

2010-2011  
Kansas State University  
**AG PROFITABILITY CONFERENCE**

February 2, 2011

Pratt Fairgrounds  
81 Lake Rd.  
Pratt, KS



## Crop Leases

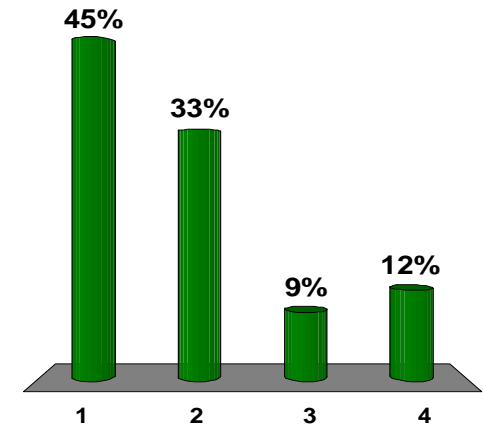
Kevin C. Dhuyvetter, K-State Ag. Economist  
kcd@ksu.edu – 785-532-3527



## Test to make sure clickers are working ...

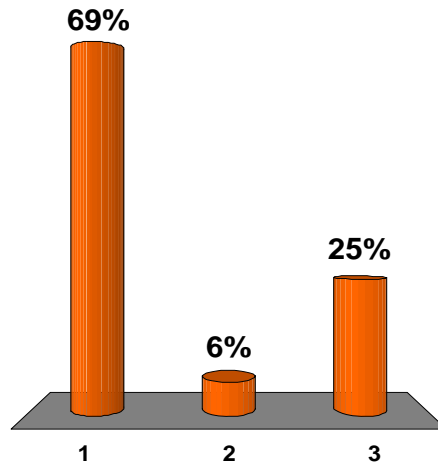
How many times have you heard Kevin talk about leasing land?

1. Never
2. Several times
3. Wish I had a \$1 for every time...
4. Who's Kevin?



## Which best describes you?

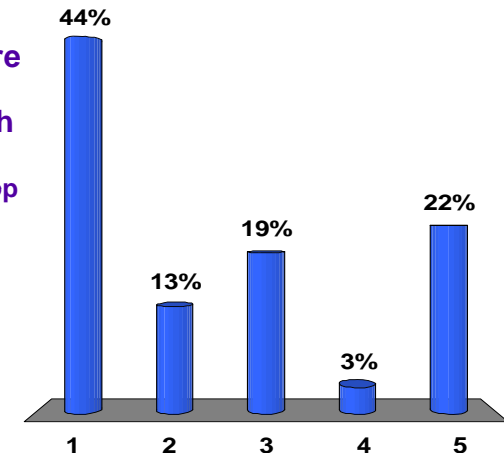
1. Producer
2. Landowner
3. Other



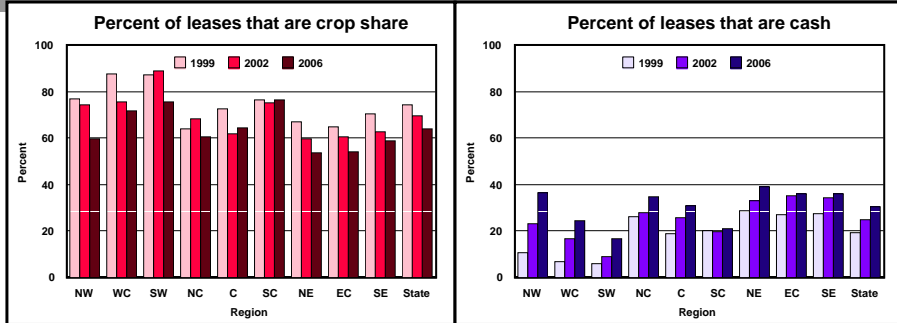
## What type of leases do you use?

The lease arrangement for the majority of crop acres I rent or manage is ...

1. Mostly crop share
2. Mostly fixed cash
3. ~50/50 mix (of crop share and cash)
4. Other
5. Does not apply



## Trend towards more cash rent...



Source: KSU and KS Ag Stat – Non-Irrigated Farm Lease Arrangement Surveys

Crop share continues to be the most prevalent, but the trend has been a shift from crop share arrangements towards more cash rent leases.

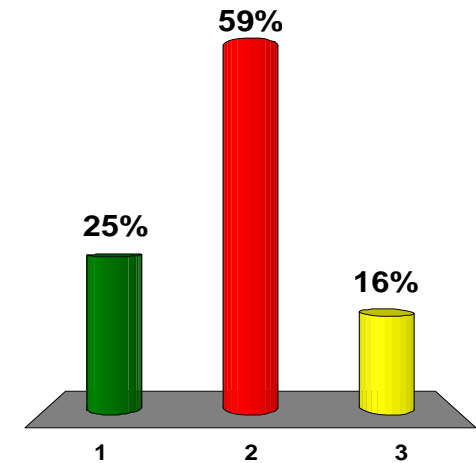
### Questions to ask:

- 1) What factors have been behind this trend?
- 2) Do we expect this to continue or to reverse in current environment?

## Written versus oral leases...

### Is your *typical* lease written?

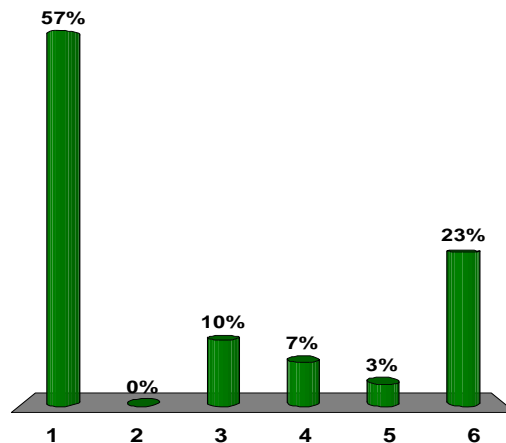
1. Yes
2. No
3. Does not apply



## Length of leases...

### How long is your *typical* lease?

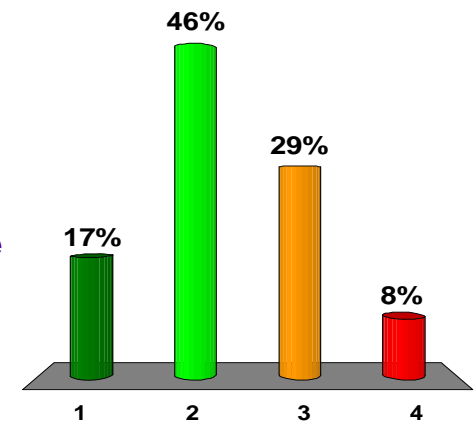
1. One year
2. Two years
3. Three years
4. Five years
5. Other
6. Does not apply



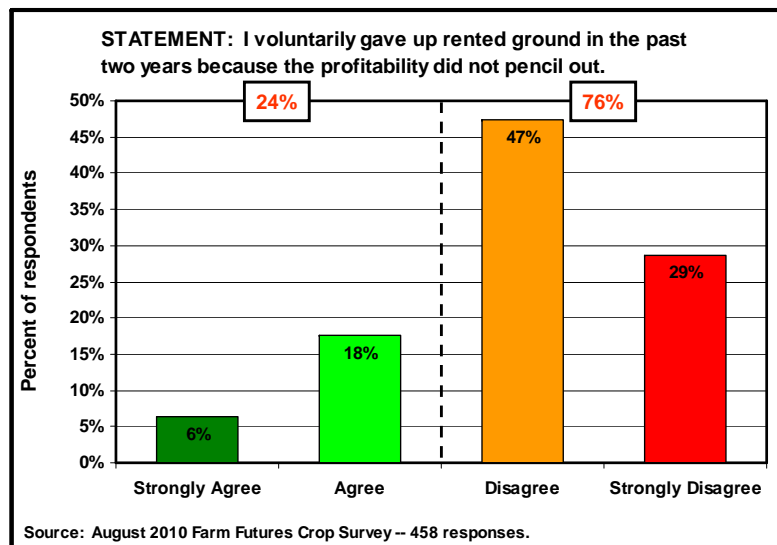
## Do you agree or disagree with the following

I have voluntarily given up land in the past because the profitability didn't "pencil out".

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree



## Most producers do not give up land voluntarily...



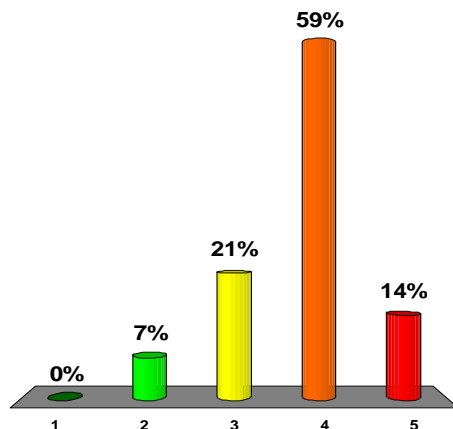
## Lease rates...

- When thinking about renting crop land (or leasing it out), how do you determine the terms of the lease?
- Does your approach vary for determining crop share terms versus cash lease rate?

## Do you agree or disagree with the following

In response to a request for a cash rent bid, “I will pay \$X above your highest offer.”

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



**Calculated values**  
**vs.**  
**Market values**

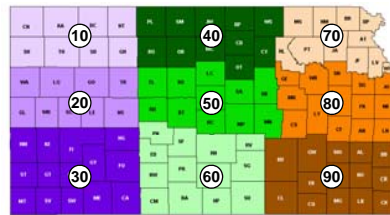
Which values are the “correct” ones?  
If market, why bother with calculations?

# Publicly available cash rent data...

Historically Kansas Agricultural Statistics (KAS) reported average land values and cash rent rates for non-irrigated, irrigated, and pasture land at the crop reporting district (CRD) level

Beginning in 2009 KAS began reporting county-level cash rates (i.e., more intensive data), but in 2010 will discontinue reporting land values at the regional level (i.e., less intensive data).

*This is the market we observe and can reference. What you folks all face day to day is the "real" market.*



# KAS surveyed market rates...

USDA United States Department of Agriculture  
National Agricultural Business Service, Kansas Field Office  
**AGRICULTURAL LAND VALUES & CASH RENTS**  
Kansas Agricultural Statistics  
Cooperating with the Kansas Department of Agriculture  
PO Box 2854 • Topeka KS 66603-0284 • (785)232-2252 • www.ksas.usda.gov • www.kagrains.usda.gov  
Released: September 10, 2010

**2010 Land Value Highlights**  
The average value of all farmland and buildings for 2010 is estimated to be \$1,025 per acre. This compares with \$1,020 in 2009 and \$1,020 in 2008. Kansas' average value of all farmland and buildings increased 2.5 percent from 2009 to 2010. Irrigated cropland values rose 3.3 percent from 2009 while non-irrigated cropland increased 7.5 percent in value from last year. The value of Kansas pasture land increased 2.7 percent from 2009 to 2010.

**2010 Cash Rents**  
The 2010 average cash rent farmers pay for non-irrigated cropland in Kansas was \$43.50 per acre, unchanged from 2009. The cash rental rates for non-irrigated cropland ranged from a low in Seaward County at \$25 per acre to the high in Douglas County at \$111 per acre. Cropland rents were followed by Brown County at \$92, Nemaha at \$82 and Johnson at \$78. Seaward was followed by Lane and Trego at \$26 and Greeley at \$26.50. The district with the highest rent was the Northeast District at \$14 per acre.

The 2010 cash rental rate for irrigated cropland in Kansas averaged \$95 per acre, up from \$89 per acre in 2009. The Northeast District had the highest rate with \$121 per acre, followed by the Northwest at \$120 and the North Central at \$116. The Southeast District had the lowest irrigated rent with \$60 per acre.

The pasture cash rent averaged \$15.50 per acre in 2010, unchanged from the rate in 2009. The rent for pasture in Kansas ranged from \$6.50 per acre in Morton County for a low to \$32 per acre in Douglas County for the high. Douglas was followed by Marshall at \$25 and Brown at \$27.50. Morton was followed by Seaward and Stevens at \$7 and Kearny and Hamilton at \$7.50. The Northeast District had the highest district-level rent per acre in the State at \$22 per acre.

**Kansas Farmland Values and Cash Rents, 2009 - 2010**

Year	Irrigated			Non-Irrigated			Pasture		All Farmland and Buildings
	Value	Rent	% Change	Value	Rent	% Change	Value	% Change	
2009	1,044	910	884	989	80	13.89	439	100	1,020
2008	1,000	835	879	72.00	39.00	300	12.80	845	30,838
2007	1,060	840	876	72.00	39.00	400	12.80	895	31,455
2006	1,080	845	884	69.00	39.00	410	12.80	895	32,332
2005	1,080	850	888	72.00	37.00	420	13.20	790	32,760
2004	1,180	770	809	73.00	35.00	500	13.40	810	38,200
2003	1,200	820	854	74.00	36.00	560	13.70	870	41,282
2002	1,260	880	914	82.00	41.00	600	14.20	950	46,274
2001	1,450	940	1,020	82.00	42.00	750	15.50	1,020	47,124
2000	1,620	1,000	1,090	84.00	43.00	750	15.50	1,080	47,986
2010	1,020	1,010	1,020	95.00	43.00	770	15.80	1,060	?

\*Rental rates are the land only. \*\*Will be published in August 2011.

**KAS report** (switched to county-level in 2009, will drop CRD-level land values after 2010)

Farm Management Guide MF-1100  
**Kansas Land Prices and Cash Rental Rates**  
Department of Agricultural Economics - www.agprn.org  
Kansas State University Agricultural Experiment Station and Cooperative Extension Service  
Katie C. Breyer  
Agricultural Economist  
Terry L. Keates  
Professor Emeritus

This Farm Management guide reports Kansas land prices and cash rents for 1991-2009. This data set is useful to farm managers in determining cash rental rates, to financial agencies in calculating indices for making time adjustments to land prices, and to landowners and investors who have experience on historical price and rental levels for farmland. The average price for all land in Kansas reported here is based on the value of all land in Kansas, not just the value of land that is currently being farmed. This data set is more appropriate for analyzing trends than for establishing market value or rental rates for specific tracts of farmland.

**Kansas Agricultural Statistics**  
For reporting purposes, Kansas Agricultural Statistics Service has divided the state into nine agricultural statistical districts. The districts are: Northwest (NW), West Central (WC), Southwest (SW), North Central (NC), South Central (SC), Northeast (NE), East Central (EC), and Southeast (SE) (Figure 1). Since 1976, Kansas Agricultural Statistics has collected price information on three types of land: non-irrigated cropland, irrigated cropland, and pasture. This information is combined in two tables.

**Kansas Land Prices**  
Tables 1 through 5 show average prices of land and buildings. Table 1 shows average prices of land for the state for the most recent 20 years reported. Data are shown for each of the nine land groupings: all land in Kansas, all irrigated, non-irrigated cropland, irrigated cropland, and pasture. The annual data are based on a survey conducted by Kansas Agricultural Statistics in late of each year asking for estimates of both January 1 land values and the percentage change in land values from the previous year as of June 1.

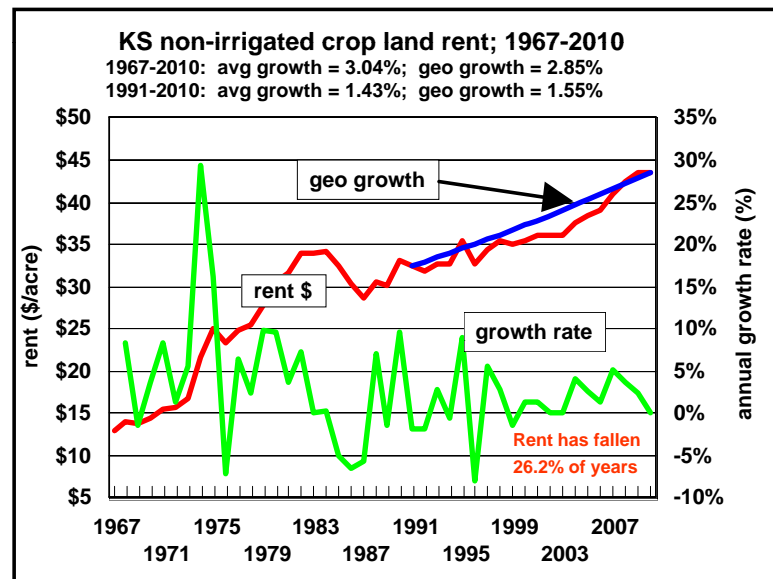
**Table 1. Price per acre of all land in Kansas and buildings, Kansas Agricultural Statistical Districts, 1991-2010\***

Year	NW	WC	SW	NC	SC	NE	EC	SE	State
1991	\$389	\$563	\$419	\$474	\$515	\$520	\$419	\$397	\$497
1992	379	564	415	465	493	540	536	402	394
1993	399	551	412	447	493	540	536	407	463
1994	401	561	412	451	493	540	536	407	489
1995	491	586	464	527	545	579	809	633	583
1996	494	599	469	526	524	564	811	613	548
1997	500	610	480	540	540	570	830	790	575
1998	500	610	480	540	540	570	830	790	575
1999	490	605	470	530	530	560	820	785	565
2000	520	615	525	620	640	640	920	850	625
2001	515	645	540	625	630	655	945	875	645
2002	520	645	550	640	640	665	960	890	665
2003	520	630	530	595	630	640	940	850	640
2004	520	630	530	595	630	640	940	850	640
2005	640	630	610	600	760	830	1,270	1,150	870
2006	650	630	610	610	820	860	1,400	1,270	940
2007	690	640	640	700	940	960	1,800	1,540	1,040
2008	720	630	700	960	960	1,050	1,540	1,300	1,020
2009	760	620	710	1,000	1,080	1,480	1,590	1,330	1,030
2010	640	640	640	1,000	1,040	1,310	1,720	1,410	1,260

Land Economics 1 - Revised October 2010

**KSU report** - basically a repackaging of KAS data (show more history)

# Cash rent historical perspective

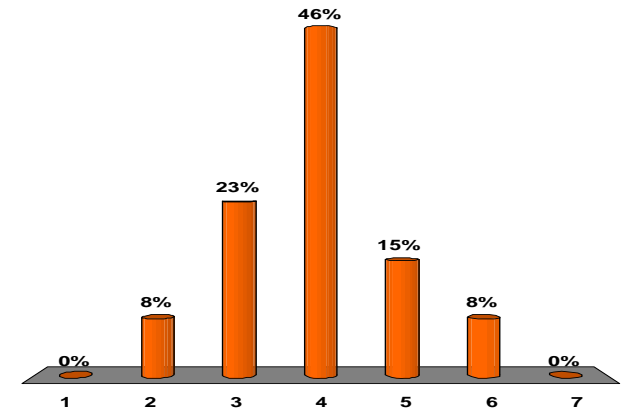


1967-2009 average land value growth = 5.09%

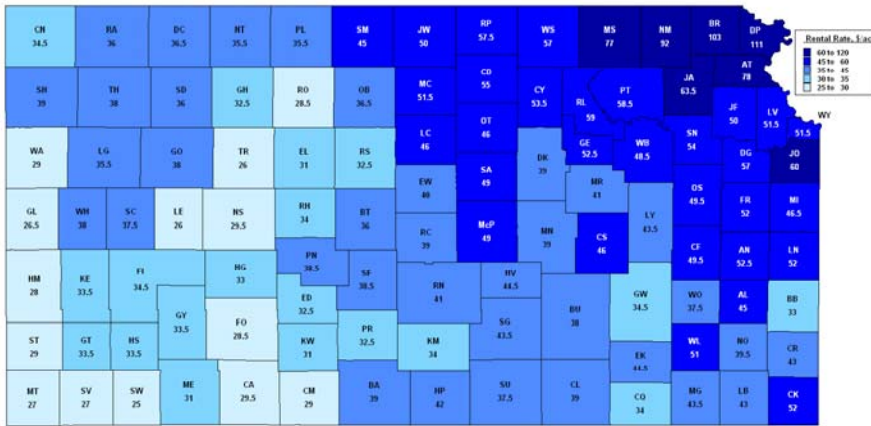
# Market rate for average cash rent...

2010 average cash rent per tillable acre for non-irrigated crop land in my area is...

- < \$25
- \$26-\$30
- \$31-\$35
- \$36-\$40
- \$41-\$50
- \$51-\$60
- > \$60

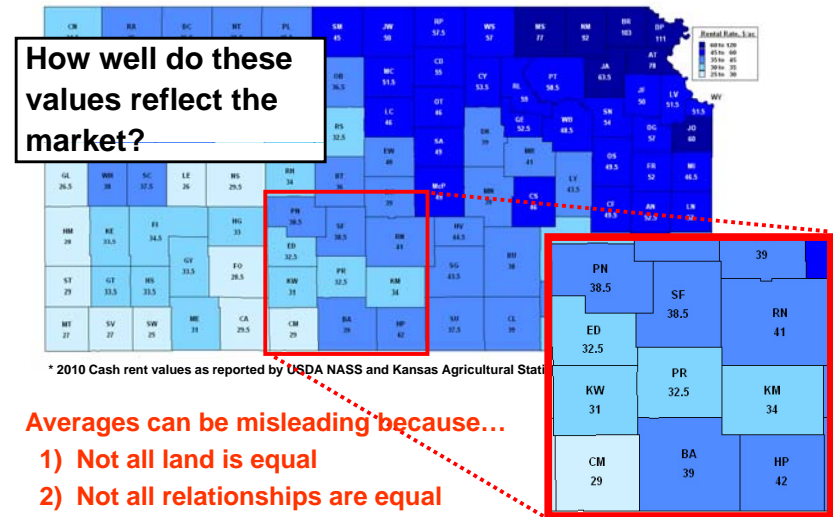


## Kansas county-level non-irrigated crop cash rents...



\* 2010 Cash rent values as reported by USDA NASS and Kansas Agricultural Statistics (KAS).

## Kansas county-level non-irrigated crop cash rents...



\* 2010 Cash rent values as reported by USDA NASS and Kansas Agricultural Statistics (KAS).

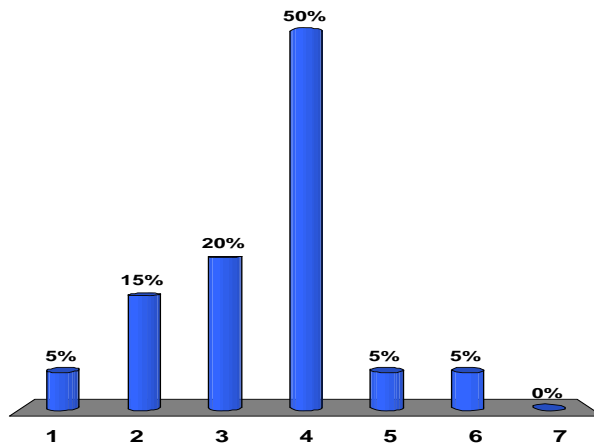
Averages can be misleading because...

- 1) Not all land is equal
- 2) Not all relationships are equal

## Market rate for average cash rent...

2010 average cash rent per wet acre for irrigated crop land in my area is...

1. < \$75
2. \$75-\$100
3. \$100-\$125
4. \$125-\$150
5. \$150-\$175
6. \$175-\$200
7. > \$200



## Example of market established crop shares...

Crop	Landlord's Percent of Crop Received (or of Costs Paid)*			
	33% Share	40% Share	50% Share	Other % Share
<b>Wheat (167 Leases)</b>	163	3	1	
% of Total Leases in Lease Arrangement	97.6%	1.8%	0.6%	No Responses
% of Leases Sharing Fertilizer Costs	100.0%	100.0%	0.0%	Responses
% of Leases Sharing Herbicide Costs	71.2%	33.3%	0.0%	
% of Leases Sharing Insecticide Costs	53.4%	33.3%	0.0%	
<b>Sorghum (9 Leases)</b>	9			
% of Total Leases in Lease Arrangement	100.0%	No Responses	No Responses	No Responses
% of Leases Sharing Fertilizer Costs	100.0%			
% of Leases Sharing Herbicide Costs	88.9%			
% of Leases Sharing Insecticide Costs	22.2%			
<b>Multiple Crops (21 Leases)</b>	16	5		
% of Total Leases in Lease Arrangement	76.2%	23.8%	No Responses	No Responses
% of Leases Sharing Fertilizer Costs	100.0%	80.0%		
% of Leases Sharing Herbicide Costs	68.8%	0.0%		
% of Leases Sharing Insecticide Costs	43.8%	80.0%		
<b>Soybeans (6 Leases)</b>	6			
% of Total Leases in Lease Arrangement	100.0%	No Responses	No Responses	No Responses
% of Leases Sharing Fertilizer Costs	100.0%			
% of Leases Sharing Herbicide Costs	33.3%			
% of Leases Sharing Insecticide Costs	33.3%			
<b>Alfalfa (9 Leases)</b>	8		1	
% of Total Leases in Lease Arrangement	88.9%	No Responses	11.1%	No Responses
% of Leases Sharing Fertilizer Costs	100.0%		100.0%	
% of Leases Sharing Herbicide Costs	100.0%		0.0%	
% of Leases Sharing Insecticide Costs	87.5%		0.0%	

\* The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 100% of landlords receiving 33% of the wheat crop paid 33% of fertilizer expenses.

Source: Schlegel and Tsoodle -- 2007 KAS/KSU survey (available at [www.agmanager.info](http://www.agmanager.info))

**Example of market established irrigated crop shares...**

Table 11. South Central-60 Irrigated Crop-Share Arrangements					
Crop	Landlord's Percent of Crop Received (or of Costs Paid)*				
	25%	33%	40%	50%	Other
<b>Wheat (6 Leases)</b>					
% of Total Leases in Lease Arrangement	16.7%	66.6%		16.7%	
% of Leases Sharing Fertilizer Costs	100.0%	100.0%	No Responses	100.0%	No Responses
% of Leases Sharing Herbicide Costs	100.0%	100.0%		100.0%	
% of Leases Sharing Insecticide Costs	100.0%	100.0%		No Response	
% of Leases Sharing Energy Costs	No Response	100.0%		No Response	
<b>Corn (88 Leases)</b>					
% of Total Leases in Lease Arrangement	1.1%	52.3%	11.4%	23.8%	11.4%
% of Leases Sharing Fertilizer Costs	100.0%	100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Herbicide Costs	No Response	100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Insecticide Costs	No Response	100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Energy Costs	No Response	100.0%	100.0%	100.0%	100.0%
<b>Sorghum (16 Leases)</b>					
% of Total Leases in Lease Arrangement		81.3%	6.2%	12.5%	
% of Leases Sharing Fertilizer Costs	No Responses	100.0%	100.0%	100.0%	No Responses
% of Leases Sharing Herbicide Costs		100.0%	100.0%	100.0%	
% of Leases Sharing Insecticide Costs		100.0%	100.0%	100.0%	
% of Leases Sharing Energy Costs		100.0%	No Response	100.0%	
<b>Soybeans (31 Leases)</b>					
% of Total Leases in Lease Arrangement		45.2%	16.1%	29.0%	9.7%
% of Leases Sharing Fertilizer Costs	No Responses	100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Herbicide Costs		100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Insecticide Costs		100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Energy Costs		100.0%	100.0%	80.0%	No Response

\*The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 100% of landlords receiving 33% of the wheat crop paid 33% of fertilizer expenses.

Source: Schlegel and Tsoodle -- 2008 KAS/KSU survey (available at [www.agmanager.info](http://www.agmanager.info))

**Calculated values  
vs.  
Market values**

**If (when) market values have very little meaning to individual situations, we need to estimate what we believe might be the more “correct” values.**

**Determining the terms of a crop lease...**

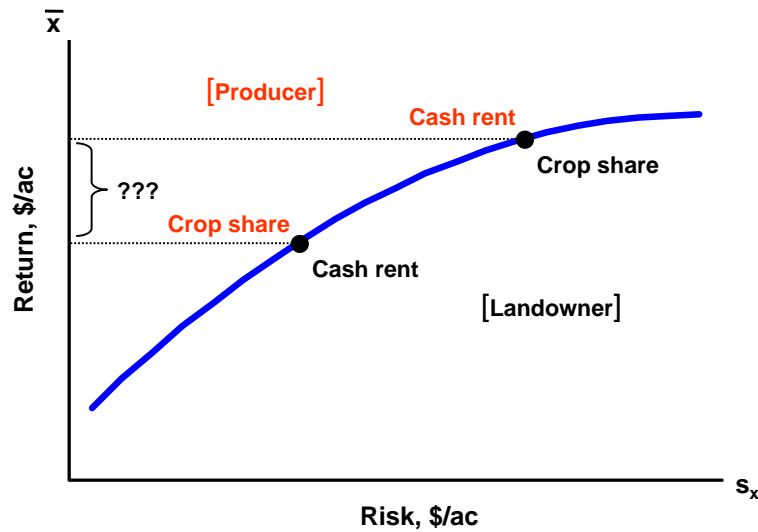
- When market reported rates are not sufficient to answer the question at hand, what do we do?
- While landowners and tenants (i.e., the market) ultimately determine terms of crop share and cash leases, we use the *equitable* concept to arrive at a starting point for negotiations – and to better understand the market.

**Principles embodied in an equitable lease...**

- Profit maximization (MR=MC)
- Economic profits (expected profit = 0\*)
- Opportunity costs
- Risk across lease types
- Equal rates of return on annual investment (if economic profit = 0, then rate of return = 0)

\* On average, in the long run.

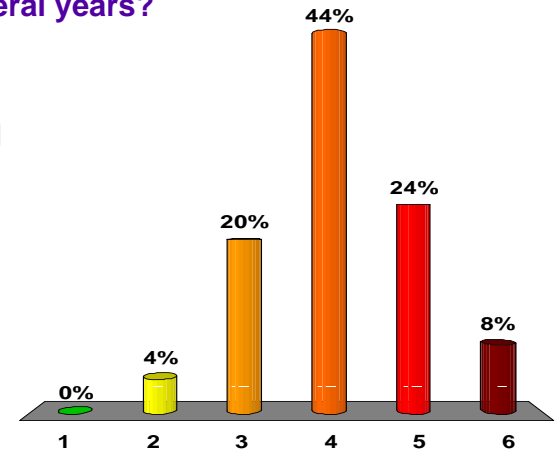
# Landowner/producer risk-return tradeoff



# Risk premium...

How should cash rent for non-irrigated land compare with expected returns from equitable crop share when averaged over several years?

1. 5-10% higher
2. Roughly equal
3. 5-10% less
4. 10-15% less
5. 15-25% less
6. >25% less



Microsoft Excel - KSU-Lease-AgProfitConf(Pratt).xls

## Calculating values using KSU-Lease.xls

KSU Lease.xls ----- A spreadsheet budgeting program to determine equitable crop share and cash lease rental arrangements.  
Version -- 1.9.10

### INPUTS vs CALCULATED VALUES

In the *Crop budgets*, *Shares*, and *Lease budgets* sheets all blue numbers are inputs and all black numbers are calculated from these inputs. The spreadsheet automatically recalculates every time an additional input is entered. Thus, it is important to wait until all data have been entered and reviewed before interpreting any of the calculated results (i.e., black numbers).

### DESCRIPTION OF INPUTS

The paper titled *KSU-Lease.pdf* serves as a "users guide" and provides a brief overview of this spreadsheet. Also, several of the input cells (i.e., blue number) have a red diamond in the upper right hand corner of the cell. By moving your mouse cursor over this diamond, a brief description of the input will be displayed on the screen.

### COMPANION PUBLICATIONS

This spreadsheet was developed as a decision-aid tool based on the principles of equitable leases outlined in several publications that can be found on the K-State Ag Econ departmental website ([www.agecon.ksu.edu](http://www.agecon.ksu.edu)). Additionally, the budget format of this spreadsheet was designed to follow that of the K-State Farm Management Guide crop budgets, which are also available on the Ag Econ website, so they can also be a useful resource when analyzing leasing alternatives.

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Microsoft Excel - KSU-Lease-AgProfitConf(Pratt).xls

## Crop budgets for SC KS using 5-year average crop prices (increased fertilizer & machinery costs).

TABLE 1. CROP BUDGETS SHOWING TOTAL COSTS AND RETURNS

Crop/System	Wht-R	Wht-C	Milo	Corn	SB-FS	SB-DC	Total	Per Acre	Per Acre
Planted acres of each crop	25.0	50.0	13.5	4.5	7.0	0.0	100.0	Planted	Tillable
Tillable acres per planted acre	1.00	1.00	1.00	1.00	1.00	0.00	100.0		
<b>INCOME PER ACRE</b>									
A. Yield per acre	40.0	40.0	70.0	80.0	25.0	18.0			
B. Price per unit	\$6.30	\$6.30	\$3.87	\$4.10	\$10.03	\$10.03			
C. Net government payments	\$15.35	\$15.35	\$15.35	\$15.35	\$15.35	\$0.00			
D. Indemnity payments	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
E. Miscellaneous income	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
F. Returns/acre ((A x B) + C + D + E)	\$267.48	\$267.48	\$286.22	\$343.69	\$266.21	\$180.62			
<b>COSTS PER ACRE</b>									
1. Seed	\$15.00	\$9.00	\$10.08	\$55.02	\$42.90	\$49.50			
2. Herbicide	3.20	6.65	19.87	32.08	8.06	9.08			
3. Insecticide / Fungicide	1.00	1.00	0.00	1.00	0.00	0.00			
4. Fertilizer and Lime	61.42	46.56	52.91	58.47	16.57	11.25			
5. Crop Consulting	0.00	0.00	0.00	0.00	0.00	0.00			
6. Crop Insurance	0.00	0.00	0.00	0.00	0.00	0.00			
7. Drying	0.00	0.00	0.00	0.00	0.00	0.00			
8. Miscellaneous	5.75	5.75	5.75	5.75	5.75	5.75			
9. Machinery Expense	111.02	111.02	118.56	120.08	70.11	62.88			
10. Non-machinery Labor	11.18	11.18	12.09	12.22	6.89	6.24			
11. Irrigation	0.00	0.00	0.00	0.00	0.00	0.00			
12. Land Charge / Rent	42.00	42.00	42.00	42.00	42.00	0.00			
G. SUB TOTAL	\$250.57	\$233.15	\$261.26	\$326.61	\$192.28	\$144.70	\$24,265	\$242.65	\$242.65
13. Interest on 1/2 Nonland Costs	6.00	5.39	6.28	8.55	4.44	4.33	574	5.74	5.74
H. TOTAL COSTS	\$256.57	\$238.54	\$267.54	\$335.17	\$196.72	\$149.03	\$24,839	\$248.39	\$248.39
I. RETURNS OVER COSTS (F - H)	\$10.90	\$28.93	\$18.67	\$8.53	\$69.49	\$31.59	\$2,496	\$24.96	\$24.96
J. TOTAL COSTS/UNIT (H/A)	\$6.41	\$5.96	\$3.82	\$4.19	\$7.87	\$8.28			
K. RETURN TO TOTAL COST ((I+13)/G)	6.75%	14.72%	9.55%	5.23%	38.45%	24.82%	10.05%	10.05%	10.05%

Returns over costs (i.e., profit) -- one of the numbers to focus on. We expect it to be "close" to \$0, on average, in the long-run.

If it is "too high" (as is likely the case here), land values and rents will increase.

### Crop budgets for SC KS using 5-year average crop prices (increased fertilizer & machinery costs).

Crop/System	Wht-R	Wht-C	Milo	Corn	SB-FS	SB-DC	Total
Planted acres	25.0	50.0	13.5	4.5	7.0	0.0	100.0
<b>OPERATOR'S share of machinery, labor, irrigation, and land (enter -100% if shared equitably)</b>							
Drill/Plant	100%	100%	100%	100%	100%	100%	
Tillage and Chemical Applications:							
Chisel	100%	100%	100%	100%	100%	100%	
Disk	100%	100%	100%	100%	100%	100%	
Field cultivate	100%	100%	100%	100%	100%	100%	
Cultivate w/sidedress	100%	100%	100%	100%	100%	100%	
Anhydrous application	100%	100%	100%	100%	100%	100%	
Fertilizer application	-100%	-100%	-100%	-100%	-100%	-100%	
Herbicide application	-100%	-100%	-100%	-100%	-100%	-100%	
Insecticide/fungicide application	-100%	-100%	-100%	-100%	-100%	-100%	
Harvest							
Harvest	100%	100%	100%	100%	100%	100%	
Hauling	100%	100%	100%	100%	100%	100%	
Miscellaneous	80%	80%	80%	80%	80%	80%	
Non-machinery labor	100%	100%	100%	100%	100%	100%	
Irrigation expenses							
Labor	100%	100%	100%	100%	100%	100%	
Fuel and oil	100%	100%	100%	100%	100%	100%	
Repair and maintenance	100%	100%	100%	100%	100%	100%	
Irrigation investment							
Well, pump and gearhead	100%	100%	100%	100%	100%	100%	
Motor	100%	100%	100%	100%	100%	100%	
Irrigation system	100%	100%	100%	100%	100%	100%	
Land	0%	0%	0%	0%	0%	0%	
Cash payment to landowner, \$/acre	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Operator's equitable share (OS%)	73.4%	72.5%	73.1%	73.3%	69.5%	99.0%	73.0%
Landowner's equitable share (LS%)	26.6%	27.5%	26.9%	26.7%	30.5%	1.0%	27.0%

**"Calculated" values for what is equitable -- numbers to focus on.**

**Typically what people are doing is equitable and thus this provides a check on costs in budget.**

**If landowners in area are typically getting a higher percentage than the calculated value (and profit > \$0), land charge likely should be increased.**

### Crop budgets for SC KS using 5-year average crop prices (increased fertilizer, machinery & land costs).

Crop/System	Wht-R	Wht-C	Milo	Corn	SB-FS	SB-DC	Total	Per Planted	Per Tillable
Planted acres of each crop	25.0	50.0	13.5	4.5	7.0	0.0	100.0	100.0	100.0
<b>A. Landowner's COST</b>									
Land	\$59.00	\$59.00	\$59.00	\$59.00	\$59.00	\$0.00	\$5,900	\$59.00	\$59.00
Irrigation equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0	\$0.00	<del>\$0.00</del>
<b>Total</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$0.00</b>	<b>\$5,900</b>	<b>\$59.00</b>	<b>\$59.00</b>
<b>B. Landowner's EQUITABLE SHARE RENT ----- risk adj factor 0.0%</b>									
Total income	\$267.48	\$267.48	\$286.22	\$243.69	\$266.21	\$180.62	\$27,335	\$273.35	\$273.35
Landowner's share	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	\$9,105	\$91.05	\$91.05
Landowner's income	\$89.09	\$89.09	\$95.34	\$114.48	\$88.67	\$60.16	\$9,105	\$91.05	\$91.05
Landowner operating expense	31.21	27.27	35.67	40.14	19.08	12.20	2,940	29.40	29.40
Income less operating expense	\$57.88	\$61.82	\$59.66	\$74.33	\$69.60	\$47.97	\$6,165	\$61.65	\$61.65
Less risk adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	<del>0.00</del>
<b>Cash rent equivalent</b>	<b>\$57.88</b>	<b>\$61.82</b>	<b>\$59.66</b>	<b>\$74.33</b>	<b>\$69.60</b>	<b>\$47.97</b>	<b>\$6,165</b>	<b>\$61.65</b>	<b>\$61.65</b>
<b>C. Amount tenant CAN AFFORD TO PAY</b>									
Total income	\$267.48	\$267.48	\$286.22	\$343.69	\$266.21	\$180.62	\$27,335	\$273.35	\$273.35
Total operating expense	\$214.57	\$196.54	\$225.54	\$293.17	\$154.72	\$149.03	\$20,639	\$206.39	\$206.39
<b>Return to land and irr equip</b>	<b>\$52.90</b>	<b>\$70.93</b>	<b>\$60.67</b>	<b>\$50.53</b>	<b>\$111.49</b>	<b>\$31.59</b>	<b>\$6,696</b>	<b>\$66.96</b>	<b>\$66.96</b>

**Cash rent from budget vs. cash rent equivalent with crop share (and imputed risk premium) -- numbers to focus on. Historically we have suggested a risk premium of ~10% (i.e., the value that would drive cash rent (A) and cash rent equivalent (B) equal -- in this example it is 4.3%).**

**If risk premium is "too high" this suggests that land rent will likely increase.**

### Crop budgets for SC KS using current forward bid crop prices (increased fertilizer, machinery & land costs).

Crop/System	Wht-R	Wht-C	Milo	Corn	SB-FS	SB-DC	Total	Per Planted	Per Tillable
Planted acres of each crop	25.0	50.0	13.5	4.5	7.0	0.0	100.0	100.0	100.0
<b>A. Landowner's COST</b>									
Land	\$59.00	\$59.00	\$59.00	\$59.00	\$59.00	\$0.00	\$5,900	\$59.00	\$59.00
Irrigation equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0	\$0.00	<del>\$0.00</del>
<b>Total</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$59.00</b>	<b>\$0.00</b>	<b>\$5,900</b>	<b>\$59.00</b>	<b>\$59.00</b>
<b>B. Landowner's EQUITABLE SHARE RENT ----- risk adj factor 0.0%</b>									
Total income	\$325.35	\$325.35	\$349.86	\$410.45	\$313.29	\$214.52	\$33,164	\$331.64	\$331.64
Landowner's share	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	\$11,047	\$110.47	\$110.47
Landowner's income	\$108.37	\$108.37	\$116.53	\$136.72	\$104.35	\$71.45	\$11,047	\$110.47	\$110.47
Landowner operating expense	31.21	27.27	35.67	40.14	19.08	12.20	2,940	29.40	29.40
Income less operating expense	\$77.16	\$81.10	\$80.86	\$96.57	\$85.28	\$59.25	\$8,107	\$81.07	\$81.07
Less risk adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	<del>0.00</del>
<b>Cash rent equivalent</b>	<b>\$77.16</b>	<b>\$81.10</b>	<b>\$80.86</b>	<b>\$96.57</b>	<b>\$85.28</b>	<b>\$59.25</b>	<b>\$8,107</b>	<b>\$81.07</b>	<b>\$81.07</b>
<b>C. Amount tenant CAN AFFORD TO PAY</b>									
Total income	\$325.35	\$325.35	\$349.86	\$410.45	\$313.29	\$214.52	\$33,164	\$331.64	\$331.64
Total operating expense	\$244.57	\$196.54	\$225.54	\$293.17	\$154.72	\$149.03	\$20,639	\$206.39	\$206.39
<b>Return to land and irr equip</b>	<b>\$80.78</b>	<b>\$128.81</b>	<b>\$124.32</b>	<b>\$117.28</b>	<b>\$158.57</b>	<b>\$65.48</b>	<b>\$12,526</b>	<b>\$125.26</b>	<b>\$125.26</b>

**At current forward bids, a landowner accepting \$59/ac cash rent would be taking ~27% less than would be expected with a 1/3 crop share. The initial \$42/ac in the budget would be roughly a 48% reduction. Is this going to pressure cash rents to increase?**

Returns above all costs (profit) \$51.78 \$69.81 \$65.32 \$58.28 \$99.57 \$65.48 \$6,626 \$66.26 \$66.26

## Cash rent auction in NW KS ...

# LAND LEASE AUCTION

2150 Acres +/- Located in Sheridan and Thomas County, Kansas

**Saturday, January 15, 2011 • Time: 2:00 p.m.**

Owner: Ward J. Munkres Sale Location: Shepherd's Staff building, 225 Main St., Rextord, KS

# Cash rent auction in NW KS ...

**Announcements made Day of Sale take precedence over printed material.**

**AUCTIONEER'S NOTE:** This land is all prime cropland with no growing crops. There are only 80 acres that are tenanted located in SW1/4 18-7S-30W, Sheridan County, Kansas. Anyone interested in adding to their operation with very productive farmland won't want to miss this auction. All leases will be sold as FSA cropland measurements with no till for the past 10 years.

**LEASE:** The leases will be auctioned for a five year lease, with a two year option after the five years. The first year's lease will be due day of auction, with following years' leases due on or before January 1 of each year. The leases will be auctioned in two individual tracts. All leases will be sold as FSA cropland measurements. The lease for the last year must be negotiated before September 1, 2015.

**AGENCY DISCLOSURE:** Johnson Realty, Inc. and its agents are representing the Lessor and not representing the Lessee.

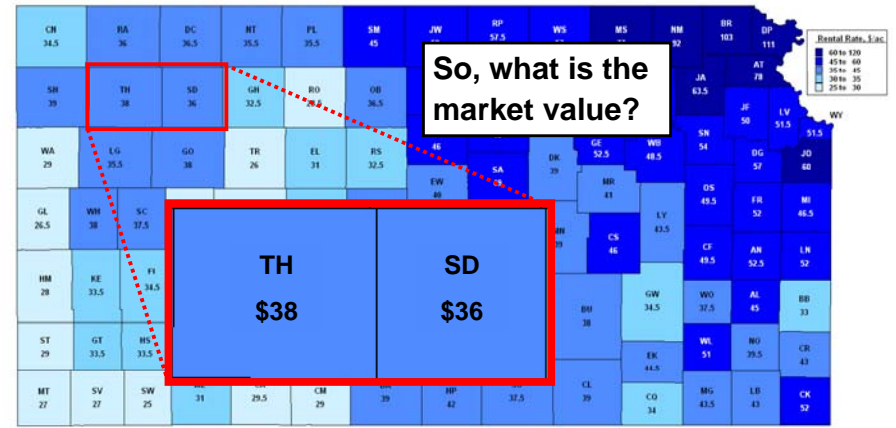
Call Lynn A. Johnson, Johnson Realty, Inc. for more information. Office - 785-475-2785 or Lynn's cell - 785-475-8514.

Not responsible for accidents. All guarantees are between Lessor and Lessee.

All inspections are the responsibility of the potential bidders, with no guarantees or warranties from the Lessor or Johnson Realty, Inc. and its agents. All information has been obtained from reliable sources.

<p><b>Tract 1: NE1/4 10-7-31 and W1/2NW1/4 11-7-31, Thomas County</b> Cropland acres - 214.0 Wheat base acres - 171.0 Yield - 36 Grain Sorghum base acres - 43.0 Yield - 46</p>	<p><b>Tract 6: SE1/4 28-6-32, Thomas County</b> Cropland acres - 156.0 Wheat base acres - 74.5 Yield - 36 Grain Sorghum base acres - 42.8 Yield - 47</p>	<p><b>Tract 8: W1/2 7-7-30, Sheridan County</b> Cropland acres - 299.0 Wheat base acres - 78.0 Yield - 36 Corn base acres - 145.8 Yield 124.0 Sunflowers base acres - 5.9 Yield 797.0 lbs.</p>
<p><b>Tract 2: E1/2NW1/4 23-7-31, Thomas County</b> Cropland acres - 79.7 Wheat base acres - 37.6 Yield - 36</p>	<p><b>Tract 7: E1/2 35-6-32, Thomas County</b> Cropland acres - 305.7 Wheat base acres - 146.6 Yield - 36 Grain Sorghum base acres - 84.4 Yield - 47</p>	<p><b>Tract 10: SW1/4 18-7-30, Sheridan County</b> Cropland acres - 156.3 Wheat base acres - 78.5 Yield - 36 Grain Sorghum base acres - 33.4 Yield - 46 Barley base acres - 2.2 Yield - 40</p>
<p><b>Tract 3: SW1/4 35-6-31, Thomas County</b> Cropland acres - 153.1 Wheat base acres - 5.8 Yield - 36 Grain Sorghum base acres - 33.4 Yield - 46 Barley acres - 6.1 Yield - 40</p>	<p><b>Tract 8: S1/2 6-7-30, Sheridan County</b> Cropland acres - 305.9 Wheat base acres - 205.5 Yield - 37 Grain Sorghum base acres - 48.3 Yield - 48</p>	
<p><b>Tract 4: NW1/4 3-7-32, Thomas County</b> Cropland acres - 160.9 Wheat base acres - 75.4 Yield - 36 Grain Sorghum base acres - 43.9 Yield - 47</p>	<p>122 South Penn, Oberlin, KS 67749  <b>Johnson Realty, Inc.</b>                  Roberta Johnson, Broker · Lynn A. Johnson, Associate Broker/Auctioneer                  Call Lynn A. Johnson for sale bill or information: 785-475-2785 · Mobile: 785-475-8514                  email: johnsonrealty1@yahoo.com                  Joe D. Green, Salesperson/Auctioneer · Roger Emigh, Salesperson/Auctioneer · Randy Ottmeyer, Salesperson                  David Juennemann, Salesperson · Dianne Bremer, Oberlin, Salesperson · Michael Wilson, Salesperson</p>	
<p><b>Tract 5: W1/2 27-6-32, Thomas County</b> Cropland acres - 314.6 Wheat base acres - 155.9 Yield - 36 Grain Sorghum base acres - 50.0 Yield - 46 Barley base acres - 1.8 Yield - 40</p>		

# Kansas county-level non-irrigated crop cash rents...



\* 2010 Cash rent values as reported by USDA NASS and Kansas Agricultural Statistics (KAS).

# Cash rent auction in NW KS ...

**Munkres cash rent auction, January 15, 2011**

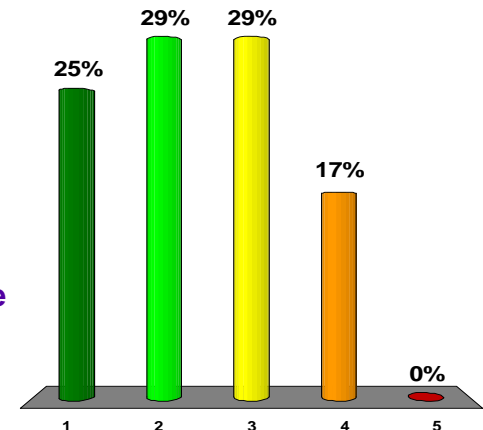
Tract	Cropland acres (FSA)	\$/acre rent	Annual dollars	Wheat stubble a	Corn stalks a	Milo stalks a	Govt payments	Govt pymt per acre	Avg % org matter	PPM soil test P
1	214.0	\$110	\$23,540	108.0	106.0		\$3,255	\$15.21	2.00	37.50
2	79.7	\$90	\$7,173		79.7		\$586	\$7.35	1.50	15.00
3	153.1	\$105	\$16,076		153.1		\$597	\$3.90	1.80	17.00
4	160.9	\$135	\$21,722	160.9			\$1,776	\$11.04	1.70	15.00
5	314.6	\$140	\$44,044	226.4	88.2		\$3,638	\$11.56	1.60	23.00
6	156.0	\$140	\$21,840		156.0		\$1,747	\$11.20	1.70	21.00
7	308.7	\$130	\$40,131	240.0	68.7		\$3,441	\$11.15	1.74	24.55
8	305.9	\$125	\$38,238			305.9	\$3,847	\$12.58	1.80	24.00
9	299.0	\$135	\$40,365			299.0	\$5,465	\$18.28	2.00	20.00
10	156.3	\$120	\$18,756		78.2	78.2	\$1,709	\$10.93	1.65	21.00
<b>Total</b>	<b>2,148.2</b>		<b>\$271,884</b>	<b>735.3</b>	<b>729.9</b>	<b>683.1</b>	<b>\$26,061</b>			
<b>Overall per acre values</b>			<b>\$126.56</b>					<b>\$12.13</b>	<b>1.75</b>	<b>21.80</b>
<b>Correlation of cash rent with above columns&gt;</b>								<b>0.51</b>	<b>0.14</b>	<b>0.04</b>

Only marginal differences in farmability and land quality across tracts, except that tract 2 had several acres in a lagoon.  
 All land is non-irrigated, fairly flat, little erosion, and has good road and grain market access.  
 All land is open, i.e., no growing wheat.  
 Land leased for 5 years and tenant must ensure no loss of soil fertility during lease term, i.e., must reimburse landowner at end of lease for any reduced fertility (both N and P), as judged by before & after soil tests.  
 Land located near Rexford and Gem in both Thomas and Sheridan counties, Kansas.  
 Pre-auction expectations likely were centered around \$80/acre.

# Do you agree or disagree with the following

Producers should receive 100% of payments from programs such as CSP that are due to their management.

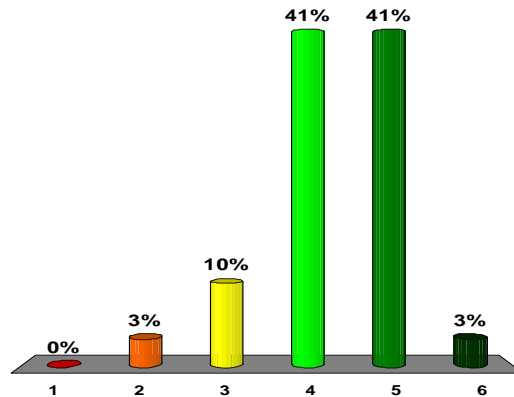
1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



## Crop land cash rents for 2011...

My estimate as to what cash rents for crop land in 2011 will be, relative to 2010, is...

1. Down >5%
2. Down 2-5%
3. Steady
4. Up 2-5%
5. Up 5-10%
6. Up >10%



## Summary ...

- Market values trump what we might calculate, but we calculate values to avoid making bad decisions
- To reduce risk associated with renting land, consider:
  - Staying with (going back to) crop share
  - Go to a flexible cash rent (not ad hoc bonuses)
  - Renegotiate often (i.e., every year) and be willing to increase *and* decrease rents annually
  - Increase level of communication
- There is no one right way to manage farm leases, but several things to strive for are:
  - Keep arrangement business like
  - Maintain open communication at all times

**Questions ???**

