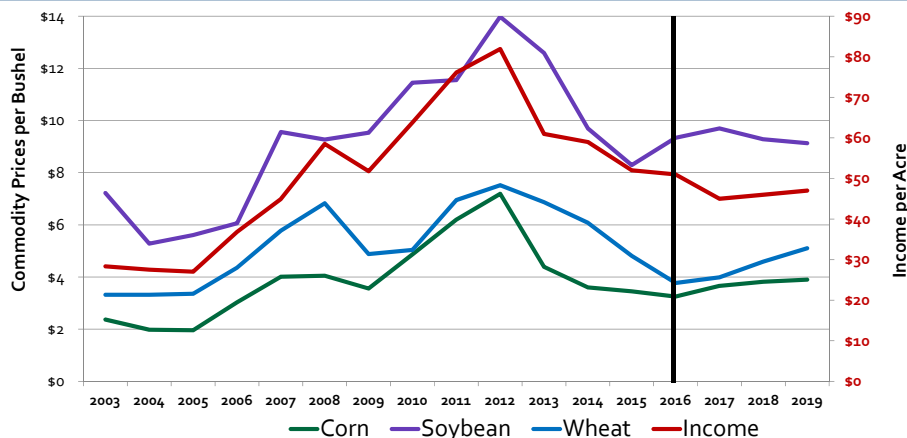


Projected Income per Crop Acre



Land Value Effects

- The long-run multiplier is 21.71 or an implied capitalization rate of 4.61%
 - Long-run elasticity is 96.9%
- At a net farm income per acre of \$46, the projected long-run Kansas land price is \$999, a decline of about 50%

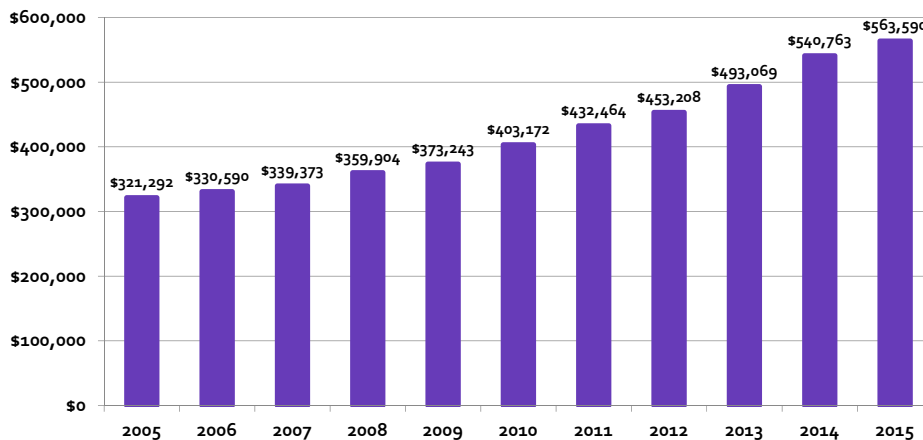


Kansas Farm Economy

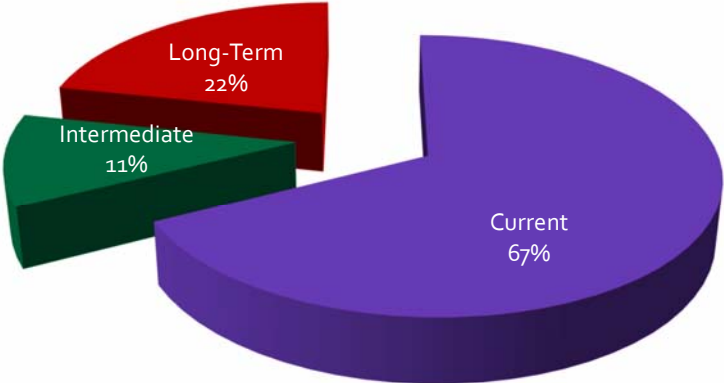
- Land values are a concern
 - 28% higher in inflation-adjusted terms than previous boom period
 - 9% lower than two years ago in inflation-adjusted terms
- Return to landlord follows sector income
- Land market is not in balance with historical norms
- With a concern of declining land values what is the debt picture?



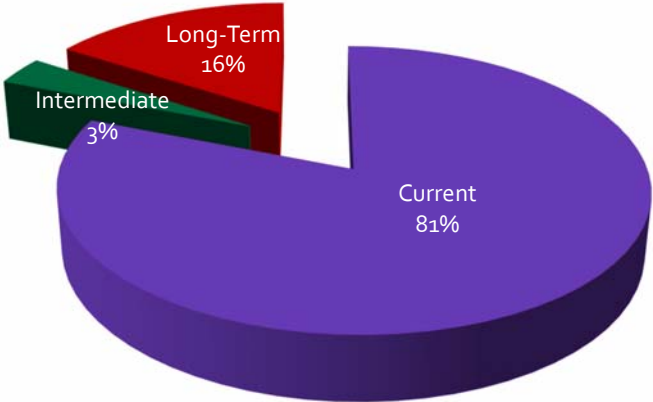
Kansas Farm Management Association Debt Levels



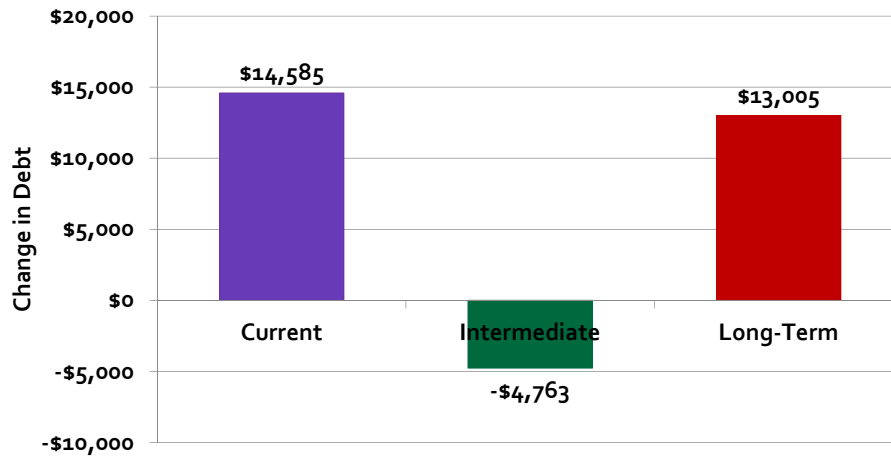
Change in Kansas Farm Debt 2013



Change in Kansas Farm Debt 2014



Change in Kansas Farm Debt 2014



Kansas Farm Economy

- Debt has increased
- Majority of increase in current liabilities
- Some indication of refinancing beginning to occur



Its in the Tails

- During the last default, only 10.9% of loans originated during the critical period by a national lender defaulted
- Most buyers of farmland are other farmers
 - Between 72% and 81% of Iowa farmland buyers are other farmers over period of 2008 to 2015
 - Last two years were 81% and 79%, respectively
- The average will not drive a bust but the tails (margin) can
- The tails (margin) will drive the average

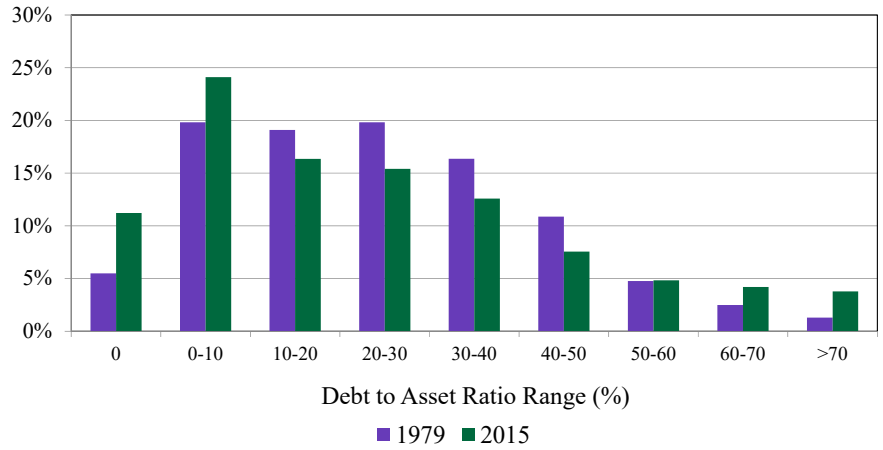


Debt to Asset Ratio is Lower in 2015 than 1979

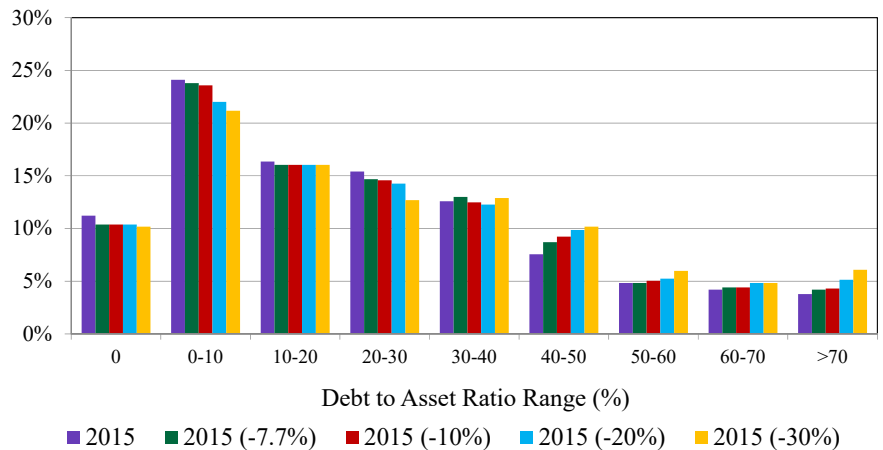
- Average debt to asset ratio for Kansas Farm Management Farms:
 - 1979 – 24.6%
 - 2014 – 19.7%
 - 2015 – 23.7%
- Farms Greater than 40% debt to assets
 - 1979 – 19.4%
 - 2014 – 13.6%
 - 2015 – 20.3%
- Farms Greater than 70% debt to assets
 - 1979 – 1.3%
 - 2014 – 2.3%
 - 2015 – 3.8%



Debt to Asset Ratio is Lower in 2015 than 1979



Distribution of Debt to Asset Under Land Value Declines



Debt to Asset Ratios under Declining Land Values

Scenario	Average Debt/Asset Ratio	% of Farms > 40%	% of Farms > 70%
2015	23.7%	20.3%	3.8%
2015 (-7.7%)	24.4%	22.1%	4.2%
2015 (-10%)	24.7%	23.0%	4.3%
2015 (-20%)	25.8%	25.1%	5.1%
2015 (-30%)	27.0%	27.0%	6.1%



Kansas Farm Economy

- Previous analysis has examined only a change in land values
- Repayment capacity is a serious issue that could lead to additional borrowing
- 2016 will further erode working capital likely leading to increased debt
- 2017 could be more troublesome than 2016 if yields return to normal with no upward adjustment in price



Conclusion

- 2016 will be another difficult year income wise.
- 2017 will be a pivotal year in production agriculture
- Average 2015 net farm income was the lowest they have been since 1985
- Given the 2016 income levels, some agricultural producers and lenders to make difficult decisions before entering the spring of 2017



Questions?

