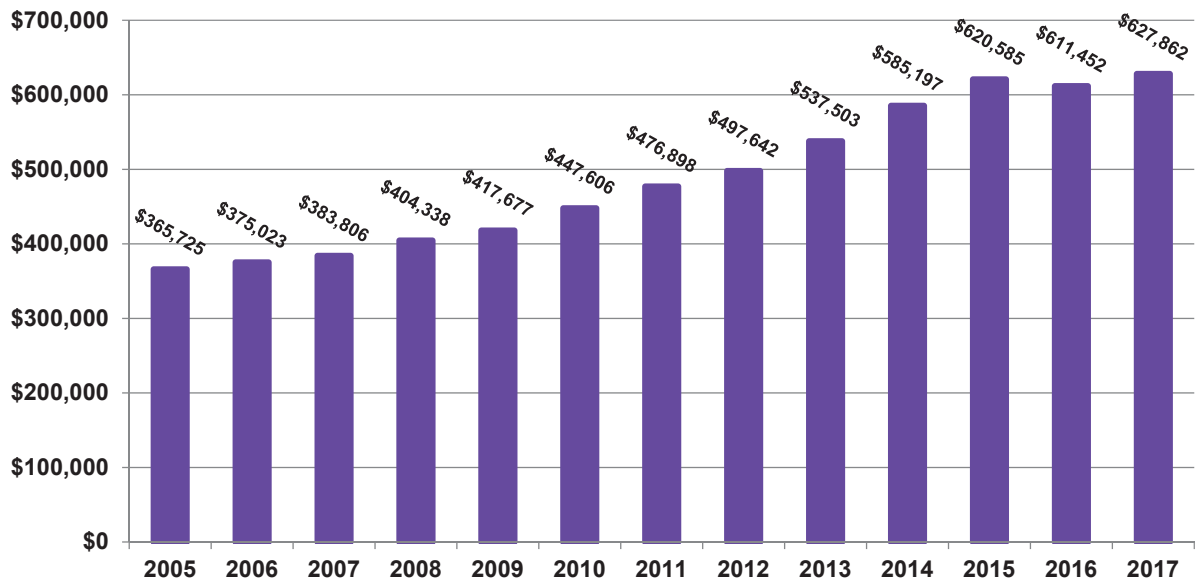
Recent and Projected Farm-Level Crop Prices Light at the end of the tunnel?



Changing Kansas Farm Economy - Debt to Asset Ratio



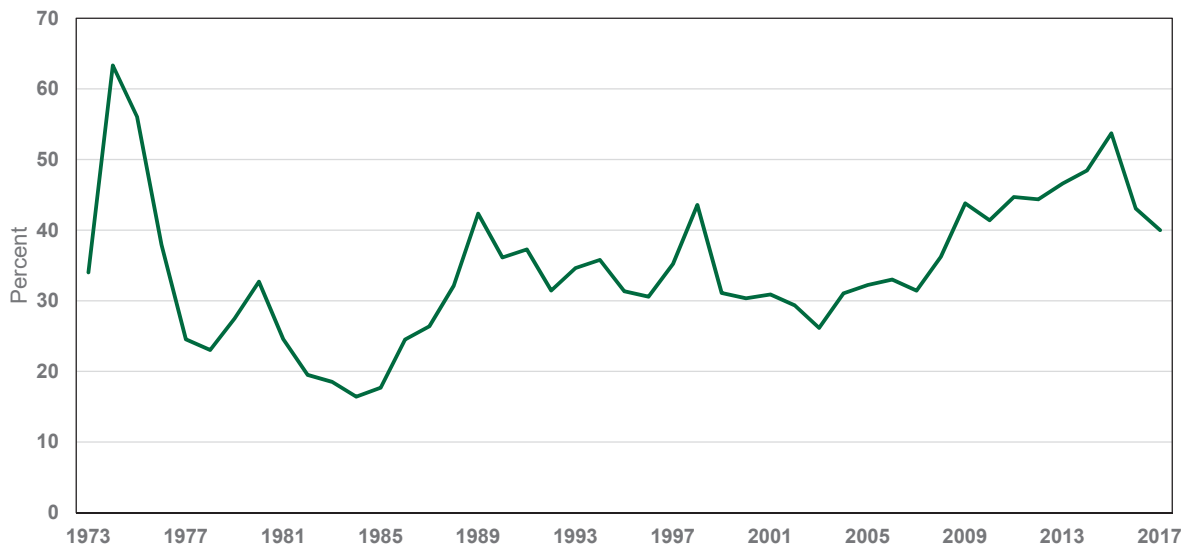
Kansas Farm Management Association Debt Levels



Kansas Farm Economy

- Debt Levels
 - Current Liabilities – (\$19,190)
 - Intermediate Liabilities – (-\$6,552)
 - Long-term Liabilities – (\$3,772)
- Working Capital
 - Fell from \$229,606 in 2016 to \$223,308 (-\$6,298)

Changing Kansas Farm Economy - Working Capital to Gross Income



Kansas Farm Economy

- Debt has increased
- Majority of increase in current liabilities
- 2017 was a year of increasing debt with some intermediate liabilities repaid



Debt to Asset is Higher in 2017 than 2016

- Average debt to asset ratio for Kansas Farm Management Farms

1979 – 24.6% 2016 – 26.0%

2014 – 19.7% 2017 – 26.4%

- Farms Greater than 40% debt to assets

1979 – 19.4% 2016 – 24.5%

2014 – 13.6% 2017 – 26.0%

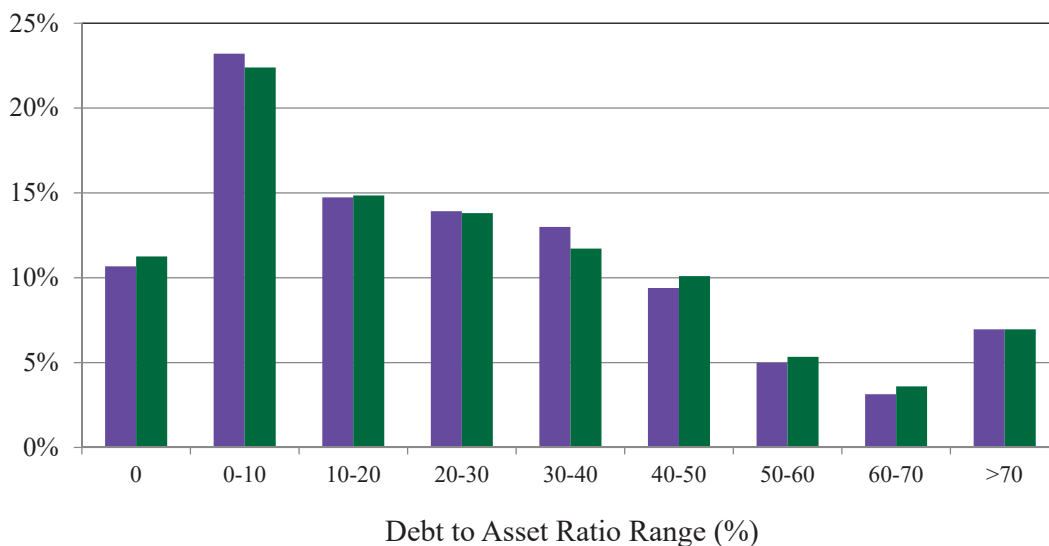
- Farms Greater than 70% debt to assets

1979 – 1.3% 2016 – 7.0%

2014 – 2.3% 2017 – 7.0%



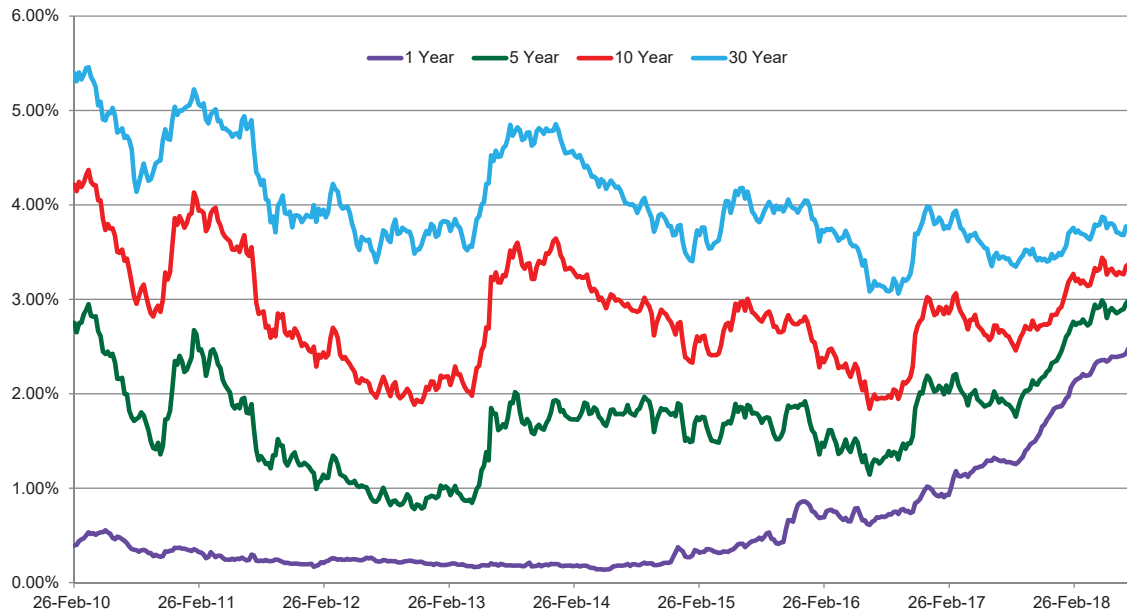
Debt to Asset Distribution is Nearly the Same in 2016 and 2017



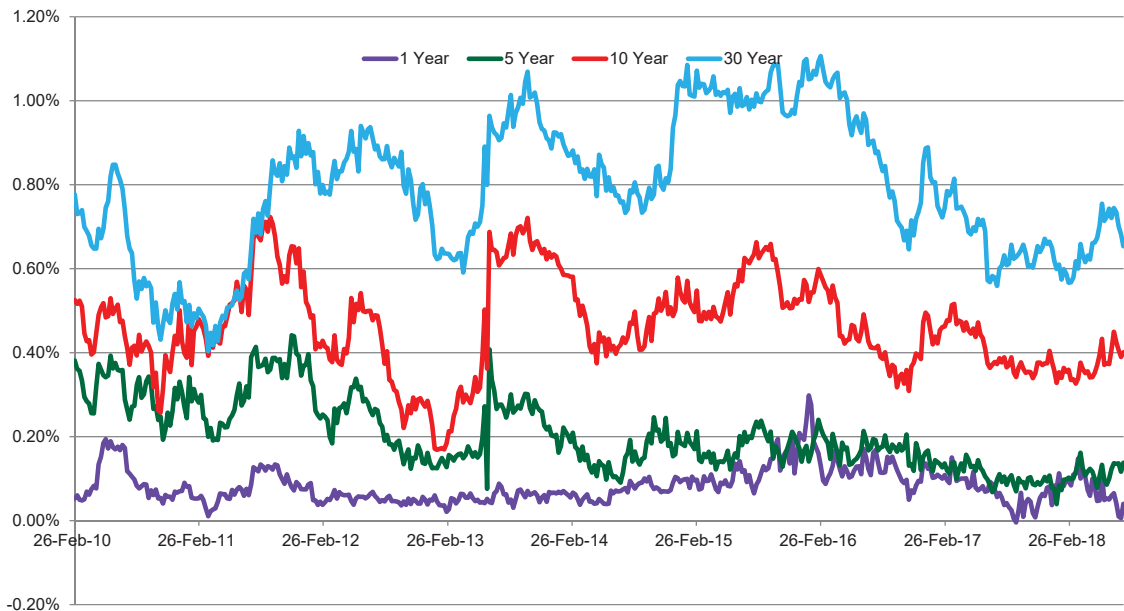
■ 2016 ■ 2017



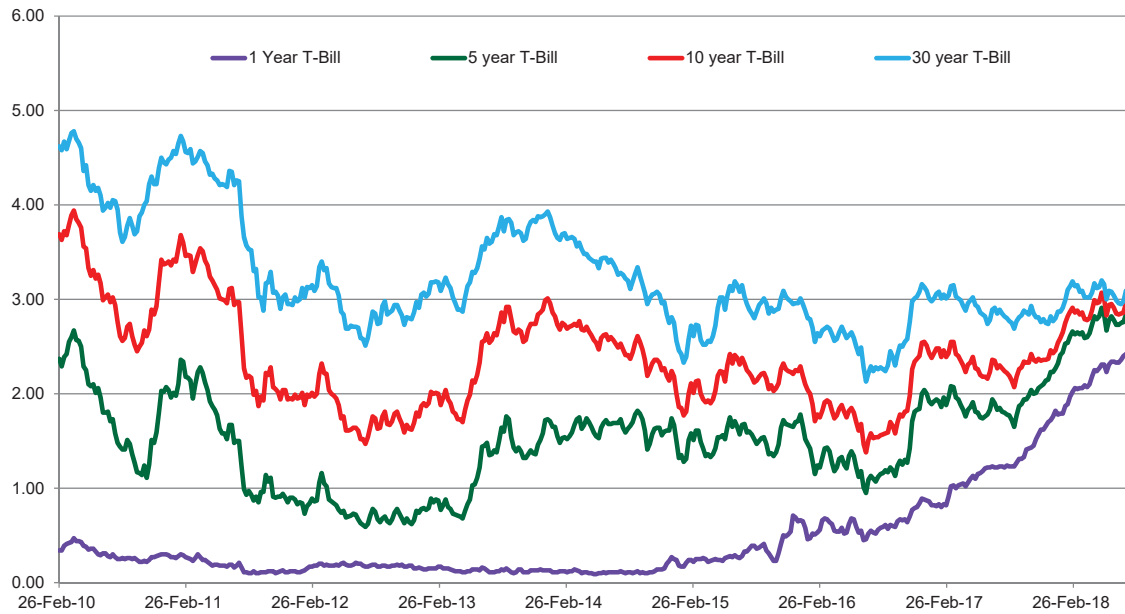
Farm Credit Bill/Bond Rates



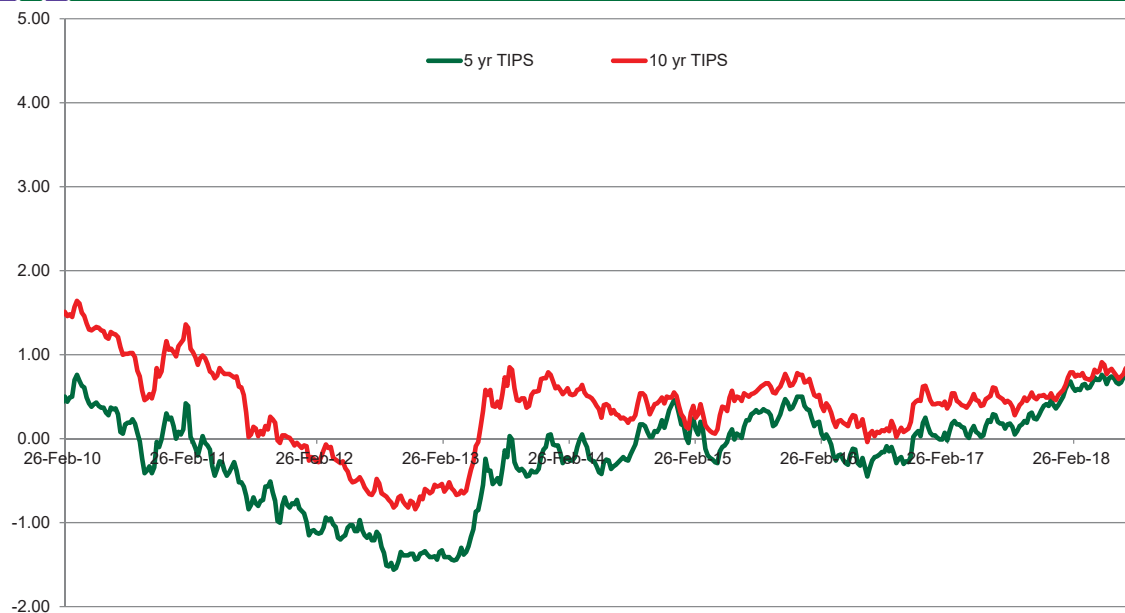
Farm Credit T-Bill/Bond Spreads



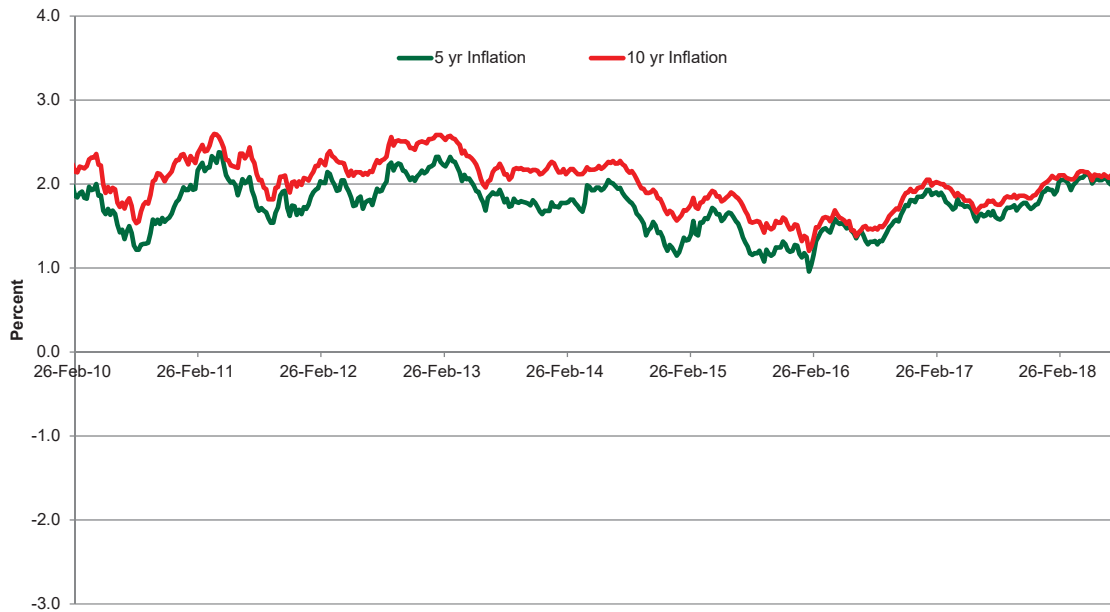
T-Bill/Bond Rates



TIPS Rates



Inflation Expectations



Conclusion

- 2018 will continue to be a sluggish income year
- Average net farm income will remain at low levels draining working capital for a significant number of farmers
- Some agricultural producers and lenders to make difficult decisions before entering the spring of 2019

Conclusion

- Farm Borrowing Rates have been increasing
 - Short term rates have increased the most
 - The Farm –T-Bill/Bond Spread has remained relatively steady
 - Inflation Expectations have increased some
 - The Real Borrowing rate has increased some



Questions?

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