

5. Land Values in Kansas: Past, Present, and Future

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Bryan Schurle has taught numerous courses in the undergraduate program, the graduate program and the Masters of Agribusiness program including introductory courses, computer courses, quantitative courses, agricultural finance, farm management, and risk management. He currently has research and extension programs involving land values, and is teaching a large introductory course in ag economics, and risk management for undergraduates and MAB students.

Abstract/Summary

Land values have increased rapidly in recent years, and many people are wondering if that increase will continue. This presentation will look at the history of land values, and look at the value based on income and current interest rates. We will examine how the Land Price P/E ratio has moved over time and where it is currently. Sales data will be analyzed to see if land prices have continued to increase or if they have leveled off or decreased. Future potential land price scenarios will be presented and discussed.

Land Values in Kansas: Past, Present and Future

Risk and Profit, 2014

Bryan Schurle
Kansas State University



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Outline

- Brief discussion of US and Ag Economies
- Review of recent land value changes
- Discussion of current land appraiser's comments regarding the current land market
- Peering into what the future might look like—hypothetical scenarios of the future land market
- Concluding discussion



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U. S. Economy

- Economy is still trying to recover from massive financial turmoil in 2007
- Government debt has increased in effort to keep economy going and Fed continues to stimulate the economy with low interest rates



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U. S. Economy

- Showing improvement
- Some dependence on increases in debt to make the economy go
- Banks lending at fastest pace since financial crisis (easing standards) WSJ Aug 12, 2014
- Labor market improving Reuters Aug 12, 2014
 - Number of unemployed job seekers hit 6 year low
 - Job openings highest since 2001
- Consumer sentiment has been fluctuating



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U. S. Economy

- Rates are low and may stay low for a while—big debate among economists
 - Raise rates too soon, economic recovery could stall or reverse—hard to fix
 - Raise rates too late, may increase inflation and foster asset bubbles—easier to fix
- Investors currently expect Fed to raise rates, in the second half of 2015



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U. S. Economy

- Current plan-Fed keeps short term interest rates near zero due to
 - Sluggish wage growth
 - Large pools of unemployed
 - Large numbers working part time
- Fed is tapering its bond buying program
- Rates will certainly increase down the road



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Stocks, Bonds and Investments

- Nothing looks like a good investment
- Stocks have a forward P/E ratio of 15.1 (WSJ 8/11/2014)
- Ten year moving average P/E of 26 (exceeded only in 1929, 2000, and 2007) (fiscal times 8/18/2014)
- Many argue the stock market is overvalued
- **Low rates** have resulted in bidding up asset values
- Land market is in the same situation



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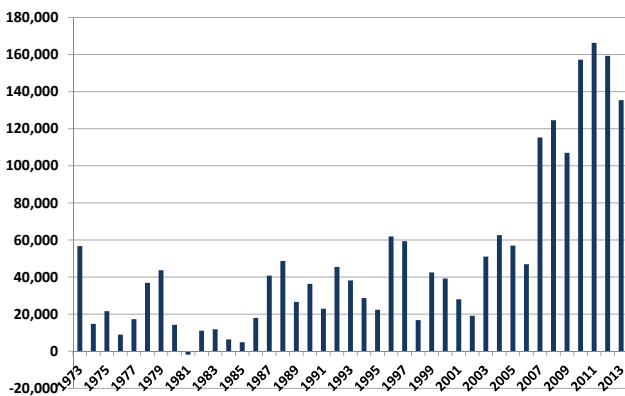
Ag Economy in Kansas

- Farm incomes have been high for 7 years (on average, some exceptions)
- Commodity prices have tumbled-causing considerable concern
- Livestock incomes have increased due to lower priced feed



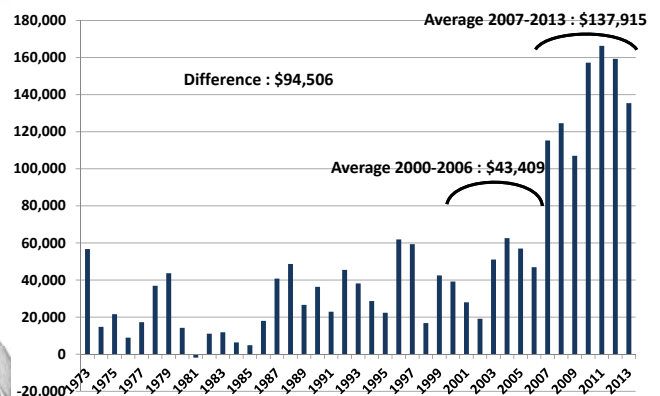
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KFMA Net Farm Income



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KFMA Net Farm Income



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Kansas Farm Management Data

- Average depreciation has increased to \$57,750 in 2013
- Interest expense averaged \$18,624 in 2013
- Average liabilities have increased over the last few years to \$492,718 in 2013
- Current assets/current liabilities was 3.22 in 2013
- Debt to Asset Ratio .225 in 2013



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Ag Economy in Kansas

- Headed into a financial environment that will have greater stress
 - Lower crop incomes
 - Higher interest rates (at some point)
 - Debt level will be important



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Land Values

- Information on land values—great need
- Land values have been increased rapidly
- Have they continued to increase???
- Have they stabilized???
- Have they decreased???
- And where might they go???



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Sources of Land Price Data

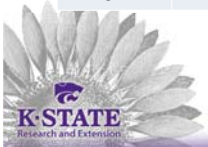
- USDA surveys – summary of producer opinions of the value
- Sales Price Data (actual sales) - collected for appraisal purposes by Kansas Society of Farm Managers and Rural Appraisers
- Property Valuation Department, Topeka also has sales data



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USDA and Sales Data Land Prices

Year	USDA	% Increase	Sales Data	% Increase
2007	980	----	965	----
2008	1,020	4%	1,086	13%
2009	1,030	1%	1,099	1%
2010	1,100	7%	1,265	14%
2011	1,300	14%	1,616	29%
2012	1,550	24%	1,958	21%
2013	1,900	18%	2,035	3.8%
2014	2,050	17%		



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Sales Data Land Prices

- From 2012-2013, 3.8% increase, **BUT**
- 2013 data split into first half and second half
 - First half (495 obs.) average price : \$2,077
 - Second half (512 obs.) average price : \$2,003
 - 3.6% decrease from first to second half of 2013



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Sales Data Land Prices

- 2013 data split into four quarters
 - First quarter (203 obs.) : \$2,404
 - Second quarter (291 obs.) : \$1,882
 - Third quarter (238 obs.) : \$2,010
 - Fourth quarter (274 obs.) : \$1,999



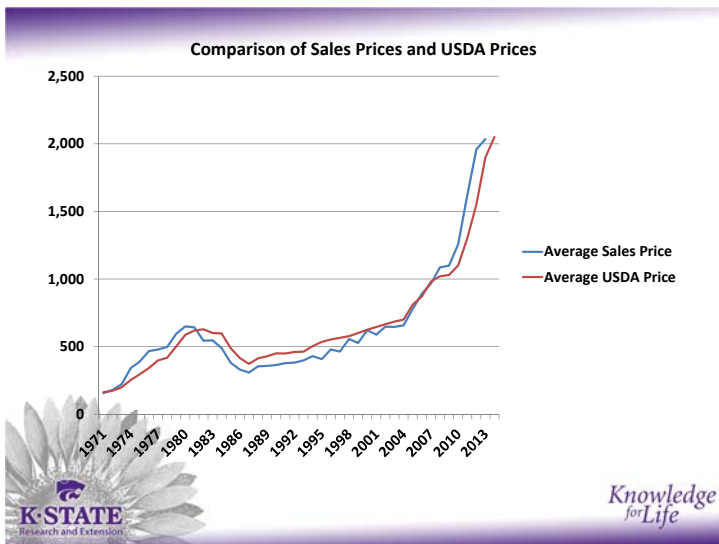
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Comparing USDA and Sales Data

- USDA prices have caught up with sales prices
- Sales data shows **major slowdown** in price increases, some numbers point to a peak



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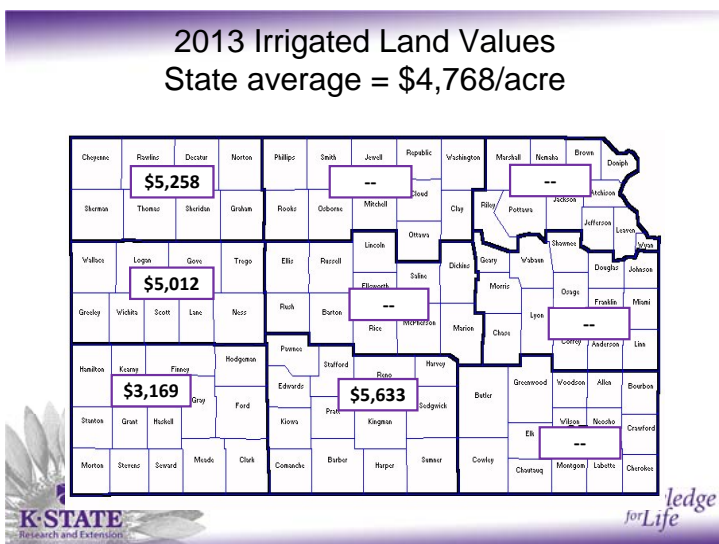
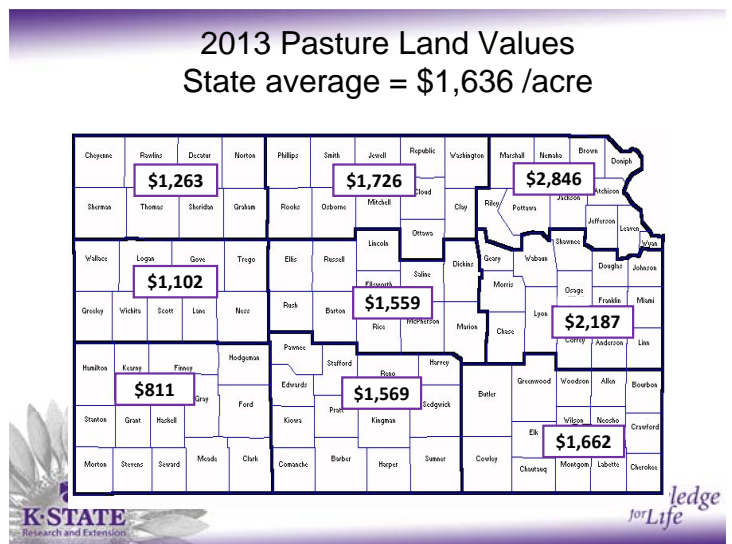
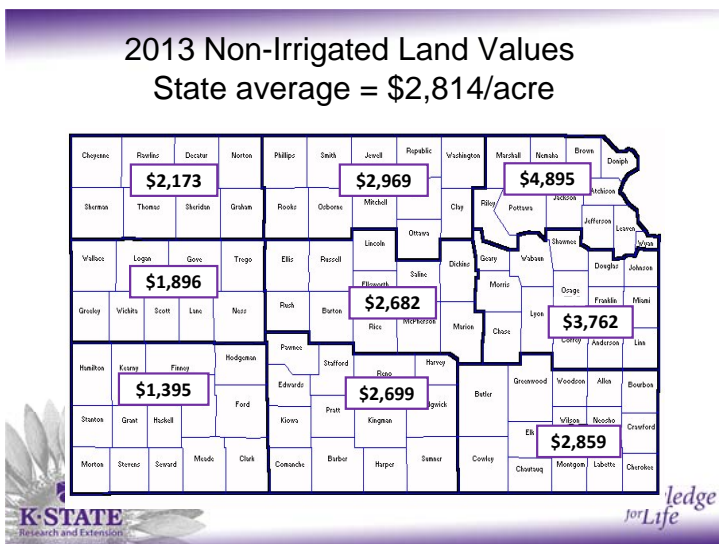


Kansas Land Values

- Source for market transaction data
 - Property Valuation Department, Topeka
- 2010-13 sales data
- Data were reviewed and outliers removed
- Used a hedonic model to estimate land values

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Land Values

- Model does not capture all factors in market that influence price
 - Expected returns to agriculture in future
 - Excess liquidity in the real estate market
 - Location
 - Local competition

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When prices are changing rapidly

- Need to stay informed
- Latest information is valuable
- Get professional opinions
- Look at Ag Econ Web site



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2013 Kansas Agricultural Land Values

[http://www.agmanager.info/farmmgmt/land/county/CountyLandValues\(May2014\).pdf](http://www.agmanager.info/farmmgmt/land/county/CountyLandValues(May2014).pdf)



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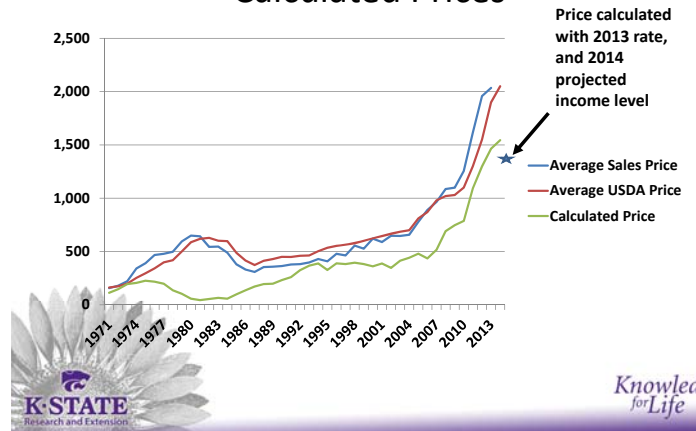
Asset Bubbles

- Consider the historical relationships to see if land prices are out of the historical range
- Can compare land prices to some benchmark—such as calculated values
- Can use calculations like P/E ratios to see if prices are out of line relative to earnings



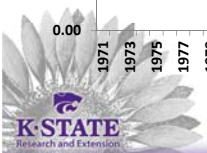
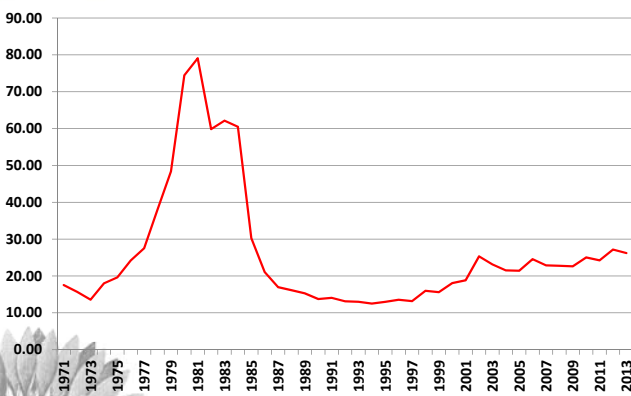
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USDA Prices, Sales Prices, and Calculated Prices



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Land Price Sales Data/Earnings Ratio



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Survey of Appraisers

- Base their opinions of value on sales in the area
- Excellent source of information on the “market in an area”
- Selected appraisers from around the state
- Provided values or ranges in values, as well as comments on the market recently



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NC, Bill Wilson, Frontier Farm Credit (Clay, Riley, Pottawatomie)

- Good dry cropland - \$4,200
- Lower quality dry cropland - \$3,800
- Bottomland - \$7,500-\$8,000
- Irrigated land – higher than bottomland
- Pasture - \$2,000
- CRP – if left in pasture, close to pasture and if going to cropland, close to cropland
- Recreation land - \$1,500-\$2,000



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NC, Bill Wilson, Frontier Farm Credit (Clay, Riley, Pottawatomie)

- Comments on the market
 - More buyers than sellers
 - Lots of people looking to expand their operations
 - Very little land on the market
 - Market prices are about level, with pastures up some



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SW, Steve Stephens, Farm Credit of SW Kansas (SW 9 counties)

- Good dry cropland - \$1,600-\$1,800
- Lower quality dry cropland - \$1,000-\$1,200
- Irrigated land – \$2,500-\$5,000 depending on quality of wells, sandy soils dropping some in anticipation of lack of water
- Pasture - \$450-\$800 depending on rainfall (ranges from 15-23 inches on average in area)
- CRP – if good contract, 75% of cropland



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SW, Steve Stephens, Farm Credit of SW Kansas (SW 9 counties)

- Comments on the market
 - Still interest on the part of buyers, but there is a little softening
 - In Jan-Feb, crop prices headed down, land prices down 10-15%, land prices increased in March to where they were
 - Seems to be a quicker adjustment in prices than had been experienced in the past



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SW, Steve Stephens, Farm Credit of SW Kansas (SW 9 counties)

- Comments on the market
 - Not much land available on the market
 - There is a huge spread in land prices—sometimes 100% differences between parcels—wide range in prices seems to be “market trying to find its way”



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NE, Ray Shinn, Shinn Appraisals (NE 3 counties)

- Good dry cropland - \$7,800 - \$10,500
- Lower quality dry cropland - \$6,000 - \$8,000
- Bottomland - \$10,000 - \$13,000
- Pasture - \$2,000 – \$2,600 for land that stays in pasture, and \$2,600 - \$3,000 for land that can be turned into cropland
- Recreation land - \$1,500



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NE, Ray Shinn, Shinn Appraisals (NE 3 counties)

- Comments on the market
 - Buyer interest is still strong, especially guys with cash and land adjacent to a parcel
 - Drop in commodity prices put some water on the fire
 - Not much land for sale—some offered at a high price to see if there are takers, but they expect to hold it



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NE, Ray Shinn, Shinn Appraisals (NE 3 counties)

- Comments on the market
 - Maybe some think the top of the market has happened already
 - Prices have been stable to just slightly higher, maybe up 5%
 - Grain prices make people rethink options
 - Grass prices increased more than cropland recently
 - Starting to see more new housing construction



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SE, Terry Shockley, Frontier Farm Credit (SE 9 counties)

- Good dry cropland - \$2,287
- Lower quality dry cropland - \$1,652
- Bottomland - \$2,553
- Pasture - \$1,410, wide range (\$786-\$2,183)
- CRP – \$1,800 (limited data)
- Recreation land - \$1,587



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SE, Terry Shockley, Frontier Farm Credit (SE 9 counties)

- Comments on the market
 - Buyer interest
 - Crop farmers have cooled off, but still have money if something is close to them
 - Not out aggressively calling landowners to buy like they did a few years ago
 - No ads “want to buy” in the papers
 - Auctions are not setting new highs like a years ago
 - No weakness, just not as aggressive as 2-3 years ago
 - Fall off in commodity prices have reduced aggressiveness
 - Not much land on the market, some advertising with a high price, but they expect to wait to get it



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SE, Terry Shockley, Frontier Farm Credit (SE 9 counties)

- Comments on the market
 - Prices holding steady, supply of land is so limited, have to bid it up to get it
 - More recreational land on the market than anything, someone always looking for rec land
 - Pasture prices might strengthen because of cattle prices, but it hasn't yet, maybe it will, maybe it won't



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SE, Terry Shockley, Frontier Farm Credit (SE 9 counties)

- Comments on the market
 - Not seeing weakness like in the corn belt
 - Big range in prices with nothing to explain the differences
 - Frustration is high on part of buyers—they do not have information on prices, and are afraid to lose a piece of land, so pay high prices just to keep from losing it



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NW 12 counties

- Good dry cropland - \$2,800 to \$3,500
- Lower quality dry cropland - \$2,300
- Bottomland – 10% higher than good dry cropland
- Irrigated land - top quality \$4,500 - \$5,750
- Pasture - \$800- \$1,200 (stronger as move east)
- CRP – close to expiring, close to dry cropland
- Recreation land – similar to pasture



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NW 12 counties

- Comments on the market
 - Still buyer interest for good quality land
 - Prolonged corn at \$3.60 will have a negative impact on value
 - Not much land available, and not many sales
 - Buyers in good shape financially due to previous cash incomes (crop, oil, stock), not much financial stress
 - Had severe drought last year, but things are better now



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NW 12 counties

- Comments on the market
 - Strong cattle market and farmers are diversified
 - Values steady with prior land values
 - Land values depend on previous cash earned
 - Have had buyers from outside, but at least 70% of buyers are neighboring farmers



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South Central

- Good dry cropland - \$2,800 to \$4,500
- Lower quality dry cropland - \$1,700 to \$3,000
- Irrigated land - top quality \$4,000 - \$7,000
- Pasture - \$1,200- \$2,000
- CRP – \$1,500 to \$2,800
- Recreation land – same as CRP, little premium over pasture



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South Central

- Buyer interest – good
- Land Available – limited
- Comments on Market – waiting to see market go down, but it is holding up. Market has not increased much this year, except pasture may be a little stronger



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Summary

- Common threads
 - Not much for sale
 - Still a lot of interest on part of buyers
 - Frustrations regarding range in prices
 - Prices about flat



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Where might the land market go from here?

- Developed three purely hypothetical scenarios
- One of the tasks in Risk Management is to imagine the possible outcomes that might befall us—foundation of evaluating the risk of the situation



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First Scenario: Land values Rise Rapidly and Fall Rapidly

- Fed keeps interest rates low---too long
- Inflation picks up significantly
- Real Rate of return on CD's goes negative
- Farm Incomes while volatile do not return to pre-boom period
- Livestock incomes high as herds rebuild
- Large amounts of available cash chase few land parcels



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First Scenario: Land values Rise Rapidly and Fall Rapidly

- Results in a land price bubble – prices being bid up because they are rising – price momentum feeds itself
- Leads to a potential rerun of the 80's--
Highly leveraged operators have major difficulty when rates do increase—they dump land on market and land market crashes



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Second Scenario: Land Values Level Off, Modest Decline

- Fed Increases rates at just the right time
- Inflation stays stable and relatively low
- Opportunity Costs of land purchases increase: you can earn 5% on CD's which looks better than 2-3% on land with little or no appreciation
- Farm incomes stabilize at \$4.00 corn
- Livestock incomes rise but do not last long, returning to more normal levels



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Second Scenario: Land Values Level Off, Modest Decline

- Land prices level off or drop modestly
- Stability in Ag Production - no return to boom level incomes nor a return to pre-boom levels of income



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Third Scenario: Land Prices Drop Drastically

- Fed Increases rates rapidly
- Opportunity Costs for land purchases increase dramatically: you can earn 8% on CD's in a low inflation environment
- Higher Livestock incomes are short-lived as demand for meat decreases
- Crises in China shrinks demand for grains and proteins
- Ethanol rules are changed and demand for corn for energy shrinks
- Farm Incomes drop substantially to support levels of government programs



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Third Scenario: Land Prices Drop Drastically

- Flood of foreclosures and lots of land on the market
- Foreclosures and large amounts of land on the market lead to drops in land prices which feed more drops in land prices



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Three scenario summary

- Useful exercise to consider a range in outcomes
- Risk to your operation needs to be considered in light of your financial situation



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Summary

- Land market has increased dramatically in past 7 years – increase in net worth worthy of a great celebration!
- Some signs of leveling off, maybe even some slight weakness
- Currently not much land for sale, and lots of interest
- Some frustration with not knowing what the price should be



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Summary

- The ***averages*** show production agriculture to be in great financial shape—low debt to asset ratio
- In a competitive market, someone is always at the margin—just barely making it financially
- Too many people “at the margin” can cause problems—watch for this condition!!!



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Summary

- This story will unfold slowly
- It is hard to keep perspective when it is developing so slowly
- Look at the numbers—do not follow the herd!



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