



Land Cost and Rental Agreements – What can you afford to pay?



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Amazing
Opportunities

2009 DIVERSIFIED SERVICES
RISK MANAGEMENT CONFERENCE
Feb 3-4, 2008. Kansas City, MO.

Unprecedented
Risks



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Purpose of land talks

- Develop an understanding of the underlying economic principles and management aspects of land ownership and leasing
- Trying to reduce decisions to numbers
- Two decision tools:
 - *KSU-Landbuy.xls*
 - *KSU-Lease.xls*

Related papers are found at
www.agmanager.info

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Returns to land

- Capital gains (growth)
- Cash returns (rent)
- The two returns to land are similar to other investments such as the stock market (capital gains and dividends)

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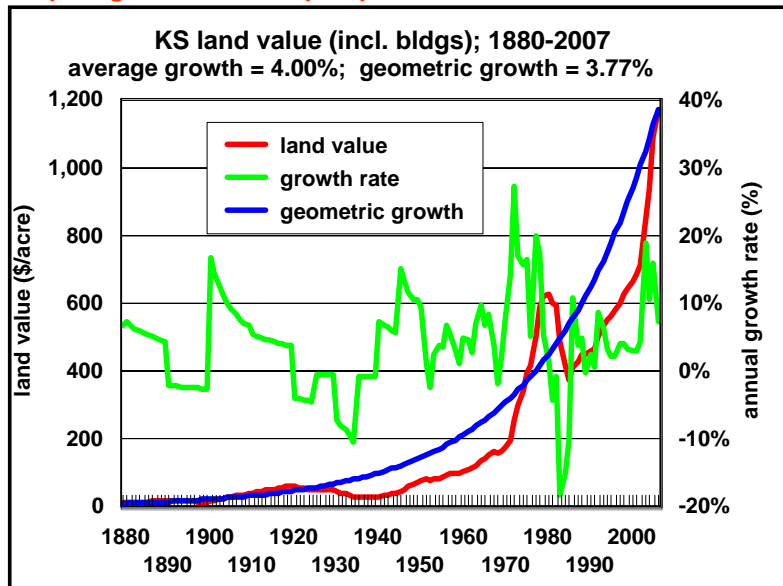
Factors/issues impacting land values

(alphabetical order)

- Farm profitability
- Farm size
- Government programs
- Input costs (e.g., fuel and fertilizer)
- Interest rates
- Outside investors (i.e., stock market money)
- Recreation uses (e.g., hunting)
- Renewable fuels (ethanol and bio-diesel)
- Section 1031 tax exchanges
- Technology (e.g., no-till, precision ag, bio-tech, DNA)
- Urban sprawl
- Weather (i.e., drought, flood)

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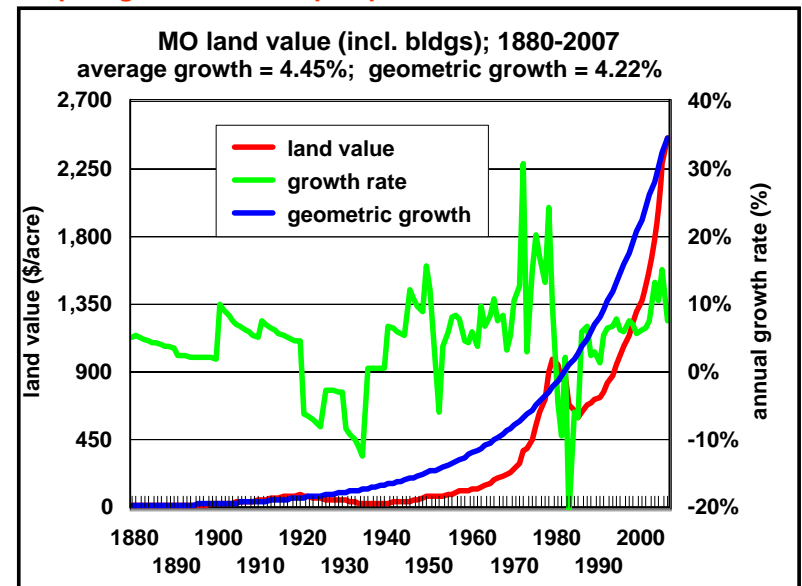
Capital gains historical perspective



1879 starting land value for Kansas was \$10.30

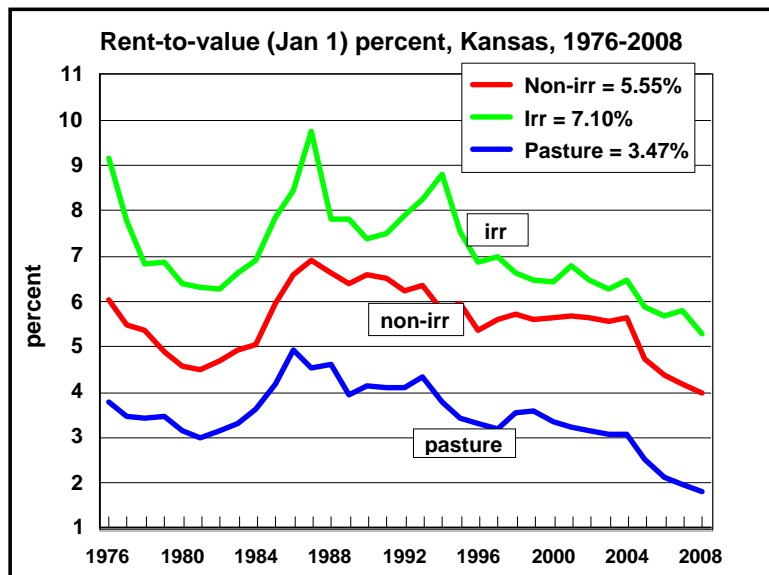
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Capital gains historical perspective



1879 starting land value for Missouri was \$12.37

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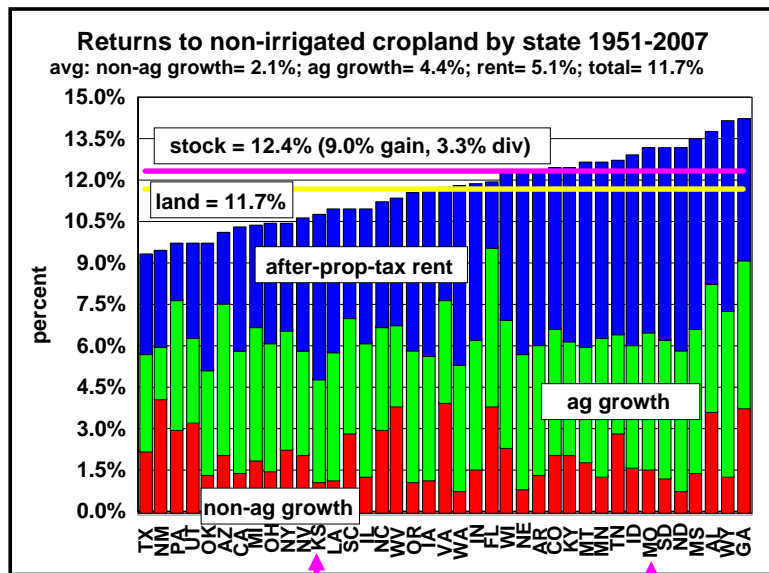
Downtrend hints at something else going on . . .

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A number of years back we began to incorporate non-agricultural aspects into agricultural land values

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We separated land returns into various components

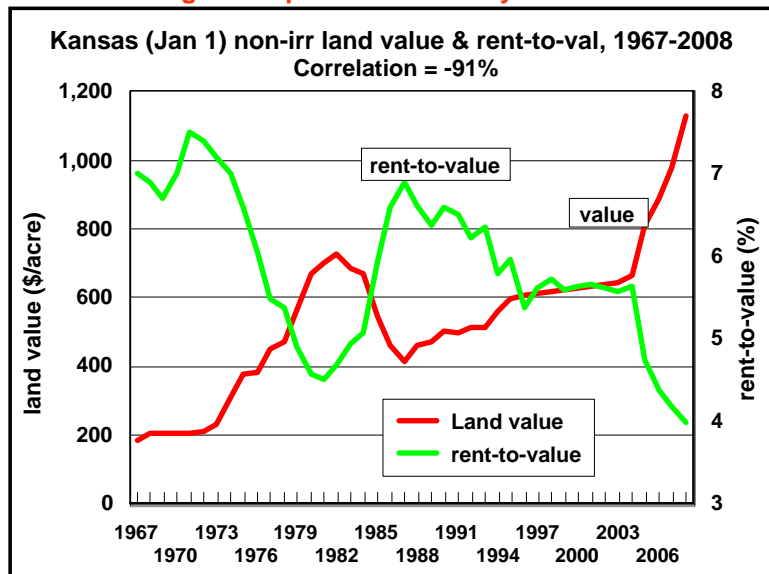


39 states ranked by total returns to land

Non-ag growth is:

- True non-ag growth
 - Recreation, hunting, homesites, 1031 exchanges
 - Subject to the broader economic forces
 - Unemployment rate, taxation issues, competing investments
- Speculation
 - A portion of true non-ag growth is speculation on future trends about such things
 - Speculation among ag buyers (farmers and investors) about future ag trends
- Not easy to sort out the two!

Are we seeing a land price bubble today?



Buying Land – How much can I afford?

- Valuing the capital gains portion
 - Pick a “selling point,” say 30 years from now
 - What will the land be worth then?
 - Assume some annual capital gain % -- ag and non-ag
 - What is left after “sell” & pay cap gains tax?
 - What is that amount worth today?
- Valuing the rent portion
 - What is cash rent today, ag and non-ag?
 - How will rents evolve (grow) over time?
 - What is the future stream of rents worth today?
- Maximum bid = today’s value of the capital gain + today’s value of the rent stream

Microsoft Excel - KSU Landbuy.xls

KSU-Landbuy.xls spreadsheet for land investment decisions

| Inputs | | | | Print report | | | |
|---------|---------|--------|---------|--|--|--|--|
| KS | KS | KS | Average | Label | | | |
| Crop | Pasture | Waste | | State where land is located (enter as two letter abbreviation, e.g., Kansas = KS) | | | |
| 120 | 30 | 0 | 160 | Land class | | | |
| \$1,130 | \$860 | \$0 | \$1,036 | Ac Enter the | | | |
| \$1,130 | \$860 | \$0 | \$1,036 | MV_0 Market pri | | | |
| \$45.00 | \$15.50 | \$0.00 | \$37.14 | PP Purchase | | | |
| \$3.96 | \$3.01 | \$0.00 | \$3.62 | aR Ag rent--c | | | |
| \$0.00 | \$0.00 | \$0.00 | \$0.00 | Pdx Real estat | | | |
| 30 | 30 | 30 | 30 | nR Non-ag re | | | |
| 43% | 43% | 43% | 43% | T Time horiz | | | |
| 18% | 15% | 15% | 15% | ltx Income ta | | | |
| 7.00% | 7.00% | 7.00% | 7.00% | Cdx Capital ga | | | |
| 40.0% | 40.0% | 40.0% | 40% | I Interest rat | | | |
| 3.01% | 2.75% | 0.00% | 2.99% | Percent of purchase price that is financed (only needed for return on equity calculations) | | | |
| 0.00% | 0.00% | 0.00% | n/a | gA Growth rate on ag rent and ag portion of land value (see column G in Guidelines) | | | |
| 4.00% | 4.00% | 0.00% | 4.00% | gNr Growth rate on non-ag rent (normally >= inflation rate) | | | |
| 0.96% | 1.22% | 0.00% | 0.95% | g Growth rate on total (ag and non-ag) land value (see column I in Guidelines) | | | |
| | | | | gNv Calculated non-ag growth rate on land value | | | |

| Calculated Outputs | | | | |
|--------------------|------------|--------|------------|--|
| 3.99% | 3.99% | 3.99% | 3.99% | l(i-Itx) After-tax interest rate on land loans (discount rate) |
| \$23.40 | \$7.12 | \$0.00 | \$19.10 | After-tax rent, \$/acre (now property taxes are removed as well) |
| \$608.10 | \$178.30 | \$0.00 | \$495.08 | PVRA Discounted value of all future after-tax ag rents |
| \$0.00 | \$0.00 | \$0.00 | \$0.00 | PVRN Discounte |
| \$3,685.04 | \$2,789.32 | \$0.00 | \$3,358.94 | Projected ag growth |
| \$2,750.81 | \$1,940.68 | \$0.00 | \$2,906.06 | Projected growth |
| \$1,015.59 | \$773.00 | \$0.00 | \$930.85 | PVS Discounte |
| \$775.40 | \$549.95 | \$0.00 | \$706.70 | PVSA Discount |
| \$1,623.79 | \$951.30 | \$0.00 | \$1,425.94 | PVL Present v |
| 85% | 77% | n/a | 84% | AMVP Ag market |
| 55% | 22% | n/a | | AMVP Ag market |
| \$493.79 | \$91.30 | \$0.00 | \$390.31 | Present value less market price |
| \$493.79 | \$91.30 | \$0.00 | \$390.31 | Present value less purchase price |
| 9.82% | 7.68% | n/a | 9.43% | Approximate pre-tax rate of return on assets |
| 11.70% | 8.14% | n/a | 11.05% | Approximate pre-tax rate of return on equity |

We provide quite a bit of background on the inputs you need to inject to make an informed land ownership decision.

More and more we tend to focus on ROA and ROE, especially for making good micro land purchases

So, what is “rent today?”

Basic Lease Types on Crop Land

- **Crop-share**
 - Landowner shares in annual revenues and typically in certain annual costs
- **Cash rent**
 - Landowner gets a fixed annual cash amount for use of land
- **Numerous variants around these two**

Determining the terms of a crop lease ...

- How are cash lease rates or the terms of crop share leases established?
 - Short answer is “the market”

Distribution of leases by type of lease ...

| Region | Cash | Share | Other |
|---------------|-------|-------|-------|
| Northwest | 36.3% | 59.8% | 3.9% |
| West Central | 24.3 | 71.7 | 4.0 |
| Southwest | 16.5 | 75.5 | 8.0 |
| North Central | 34.9 | 60.5 | 4.6 |
| Central | 30.9 | 64.6 | 4.5 |
| South Central | 21.0 | 76.4 | 2.6 |
| Northeast | 38.8 | 53.5 | 7.7 |
| East Central | 36.0 | 54.3 | 9.6 |
| Southeast | 36.2 | 58.9 | 4.9 |
| State | 30.5 | 63.9 | 5.6 |

Source: Schlegel and Tsoodle -- 2006 KAS/KSU survey

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Distribution of crop share percentages...

Percent of Leases by Crop Share Percentage

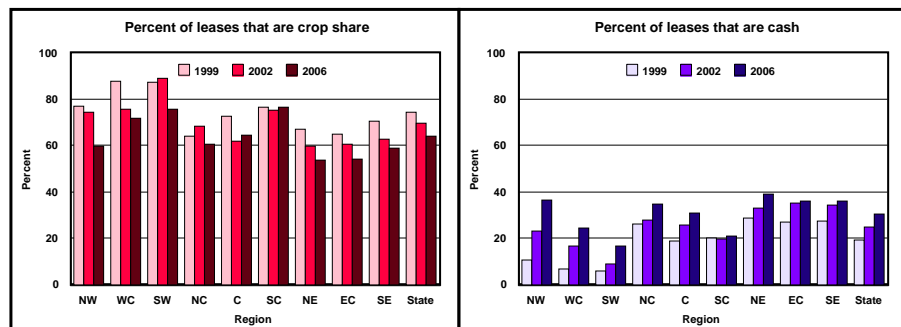
| Landlord Share | Crop Reporting District | | | | | | | | |
|----------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | NW-10 | WC-20 | SW-30 | NC-40 | C-50 | SC-60 | NE-70 | EC-80 | SE-90 |
| 10.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% |
| 16.5% | 1.7% | 0.0% | 0.0% | 0.0% | 0.3% | 0.0% | 0.0% | 0.0% | 0.6% |
| 20.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.3% | 0.0% | 0.0% | 0.7% | 0.0% |
| 25.0% | 2.9% | 0.0% | 4.1% | 0.4% | 0.3% | 0.9% | 3.8% | 1.3% | 1.1% |
| 33.3% | 90.1% | 96.1% | 89.5% | 69.4% | 85.2% | 94.3% | 20.5% | 79.5% | 92.6% |
| 40.0% | 0.0% | 1.7% | 0.9% | 25.9% | 9.4% | 3.5% | 25.7% | 10.6% | 4.0% |
| 45.0% | 0.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 50.0% | 4.1% | 2.2% | 3.2% | 3.5% | 2.8% | 1.3% | 50.0% | 7.9% | 1.7% |
| 60.0% | 0.0% | 0.0% | 0.5% | 0.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 66.7% | 0.0% | 0.0% | 1.8% | 0.0% | 1.4% | 0.0% | 0.0% | 0.0% | 0.0% |
| 100.0% | 0.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Source: Schlegel and Tsoodle -- 2006 KAS/KSU survey

Wheat belt
Corn belt

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Basic Lease Types in Kansas



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.

- 1) What factors have been behind this trend?
- 2) Do we expect this trend to continue?

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In recent years, the majority of leasing questions received pertain to:

- Impact of adopting new technologies
- Cash renting
- “Non-traditional” leases
 - Net share rent
 - Flexible cash rent
 - Bushel rent
 - Combination cash/cropshare

... while “hot topic” has varied over time, the method of addressing questions has not changed.

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“Non-traditional” leases ...

Numerous good reasons to use these different types of leases, but landowners and producers need to recognize several things when doing so ...

- Communication is critical
- Rules-of-thumb really don't exist
- More important to have a written lease
- Pay special attention to FSA rulings

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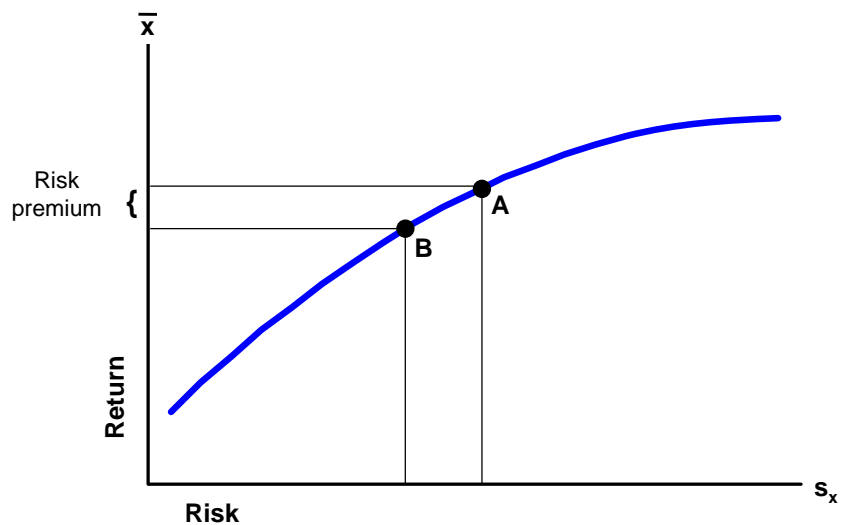
Cash rents ...

Numerous good reasons to go to cash rent, but landowners and producers need to recognize several things when doing so ...

- Land tends to change hands more often
- Relative risks change

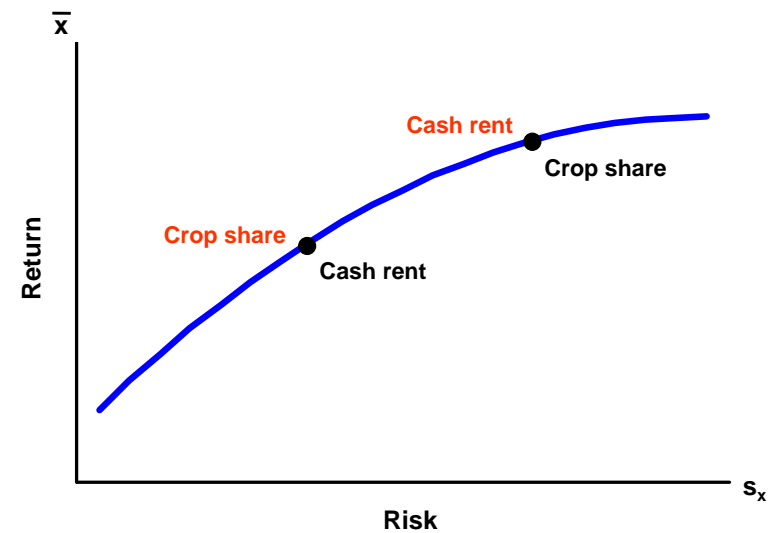
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Risk-return tradeoff



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Landowner/producer risk-return tradeoff



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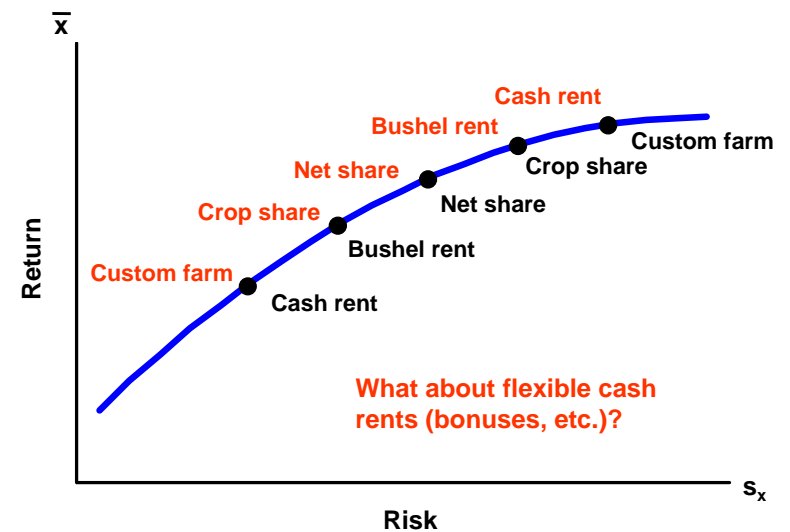
Risk

- Risk: variation about expected outcome
 - Suggests that the cash-equivalent of a share lease will be greater than cash rent
- Hasn't helped much in understanding rents
 - Tenant's risk lower recently (1990s thru 2006)
 - Cash rent is not riskless
 - Costs may be higher with share rents
 - So cash rents may be higher than share rents i.e., tenants bid up cash rents to avoid costs
- Crop share rent shares are sticky
 - Only way to bid up rents is through cash rent

Just when we got used to ignoring risk, it seems to come back into play . . .

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Landowner/producer risk-return tradeoff



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Flexible cash rents (method of paying bonuses)

1) Establish base cash rent

2) Flex/modify base rent based on...

- price deviation from base (fixed bushel rent)
- yield deviation from base
- price and yield (revenue) deviation from base

• Does flex work both ways?

- Communication and documentation are extremely important to make sure everybody understands what they are agreeing to

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Example of Flex Lease

| | | | | | |
|---|----------|----------|----------|--------|----------|
| Base cash rent, \$/acre | | | | | \$50.00 |
| Flex direction (Both (up and down) vs Up) | | | | | Up |
| Percent of change to factor into flexible rent | | | | | 100.0% |
| Adjustments based on Base acres or Actual acres | | | | | Base |
| | Wheat | Milo | Soybean | | Total |
| Base acres | 60 | 25 | 15 | | 100 |
| Base yield | 50 | 85 | 30 | | |
| Base price | \$5.00 | \$2.75 | \$7.50 | | |
| Revenue | \$250.00 | \$233.75 | \$225.00 | \$0.00 | \$24,219 |

Issues to resolve:

- 1) Where does base cash rent come from?
- 2) Where do base acres, yields, and prices come from
(these should be consistent with base rent)?
- 3) What crops should all be included?
- 4) Does rent flex on yield, price, or combination (revenue)?
- 5) Does rent flex both directions or only up?
- 6) What percent change from base should be used?

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Example of Flex Lease

| | |
|---|---------|
| Base cash rent, \$/acre | \$50.00 |
| Flex direction (Both (up and down) vs Up) | Up |
| Percent of change to factor into flexible rent | 100.0% |
| Adjustments based on Base acres or Actual acres | Base |

| | Wheat | Milo | Soybean | Total |
|------------|----------|----------|----------|----------|
| Base acres | 60 | 25 | 15 | 100 |
| Base yield | 50 | 85 | 30 | |
| Base price | \$5.00 | \$2.75 | \$7.50 | |
| Revenue | \$250.00 | \$233.75 | \$225.00 | \$0.00 |
| Revenue | | | | \$24,219 |

| | | | | |
|--------------|----------|----------|----------|----------|
| Actual acres | 55 | 28 | 17 | 100 |
| Actual yield | 53 | 92 | 33 | |
| Actual price | \$5.40 | \$3.15 | \$8.25 | |
| Revenue | \$286.20 | \$289.80 | \$272.25 | \$0.00 |
| Revenue | | | | \$28,501 |

| | % chg from base | Rent, \$/ac |
|--|-----------------|-------------|
| Cash rent flexing on yield only | 7.1% | \$53.55 |
| Cash rent flexing on price only | 9.9% | \$54.93 |
| Cash rent flexing on revenue (yield and price) | 17.7% | \$58.84 |

Issues to resolve:

- 1) Do you use actual acres or base acres in calculations?
- 2) Do you use actual yields or county yields (do they need to be verified)?
- 3) What actual prices should be used (location, time, etc)?

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Determining the terms of a crop lease ...

- How are cash lease rates or the terms of crop share leases established?
 - Short answer is “the market”
- 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.
 - Equitable lease: Total returns divided in same proportion as resources contributed (cost-based)

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Methods of establishing cash rent values ...

- Market going rate (if available)
-
- Crop share equivalent (adjusted for risk)
 - Landowner's cost
 - Amount tenant can afford to pay



The last three require yield, price, and government payment projections (as well as cost information used for crop share).

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KSU-Lease.xls

- A what-if spreadsheet to analyze rents
- Delineates relative contributions
- Allows considering cash vs. crop-share
 - Can deal with a risk premium
- Very flexible; can handle
 - Net share leases
 - Fixed bushel rents
 - Cash transfers
- Important purpose is to allow people to move beyond traditional leases when they need to change (and to analyze impact of cash rent)

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Microsoft Excel - KSU-Lease.xls

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

Version -- 11.17.08

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 numbers) 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). 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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Various tabs

Intro / Crop budgets / Shares / Lease budgets / Irr energy costs / Notes /

Microsoft Excel - KSU-Lease - [SC].xls

KSU-Lease.xls -- 2009 SC KS crop budgets (with crop and fertilizer price adjustments)

CROP BUDGETS SHOWING TOTAL COSTS AND RETURNS

Link to KSU Farm Management Guides (crop budgets) | Print budgets

| Crop/System | Wht (C) | Wht (R) | Corn | Milo | Soybean | DC SF | Total | Per Acre | Per Acre |
|-------------------------------------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|
| Planted acres of each crop | 38.0 | 38.0 | 3.0 | 18.0 | 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 | | |
| INCOME PER ACRE | | | | | | | | | |
| A. Yield per acre | 45.0 | 45.0 | 90.0 | 80.0 | 27.0 | 1,000.0 | --- | --- | --- |
| B. Price per unit | \$5.50 | \$5.50 | \$3.70 | \$3.05 | \$8.25 | \$0.14 | --- | --- | --- |
| C. Net government payments | \$15.35 | \$15.35 | \$15.35 | \$15.35 | \$15.35 | \$0.00 | \$1,835 | \$15.35 | \$15.35 |
| D. Indemnity payments | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 | \$0.00 | \$0.00 |
| E. Miscellaneous income | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 | \$0.00 | \$0.00 |
| F. Returns/acre (A x B) + C + D + E | \$262.85 | \$262.85 | \$348.35 | \$289.35 | \$238.10 | \$137.50 | \$26,305 | \$263.05 | \$263.05 |
| COSTS PER ACRE | | | | | | | | | |
| 1. Seed | \$9.80 | \$16.00 | \$47.04 | \$9.48 | \$33.75 | \$20.02 | \$1,470 | \$14.70 | \$14.70 |
| 2. Herbicide | 6.43 | 2.85 | 26.19 | 20.03 | 9.06 | 19.47 | 836 | 8.36 | 8.36 |
| 3. Insecticide / Fungicide | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 6.46 | 75 | 0.75 | 0.75 |
| 4. Fertilizer and Lime | 46.17 | 69.20 | 63.38 | 56.58 | 18.92 | 32.41 | 5,134 | 51.34 | 51.34 |
| 5. Crop Consulting | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| 6. Crop Insurance | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| 7. Drying | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.90 | 0 | 0.00 | 0.00 |
| 8. Miscellaneous | 5.75 | 5.75 | 5.75 | 5.75 | 5.75 | 5.00 | 575 | 5.75 | 5.75 |
| 9. Machinery Expense | 98.87 | 98.87 | 101.72 | 96.29 | 69.52 | 68.89 | 9,573 | 95.73 | 95.73 |
| 10. Non-machinery Labor | 11.18 | 11.18 | 11.44 | 10.82 | 6.76 | 5.98 | 1,083 | 10.83 | 10.83 |
| 11. Irrigation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| 12. Land Charge / Rent | 46.00 | 46.00 | 46.00 | 46.00 | 46.00 | 46.00 | 4,600 | 46.00 | 46.00 |
| G. SUB TOTAL | \$249.99 | \$240.84 | \$302.52 | \$245.04 | \$179.76 | \$148.13 | \$23,347 | \$233.47 | \$233.47 |
| H. TOTAL COSTS | \$230.82 | \$247.31 | \$311.42 | \$261.71 | \$184.31 | \$154.19 | \$23,968 | \$239.68 | \$239.68 |
| I. RETURNS OVER COSTS (F - H) | \$32.03 | \$15.54 | \$36.93 | \$27.64 | \$52.79 | (\$16.69) | \$2,337 | \$23.37 | \$23.37 |
| J. TOTAL COSTS/UNIT (H/A) | \$5.13 | \$5.50 | \$3.46 | \$3.15 | \$6.83 | \$0.15 | --- | --- | --- |
| K. RETURN TO TOTAL COST ((H-I)/G) | 16.83% | 9.14% | 15.15% | 5.84% | 32.46% | -7.80% | 9.75% | 9.75% | 9.75% |

Intro / Crop budgets / Shares / Lease budgets / Flex / PriceScenarios / Irr energy costs / Notes / NASS CRD

Microsoft Excel - KSU-Lease - [SC].xls

KSU-Lease.xls -- 2009 SC KS crop budgets (with crop and fertilizer price adjustments)

TABLE 1. Production Inputs Used for Budgets

| ITEM | Wht (C) | Wht (R) | Corn | Milo | Soybean | DC SF | \$/unit |
|-------------------------------------|---------|---------|--------|--------|---------|----------|---------------|
| Seeding rate (lbs. seeds, etc) | 60 | 100 | 21 | 3 | 135 | 22 | |
| Seed price, \$/unit | \$0.16 | \$0.16 | \$2.24 | \$3.16 | \$0.25 | \$0.91 | |
| Fertilizer: | | | | | | | |
| \$2-0-0 | 64 | 60 | 86 | 77 | 0 | 0 | \$0.310 /lb |
| N (dry/liquid) | 15 | 40 | 20 | 15 | 0 | 47 | \$0.455 /lb |
| P | 25 | 30 | 39 | 36 | 24 | 19 | \$0.580 /lb |
| K | 0 | 0 | 0 | 0 | 0 | 0 | \$0.660 /lb |
| Lime | 500 | 500 | 500 | 500 | 500 | 0 | \$0.010 /lb |
| Herbicide | | | | | | | |
| Bicep Lite II Magnum (PRE) | | | 2 | | | | \$11.28 /qt |
| Atrazine 4L + crop oil | | | 1 | 1 | | | \$3.63 /qt |
| Bicep II Magnum (PRE) | | | | 1.6 | | | \$10.25 /qt |
| Glyphosate | | | | | 32 | 24 | \$0.27 /oz |
| + 2% Ammonium Sulfate | | | | | 1.5 | 1.5 | \$0.29 /oz |
| Ally | | 0.1 | | | | | \$12.47 /oz |
| + Banvel | 4 | 4 | | | | | \$0.40 /oz |
| Glean | 0.25 | | | | | | \$19.31 /oz |
| 2,4-D IV Ester | | | | | | | \$5.24 /oz |
| Prowl H2O | | | 3 | | | | \$4.19 /pt |
| Insecticide / Fungicide | | | | | | | |
| Seed treatment | | | 1 | | | | \$1.00 /ac |
| Seedbox treatment | 1 | 1 | | | | | \$1.00 /ac |
| Warrior IEC | | | | | 0.025 | | \$258.46 /gal |
| xxx | | | | | | | |
| Irrigation water, inches/acre | 0 | 0 | 0 | 0 | 0 | 0 | \$4.50 /in |
| Irrigation repairs, \$/acre-inch | | | | | | | \$0.33 /in |
| Drying cost, \$/unit (bu, cwt, etc) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.0039 | |

Prices are reduced such that costs are ~44% lower than initial FMG values.

1:08 PM 01/30/09

Intro / Crop budgets / Shares / Lease budgets / Flex / PriceScenarios / Irr energy costs / Notes / NASS CRD

Microsoft Excel - KSU-Lease - [SC].xls

KSU-Lease.xls -- 2009 SC KS crop budgets (with crop and fertilizer price adjustments)

TABLE 2. Machinery and Land Resources Used for Budgets

| ITEM | Wht (C) | Wht (R) | Corn | Milo | Soybean | DC SF | \$/unit |
|---|---------|---------|---------|---------|---------|----------|-------------|
| Drill/Plant, \$/acre | \$10.91 | \$10.91 | \$13.83 | \$12.18 | \$14.12 | \$13.91 | |
| Tillage and Chemical Applications: | | | | | | | |
| Chisel | 1 | 1 | 0 | 0 | 0 | 0 | \$11.04 /ac |
| Disk | 1 | 1 | 1 | 1 | 0 | 0 | \$9.07 /ac |
| Field cultivate | 2 | 2 | 1 | 1 | 0 | 0 | \$8.29 /ac |
| Cultivate with sidedress | 0 | 0 | 1 | 0 | 0 | 0 | \$7.24 /ac |
| Anhydrous application | 1 | 1 | 1 | 1 | 0 | 0 | \$9.68 /ac |
| Fertilizer application | 1 | 1 | 1 | 1 | 1 | 1 | \$4.80 /ac |
| Herbicide application | 1 | 1 | 1 | 2 | 2 | 1 | \$5.15 /ac |
| Insecticide application | 0 | 0 | 0 | 0 | 0 | 1 | \$5.14 /ac |
| Harvest | | | | | | | |
| Base charge, \$/acre | \$19.26 | \$19.26 | \$25.33 | \$19.96 | \$25.87 | \$23.89 | |
| Charge for high yields, \$/unit | \$0.183 | \$0.183 | \$0.188 | \$0.182 | \$0.181 | \$0.002 | |
| High yield | 21 | 21 | 71 | 36 | 28 | 1400 | |
| Hauling, \$/unit | \$0.177 | \$0.177 | \$0.164 | \$0.175 | \$0.164 | \$0.003 | |
| Non-machinery labor, hr/acre | | | | | | | |
| Irrigation labor, hr/acre | 0.86 | 0.86 | 0.88 | 0.84 | 0.82 | 0.46 | \$13.00 /hr |
| Average land value, \$/acre IA | \$46 | \$46 | \$46 | \$46 | \$46 | \$46 | |
| Annual return to land, % IA | | | | | | | 100.0% |
| Interest on capital, % | | | | | | | 8.0% |
| Price scenarios to consider | | | | | | | |
| Short-run prices (MF-1013) -- Aug | \$8.66 | \$8.66 | \$6.16 | \$6.06 | \$12.63 | \$0.2360 | 0 |
| Short-run prices (MF-1013) -- Oct | \$6.03 | \$6.03 | \$3.84 | \$4.18 | \$8.50 | \$0.1588 | 0 |
| 2009 bids (MKC -- SC KS -- 1/30/09) | \$5.50 | \$5.50 | \$3.70 | \$3.05 | \$8.25 | \$0.1375 | 1 |

IA -- The annual cost associated with land can either be entered as a Land Value x Rent-to-Value OR as a Cash Rent x 100%. For example, if cash rent in region is \$42 per acre, this can be entered as \$42 in row 94 and 100% in cell K95 (\$42 x 100% = \$840 x 5%).

Intro / Crop budgets / Shares / Lease budgets / Flex / PriceScenarios / Irr energy costs / Notes / NASS CRD

Equitable crop-share arrangement – SC KS

| Landowner | Average landowner, South Central KS, 555-987-6543 | | | | | | 01:30:09 |
|---|---|---------|-------|-------|---------|-------|-------------------------|
| Operator | Average farmer, South Central KS, 555-123-4567 | | | | | | 1:58 PM |
| Basis for equitable share calculations: For the entire rotation (L4 = 0), Crop-by-crop (L4 = 1) | | | | | | | |
| OPERATOR'S share of production inputs (enter -100% if equitably shared) | | | | | | | |
| Crop/System | Wht (C) | Wht (R) | Corn | Milo | Soybean | DC SF | Total |
| Planted acres | 36.0 | 36.0 | 3.0 | 18.0 | 7.0 | 0.0 | 100.0 |
| Seed | 100% | 100% | 100% | 100% | 100% | 0% | |
| Fertilizer: | | | | | | | Print operator's shares |
| S2-0-0 | -100% | -100% | -100% | -100% | -100% | -100% | |
| N (dry/liquid) | -100% | -100% | -100% | -100% | -100% | -100% | |
| P | -100% | -100% | -100% | -100% | -100% | -100% | |
| K | -100% | -100% | -100% | -100% | -100% | -100% | |
| Lime | 0% | 0% | 0% | 0% | 0% | 0% | |
| Herbicide | | | | | | | |
| Bicep Lite II Magnum (PRE) | -100% | -100% | -100% | -100% | -100% | -100% | |
| Atrazine 4L + crop oil | -100% | -100% | -100% | -100% | -100% | -100% | |
| Bicep II Magnum (PRE) | -100% | -100% | -100% | -100% | -100% | -100% | |
| Glyphosate | -100% | -100% | -100% | -100% | -100% | -100% | |
| + 2% Ammonium Sulfate | -100% | -100% | -100% | -100% | -100% | -100% | |
| Ally | -100% | -100% | -100% | -100% | -100% | -100% | |
| + Banvel | -100% | -100% | -100% | -100% | -100% | -100% | |
| Glean | -100% | -100% | -100% | -100% | -100% | -100% | |
| 2,4-D IV Ester | -100% | -100% | -100% | -100% | -100% | -100% | |
| Prowl H2O | -100% | -100% | -100% | -100% | -100% | -100% | |
| Insecticide / Fungicide | | | | | | | |
| Seed treatment | -100% | -100% | -100% | -100% | -100% | -100% | |
| Seedbox treatment | -100% | -100% | -100% | -100% | -100% | -100% | |
| Warrior IEC | -100% | -100% | -100% | -100% | -100% | -100% | |
| xxx | -100% | -100% | -100% | -100% | -100% | -100% | |
| Crop consulting | 100% | 100% | 100% | 100% | 100% | 100% | |
| Crop insurance | -100% | -100% | -100% | -100% | -100% | -100% | |
| Drying cost | -100% | -100% | -100% | -100% | -100% | -100% | |

Entering a number between 0-100% (or -100%) by crop and by input provides flexibility to handle most any situation.

Equitably sharing fertilizer (excluding lime), herbicides, and insecticides in this example.

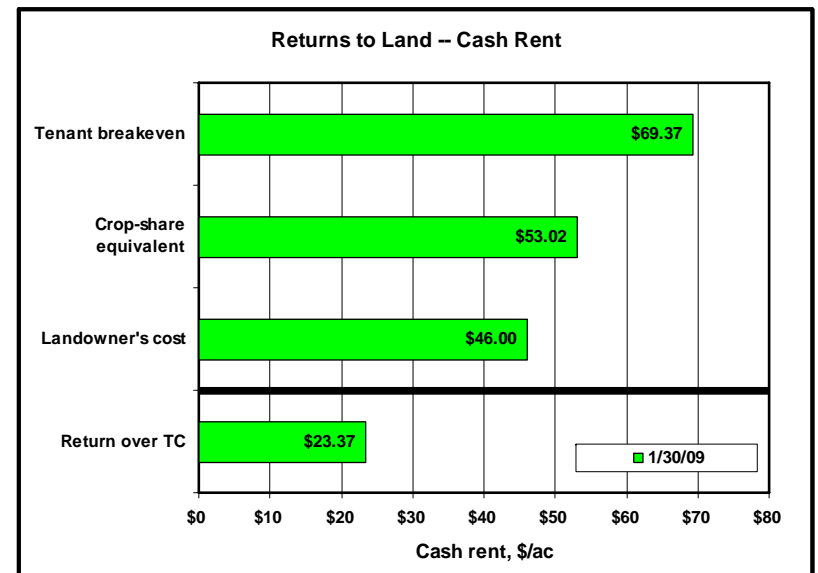
Equitable crop-share arrangement – SC KS

| Crop/System | Wht (C) | Wht (R) | Corn | Milo | Soybean | DC SF | Total |
|--|---------|---------|--------|--------|---------|--------|-------|
| Planted acres | 36.0 | 36.0 | 3.0 | 18.0 | 7.0 | 0.0 | 100.0 |
| OPERATOR'S share of machinery, labor, irrigation, and land (enter -100% if shared equitably) | | | | | | | |
| 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 with sidedress | 100% | 100% | 100% | 100% | 100% | 100% | |
| Antydrus application | 100% | 100% | 100% | 100% | 100% | 100% | |
| Fertilizer application | 100% | 100% | 100% | 100% | 100% | 100% | |
| Herbicide application | -100% | -100% | -100% | -100% | -100% | -100% | |
| Insecticide application | -100% | -100% | -100% | -100% | -100% | -100% | |
| Harvest | | | | | | | |
| Harvest | 100% | 100% | 100% | 100% | 100% | 100% | |
| Hauling | 100% | 100% | 100% | 100% | 100% | 100% | |
| Miscellaneous | 75% | 75% | 75% | 75% | 75% | 75% | |
| 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 | 0% | 0% | 0% | 0% | 0% | 0% | |
| Motor | 0% | 0% | 0% | 0% | 0% | 0% | |
| Irrigation system | 0% | 0% | 0% | 0% | 0% | 0% | |
| Land | | | | | | | |
| Cash payment to landowner, \$/acre | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 |
| Operator's equitable share (OS%) | 69.9% | 71.8% | 75.7% | 68.4% | 64.8% | 72.0% | 70.0% |
| Landowner's equitable share (LS%) | 30.1% | 28.2% | 24.3% | 31.6% | 35.2% | 28.0% | 30.0% |

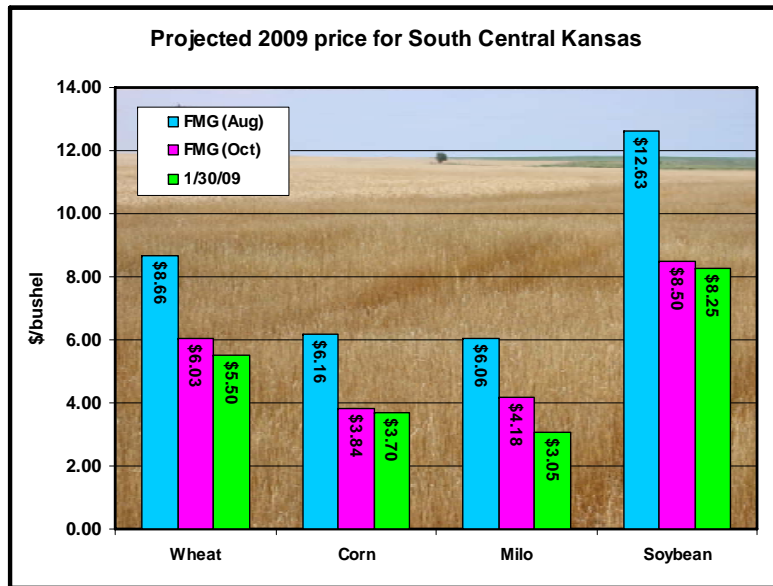
ALTERNATIVE METHODS OF ESTIMATING CASH RENT

| Crop/System | Wht (C) | Wht (R) | Corn | Milo | Soybean | DC SF | Total | Per | Per |
|---|----------|----------|----------|----------|----------|-----------|----------|----------|----------|
| Total tillable acre | | | | | | | 100.0 | Planted | Tillable |
| Planted acres of each crop | 36.0 | 36.0 | 3.0 | 18.0 | 7.0 | 0.0 | 100.0 | Acre | Acre |
| A. Landowner's COST | | | | | | | | | |
| Land | \$46.00 | \$46.00 | \$46.00 | \$46.00 | \$46.00 | \$0.00 | \$4,600 | \$46.00 | \$46.00 |
| Irrigation equipment | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 | \$0.00 | \$0.00 |
| Total | \$46.00 | \$46.00 | \$46.00 | \$46.00 | \$46.00 | \$0.00 | \$4,600 | \$46.00 | \$46.00 |
| B. Landowner's EQUITABLE SHARE RENT ---- risk adj factor 0.0% ← RAF of 13.25% equates A and B | | | | | | | | | |
| Total income | \$262.85 | \$262.85 | \$348.35 | \$259.35 | \$238.10 | \$137.50 | \$26,305 | \$263.05 | \$263.05 |
| Landowner's share | 30.0% | 30.0% | 30.0% | 30.0% | 30.0% | 30.0% | 30.0% | 30.0% | 30.0% |
| Landowner's income | \$78.97 | \$78.97 | \$104.65 | \$77.92 | \$71.53 | \$41.31 | \$7,903 | \$79.03 | \$79.03 |
| Landowner operating expense | 23.47 | 26.42 | 35.02 | 32.24 | 17.05 | 44.89 | 2,601 | 26.01 | 26.01 |
| Income less operating expense | \$55.50 | \$52.55 | \$69.63 | \$45.67 | \$54.48 | (\$3.38) | \$5,302 | \$53.02 | \$53.02 |
| Less risk adjustment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| Cash rent equivalent | \$55.50 | \$52.55 | \$69.63 | \$45.67 | \$54.48 | (\$3.38) | \$5,302 | \$53.02 | \$53.02 |
| C. Amount tenant CAN AFFORD TO PAY | | | | | | | | | |
| Total income | \$262.85 | \$262.85 | \$348.35 | \$259.35 | \$238.10 | \$137.50 | \$26,305 | \$263.05 | \$263.05 |
| Total operating expense | \$194.82 | \$201.31 | \$265.42 | \$205.71 | \$138.31 | \$154.19 | \$19,368 | \$193.68 | \$193.68 |
| Return to land and irr equip | \$78.03 | \$61.54 | \$82.93 | \$53.64 | \$99.79 | (\$16.69) | \$6,937 | \$69.37 | \$69.37 |
| Comparison of alternative cash rent methods | | | | | | | | | |
| Low | \$46.00 | \$46.00 | \$46.00 | \$45.67 | \$46.00 | (\$16.69) | \$4,600 | \$46.00 | \$46.00 |
| Average | \$59.94 | \$53.36 | \$66.19 | \$48.44 | \$66.76 | (\$6.69) | \$5,613 | \$56.13 | \$56.13 |
| High | \$78.03 | \$61.54 | \$82.93 | \$53.64 | \$99.79 | \$0.00 | \$6,937 | \$69.37 | \$69.37 |
| Returns above all costs (profit) | \$32.03 | \$15.54 | \$36.93 | \$7.64 | \$53.79 | (\$16.69) | \$2,337 | \$23.37 | \$23.37 |

Returns to land (SC KS budgets, current crop and fertilizer prices)...



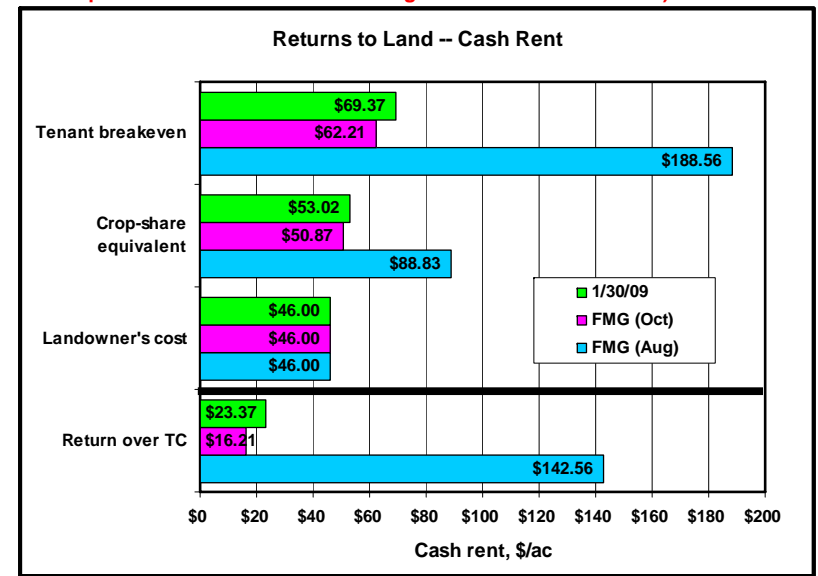
Alternative price scenarios...



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SC KS returns to land under alternative price scenarios...

(Fertilizer prices in FMG scenarios were higher than 1/30/09 scenario)



Risk associated with a fixed cash rent that was negotiated at the "wrong" time...

80

KSU-Lease.xls -- 2009 NE KS crop budgets (with crop and fertilizer price adjustments)

| Crop/System | Wheat | Corn | Milo | Soybean | SF | Brome | Total | Per Acre | Per Acre |
|---------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Planted acres of each crop | 12.5 | 36.5 | 5.0 | 46.0 | 0.0 | 0.0 | 100.0 | 100.0 | 100.0 |
| Tillable acres per planted acre | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 100.0 | 100.0 | 100.0 |
| INCOME PER ACRE | | | | | | | | | |
| A. Yield per acre | 50.0 | 110.0 | 76.0 | 33.0 | 1,600.0 | 2.5 | | | |
| B. Price per unit | \$5.82 | \$3.90 | \$3.50 | \$8.75 | \$0.15 | \$80.00 | | | |
| C. Net government payments | \$13.60 | \$13.60 | \$13.60 | \$0.00 | \$0.00 | \$0.00 | \$1,360 | \$13.60 | \$13.60 |
| D. Indemnity payments | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 | \$0.00 | \$0.00 |
| E. Miscellaneous income | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 | \$0.00 | \$0.00 |
| F. Returns/acre ((A x B) + C + D + E) | \$304.35 | \$442.60 | \$279.60 | \$302.35 | \$240.00 | \$200.00 | \$35,285 | \$352.65 | \$352.65 |
| COSTS PER ACRE | | | | | | | | | |
| 1. Seed | \$16.00 | \$85.86 | \$14.76 | \$35.00 | \$20.02 | \$2.50 | \$5,018 | \$50.18 | \$50.18 |
| 2. Herbicide | 6.16 | 23.03 | 29.52 | 18.76 | 19.47 | 5.24 | 1,928 | 19.28 | 19.28 |
| 3. Insecticide / Fungicide | 20.25 | 0.00 | 0.00 | 0.00 | 12.92 | 0.00 | 293 | 2.93 | 2.93 |
| 4. Fertilizer and Lime | 61.28 | 65.29 | 44.16 | 21.82 | 47.27 | 42.23 | 4,374 | 43.74 | 43.74 |
| 5. Crop Consulting | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| 6. Crop Insurance | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| 7. Drying | 0.00 | 14.30 | 9.88 | 0.00 | 6.24 | 0.00 | 571 | 5.71 | 5.71 |
| 8. Miscellaneous | 8.25 | 8.25 | 8.25 | 8.25 | 8.25 | 7.00 | 825 | 8.25 | 8.25 |
| 9. Machinery Expense | 62.37 | 84.51 | 74.29 | 56.81 | 68.11 | 75.43 | 6,840 | 68.40 | 68.40 |
| 10. Non-machinery Labor | 7.02 | 9.49 | 8.45 | 6.37 | 7.67 | 8.58 | 769 | 7.69 | 7.69 |
| 11. Irrigation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| 12. Land Charge / Rent | 76.00 | 76.00 | 76.00 | 76.00 | 0.00 | 40.00 | 7,600 | 76.00 | 76.00 |
| G. SUB TOTAL | \$257.33 | \$366.73 | \$265.30 | \$222.81 | \$189.95 | \$180.98 | \$28,178 | \$281.78 | \$281.78 |
| H. TOTAL COSTS | \$263.74 | \$376.66 | \$271.48 | \$227.92 | \$196.38 | \$185.61 | \$28,887 | \$288.86 | \$288.87 |
| I. RETURNS OVER COSTS (F - H) | \$40.61 | \$65.94 | \$8.12 | \$74.43 | \$43.62 | \$14.39 | \$6,379 | \$63.79 | \$63.79 |
| J. TOTAL COSTS/UNIT (H/A) | \$5.27 | \$3.42 | \$3.57 | \$6.91 | \$0.12 | \$7.424 | | | |
| K. RETURN TO TOTAL COST ((H-13)/G) | 18.27% | 20.69% | 5.39% | 35.70% | 26.35% | 10.51% | 22.08% | 22.08% | 22.08% |

Equitable crop-share arrangement -- NE KS

| Operator | Wheat | Corn | Milo | Soybean | SF | Brome | Total |
|-------------------------|-------|-------|-------|---------|-------|-------|-------|
| Planted acres | 12.5 | 36.5 | 5.0 | 46.0 | 0.0 | 0.0 | 100.0 |
| Seed | 100% | 100% | 100% | 100% | 100% | 0% | |
| Fertilizer: | | | | | | | |
| N (dry/liquid) | -100% | -100% | -100% | -100% | -100% | -100% | |
| P | -100% | -100% | -100% | -100% | -100% | -100% | |
| K | -100% | -100% | -100% | -100% | -100% | -100% | |
| Lime | -100% | -100% | -100% | -100% | -100% | -100% | |
| Herbicide | | | | | | | |
| Bicep II Magnum | -100% | -100% | -100% | -100% | -100% | -100% | |
| Status | -100% | -100% | -100% | -100% | -100% | -100% | |
| Buctril + Atrazine | -100% | -100% | -100% | -100% | -100% | -100% | |
| Clyphosate | -100% | -100% | -100% | -100% | -100% | -100% | |
| + 2% Ammonium Sulfate | -100% | -100% | -100% | -100% | -100% | -100% | |
| + 2, 4-D LV Ester | -100% | -100% | -100% | -100% | -100% | -100% | |
| Prowl H2O | -100% | -100% | -100% | -100% | -100% | -100% | |
| Roundup Weather Max | -100% | -100% | -100% | -100% | -100% | -100% | |
| Finesse | -100% | -100% | -100% | -100% | -100% | -100% | |
| + Surfactant | -100% | -100% | -100% | -100% | -100% | -100% | |
| Insecticide / Fungicide | | | | | | | |
| Pounce | -100% | -100% | -100% | -100% | -100% | -100% | |
| Warrior | -100% | -100% | -100% | -100% | -100% | -100% | |
| Quitl | -100% | -100% | -100% | -100% | -100% | -100% | |
| Headline | -100% | -100% | -100% | -100% | -100% | -100% | |
| Crop consulting | 100% | 100% | 100% | 100% | 100% | 100% | |
| Crop insurance | -100% | -100% | -100% | -100% | -100% | -100% | |
| Drying cost | -100% | -100% | -100% | -100% | -100% | -100% | |

Entering a number between 0-100% (or -100%) by crop and by input provides flexibility to handle most any situation.

Equitably sharing all fertilizer, herbicides, insecticides, and seed on spring crops in this example.

Equitable crop-share arrangement – NE KS

| Crop/System | Wheat | Corn | Milo | Soybean | SF | Brome | Total |
|---|-------|-------|-------|---------|-------|-------|-------|
| Planted acres | 12.5 | 36.5 | 5.0 | 46.0 | 0.0 | 0.0 | 100.0 |
| OPERATOR'S share of machinery, labor, irrigation, and land (enter -100% if shared equitably) | | | | | | | |
| 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% | |
| Harrow | 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 application | -100% | -100% | -100% | -100% | -100% | -100% | |
| Harvest | | | | | | | |
| Harvest | 100% | 100% | 100% | 100% | 100% | 100% | |
| Hauling | 100% | 100% | 100% | 100% | 100% | 100% | |
| Miscellaneous | | | | | | | |
| Non-machinery labor | 75% | 75% | 75% | 75% | 75% | 75% | |
| 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 | 0% | 0% | 0% | 0% | 0% | 0% | |
| Motor | 0% | 0% | 0% | 0% | 0% | 0% | |
| Irrigation system | 0% | 0% | 0% | 0% | 0% | 0% | |
| Land | | | | | | | |
| Cash payment to landowner, \$/acre | 0% | 0% | 0% | 0% | 0% | 0% | \$0 |
| Operator's equitable share (OS%) | 51.8% | 54.2% | 50.9% | 49.7% | 99.0% | 66.1% | 49.4% |
| Landowner's equitable share (LS%) | 48.2% | 45.8% | 49.1% | 50.3% | 1.0% | 33.9% | 50.6% |

Entering a number between 0-100% (or -100%) by crop and by input provides flexibility to handle most any situation.

Equitably sharing all fertilizer, herbicides, insecticides, and seed on spring crops in this example.

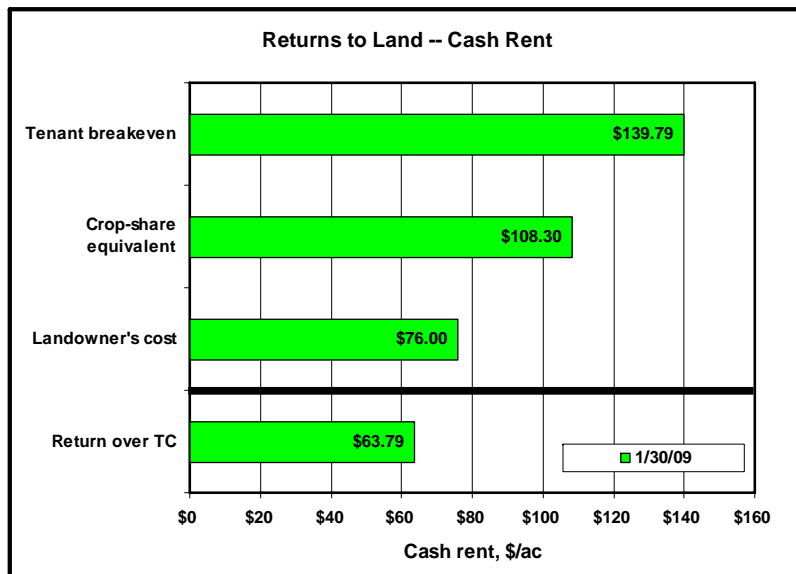
Sharing no inputs (i.e., net share rent) results in a 72/28 split.

ALTERNATIVE METHODS OF ESTIMATING CASH RENT

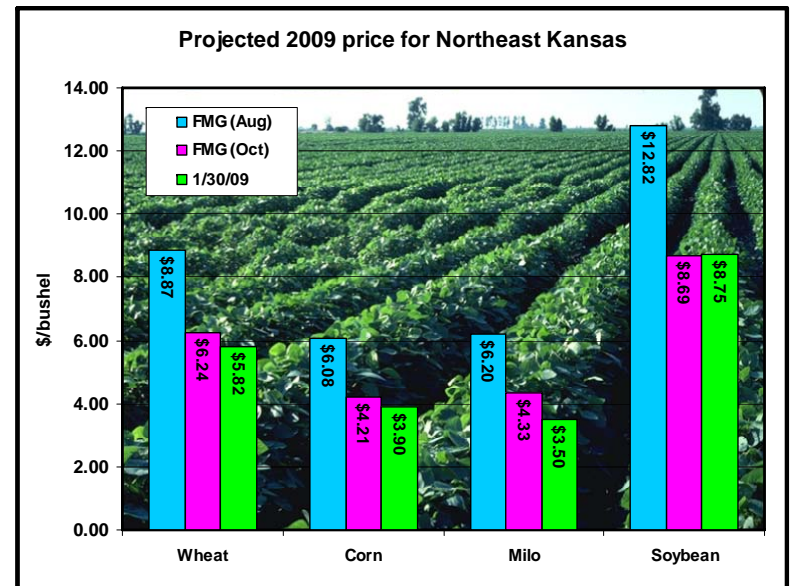
| Crop/System | Wheat | Corn | Milo | Soybean | SF | Brome | Total | Per Planted | Per Tillable |
|---|-----------------|-----------------|----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|
| Total tillable acre | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Planted acres of each crop | 12.5 | 36.5 | 5.0 | 46.0 | 0.0 | 0.0 | 100.0 | | |
| A. Landowner's COST | | | | | | | | | |
| Land | \$76.00 | \$76.00 | \$76.00 | \$76.00 | \$0.00 | \$40.00 | \$7,800 | \$76.00 | \$76.00 |
| Irrigation equipment | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 | \$0.00 | \$0.00 |
| Total | \$76.00 | \$76.00 | \$76.00 | \$76.00 | \$0.00 | \$40.00 | \$7,800 | \$76.00 | \$76.00 |
| B. Landowner's EQUITABLE SHARE RENT ---- risk adj factor | | | | | | | | | |
| | | | | 0.0% | | | | | |
| Total income | \$304.35 | \$442.60 | \$279.60 | \$302.35 | \$240.00 | \$200.00 | \$35,285 | \$352.65 | \$352.65 |
| Landowner's share | 50.6% | 50.6% | 50.6% | 50.6% | 50.6% | 50.6% | \$17,960 | 50.6% | 50.6% |
| Landowner's income | \$154.13 | \$224.15 | \$141.60 | \$153.12 | \$121.54 | \$101.29 | \$17,960 | \$178.59 | \$178.59 |
| Landowner operating expense | \$3.88 | 106.48 | 59.08 | 47.31 | 65.83 | 32.10 | 7,029 | 70.29 | 70.29 |
| Income less operating expense | \$100.45 | \$117.67 | \$82.52 | \$105.81 | \$55.72 | \$69.19 | \$10,930 | \$108.30 | \$108.30 |
| Less risk adjustment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 | 0.00 |
| Cash rent equivalent | \$100.45 | \$117.67 | \$82.52 | \$105.81 | \$55.72 | \$69.19 | \$10,930 | \$108.30 | \$108.30 |
| C. Amount tenant CAN AFFORD TO PAY | | | | | | | | | |
| Total income | \$304.35 | \$442.60 | \$279.60 | \$302.35 | \$240.00 | \$200.00 | \$35,285 | \$352.65 | \$352.65 |
| Total operating expense | \$187.74 | \$300.66 | \$195.48 | \$151.92 | \$196.39 | \$145.61 | \$21,287 | \$212.87 | \$212.87 |
| Return to land and irr equip | \$116.61 | \$141.94 | \$84.12 | \$150.43 | \$43.62 | \$54.39 | \$13,979 | \$139.79 | \$139.79 |
| Comparison of alternative cash rent methods | | | | | | | | | |
| Low | \$76.00 | \$76.00 | \$76.00 | \$76.00 | \$0.00 | \$40.00 | \$7,600 | \$76.00 | \$76.00 |
| Average | \$97.69 | \$111.87 | \$80.88 | \$110.75 | \$33.11 | \$54.53 | \$10,903 | \$108.03 | \$108.03 |
| High | \$116.61 | \$141.94 | \$84.12 | \$150.43 | \$55.72 | \$69.19 | \$13,979 | \$139.79 | \$139.79 |
| Returns above all costs (profit) | \$40.61 | \$65.94 | \$8.12 | \$74.43 | \$43.62 | \$14.39 | \$6,379 | \$63.79 | \$63.79 |

RAF of ~30% equates A and B

Returns to land (NE KS budgets, current crop and fertilizer prices)...

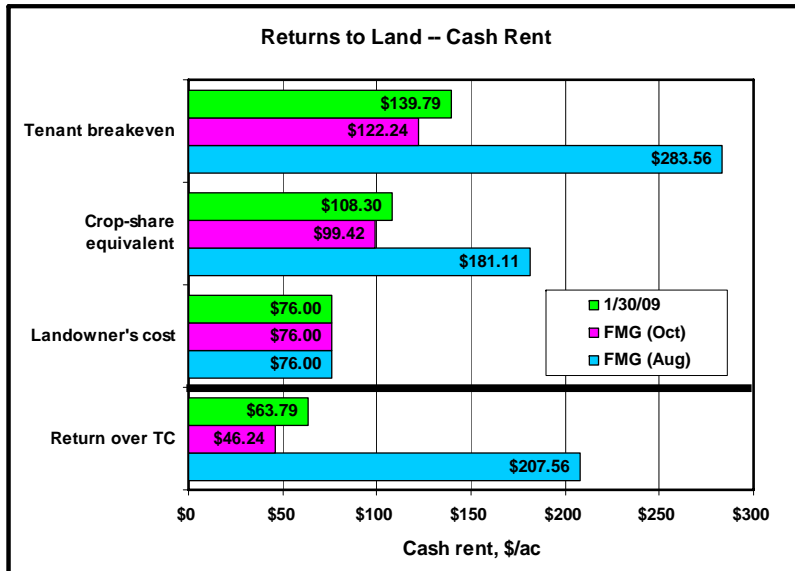


Alternative price scenarios...



Returns to land under alternative price scenarios...

(Fertilizer prices in FMG scenarios were higher than 1/30/09 scenario)



Risk associated with a fixed cash rent that was negotiated at the "wrong" time... 91

Questions ???



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