

Leasing Land: How Do You Decide What's Fair?

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**Women Managing the Farm Conference
Hutchinson, KS February 9-10, 2007**



Objective of talk

- Develop an understanding of how technological changes and factors such as high commodity and energy prices can impact crop leases
- Trying to reduce decisions to numbers
- Decision tools:
 - *KSU-Lease.xls*
 - *KSU-Crop Budgets 2006.xls*
 - *KSU-Landbuy.xls*

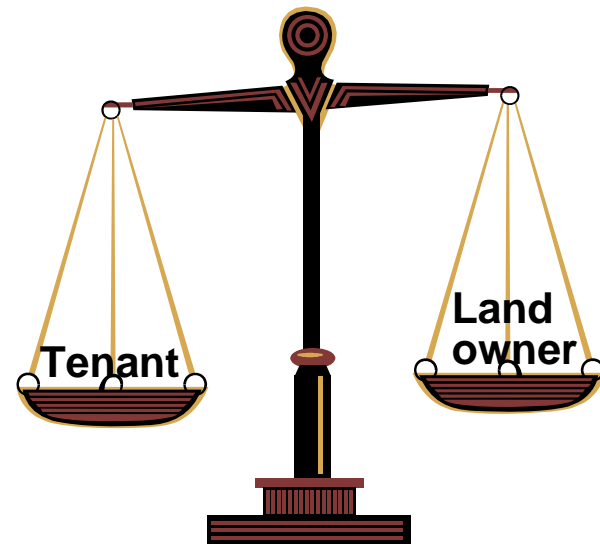
In recent years, the majority of leasing questions received pertain to:

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

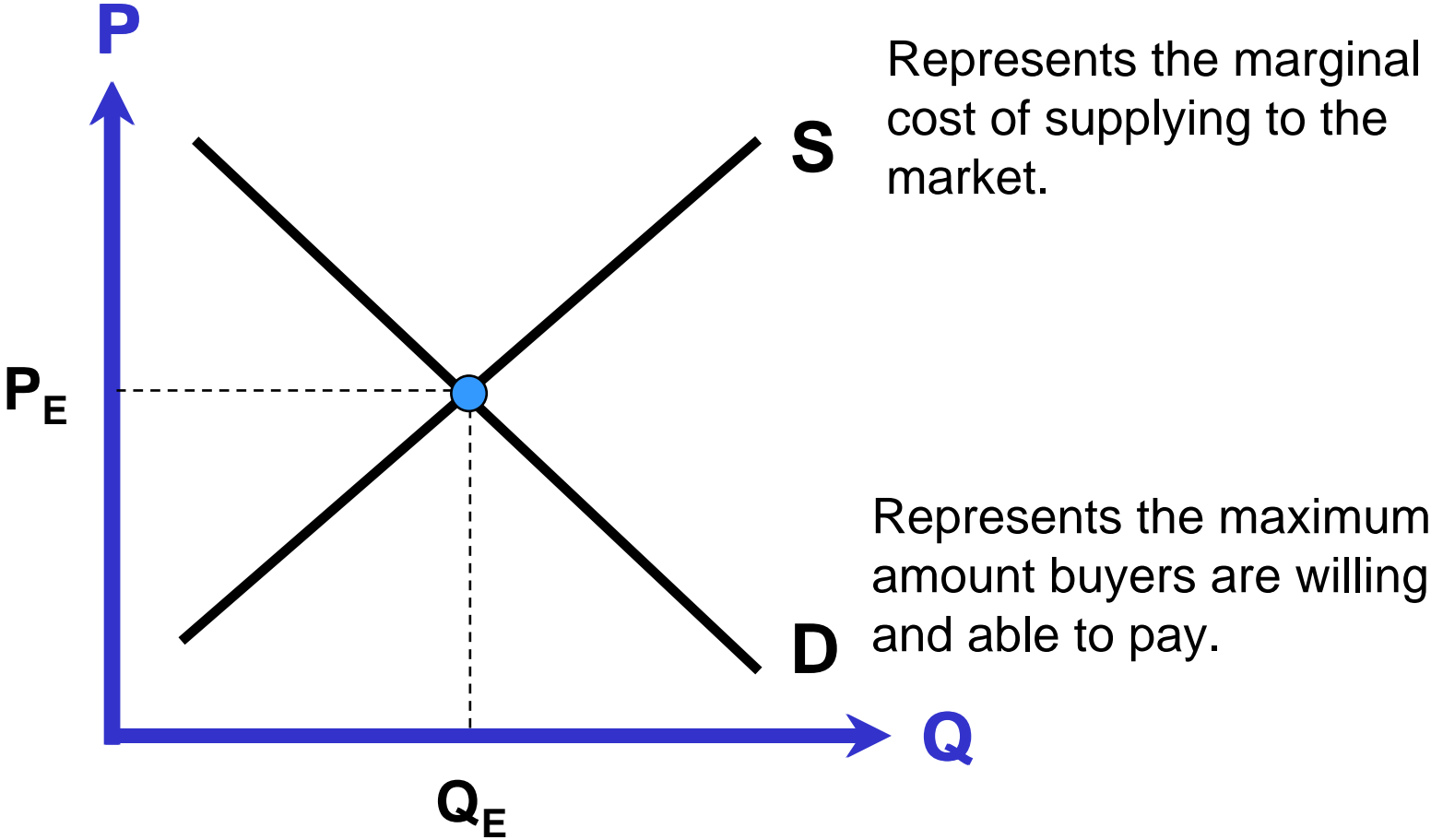
... while current “hot topic” is slightly different, method of addressing questions has not changed.

Determining the terms of a lease ...

How are cash lease rates or the terms of crop share leases established?



Market established rental rates ...

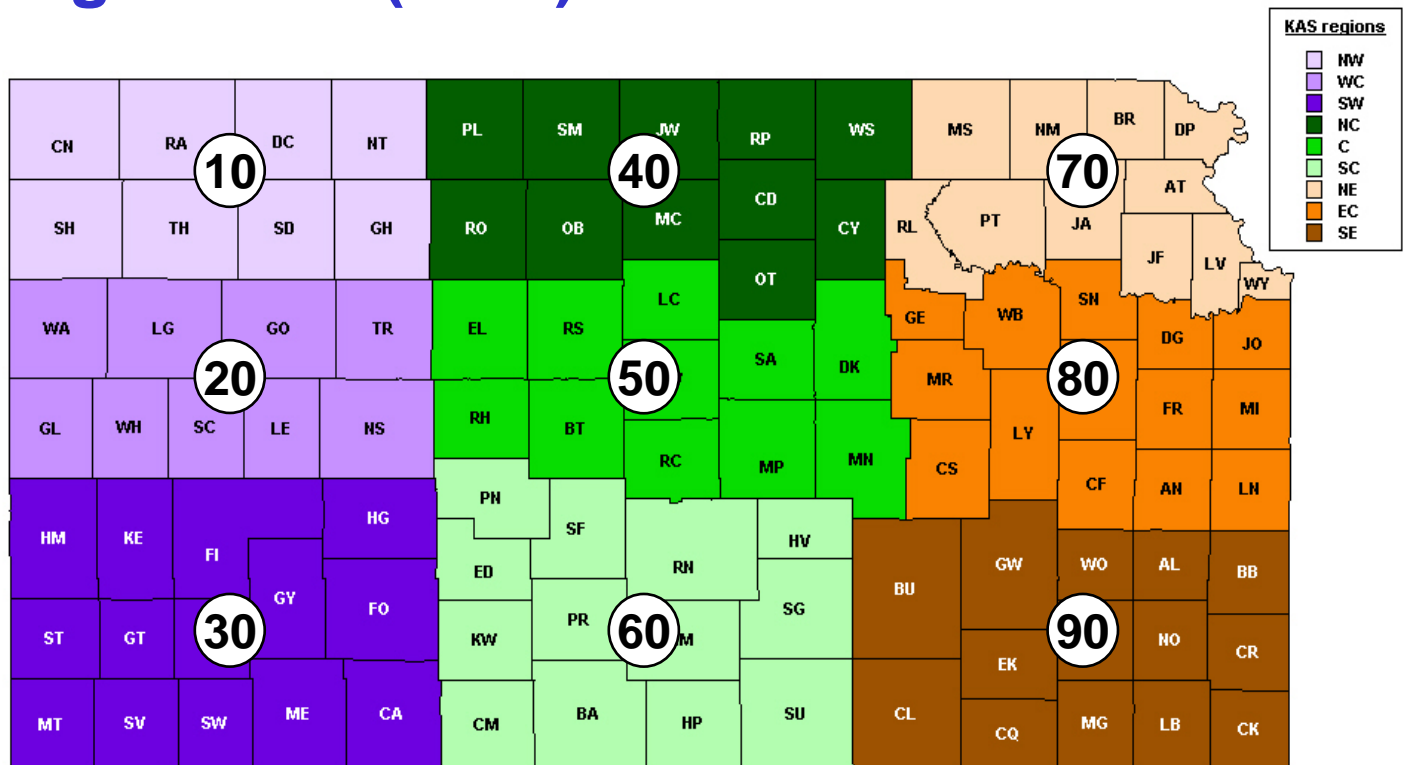


Market established rates...

- **Land Use Value Project of the KSU Ag Econ Dept annually conducts one of four surveys (irrigated, non-irrigated, pasture, input costs)**
- **Kansas Agricultural Statistics (KAS) annually surveys landowners and producers regarding land values and cash rents**
- **Local and regional surveys of leasing practices**
- **With surveys there is often a trade-off between statistical validity and level of aggregation**

Market going rate ...

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



KAS surveyed market rates ...

AGRICULTURAL LAND VALUES



Released: August 17, 2006

Kansas Farmland Values and Rents, 2006

Kansas' average value of all farmland and buildings for 2006 is estimated to be \$930 per acre. This compares with \$850 in 2005 and \$715 in 2004. Kansas' average value of all farmland and buildings increased by 9.4 percent from 2005 to 2006. Irrigated cropland values rose 5 percent, non-irrigated was up 10 percent, and

pasture land values increased 17 percent.

Rental rates for non-irrigated cropland increased by \$.50 per acre and irrigated cropland was up \$1.00 per acre. Pasture rents for 2006 rose \$.30 per acre to 13.70 per acre.

Kansas Farmland Values and Rents, 1995-2006 1/

Year	Cropland				Pasture and Rangeland		All Farmland and Buildings 2/		
	Value Per Acre		Rent Per Acre		Value Per Acre	Rent Per Acre	Value Per Acre	Total Value	
	Irrigated	Non-Irrigated	All Crop Land	Irrigated					Non-Irrigated
	Dollars								
1995	920	595	623	3/	35.50	343	11.70	535	25,466
1996	966	607	638	66.30	32.70	361	11.90	553	26,268
1997	990	615	649	69.00	34.50	365	11.60	565	26,838
1998	1,010	620	655	67.00	35.50	367	13.00	577	27,408
1999	1,020	625	660	66.00	35.00	370	13.30	600	28,500
2000	1,040	630	666	67.00	35.50	380	12.80	625	29,688
2001	1,060	635	673	72.00	36.00	390	12.60	645	30,509
2002	1,080	640	679	70.00	36.00	400	12.60	665	31,455
2003	1,080	645	684	68.00	36.00	410	12.60	685	32,332
2004	1,110	665	705	72.00	37.50	430	13.20	715	33,748
2005	1,240	810	849	73.00	38.50	530	13.40	850	40,120
2006	1,300	890	927	74.00	39.00	620	13.70	930	43,900

1/ Rental rates are for land only. 2/ Values per acre are for land and buildings. 3/ Insufficient data to publish.

The Land Values Survey—Background

The Agricultural Land Values Survey was conducted during May/June 2006. Survey respondents were asked to provide information on the value of the land they operate and the rental rates for any land they rented. Additional land value and rent data were collected in the June Agricultural Survey.

The Census provides the official base for estimates of all farmland values. However, the Census occurs once every five years and only estimates the value of all

agricultural land and buildings. The Land Values Survey and Agricultural Survey provide data to make annual estimates of both market values and rental rates for different categories of farmland.

The average values in this report encompass a wide range of soil types and pastures. These data are more appropriate for studying overall trends and should not be used to establish rental rates or market values.

Farm Management Guide

MF-1100

Kansas Land Prices and Cash Rental Rates

Department of Agricultural Economics — www.agmanager.info



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This Farm Management guide reports Kansas land prices and cash rents for 1987-2006. These data are useful to farm managers in determining cash rental rates, to farmland appraisers in calculating indexes for making time adjustments to land prices, and to landowners and investors who base expectations on historical price and return levels for farmland. The average prices in this guide encompass parcels of land that vary widely in productivity. Thus, these data are more appropriate for analyzing trends than for establishing market value or rental rates for specific tracts of farmland.

nonirrigated cropland, irrigated cropland, and pasture. This information is combined in two additional land groupings: all cropland and all land in farms. While these two groupings do not represent a particular type of land (e.g., nonirrigated cropland), they provide a broader classification of interest.

The land values reported also include the value of any buildings that may be on the land. The value of the buildings represents a small portion of the total value, on average, and thus this reporting method does not significantly affect the accuracy of land values reported.

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), Central (C), South Central (SC), Northeast (NE), East Central (EC), and Southeast (SE). Since 1976, Kansas Agricultural Statistics has collected price information on three types of land:

Kansas Land Prices

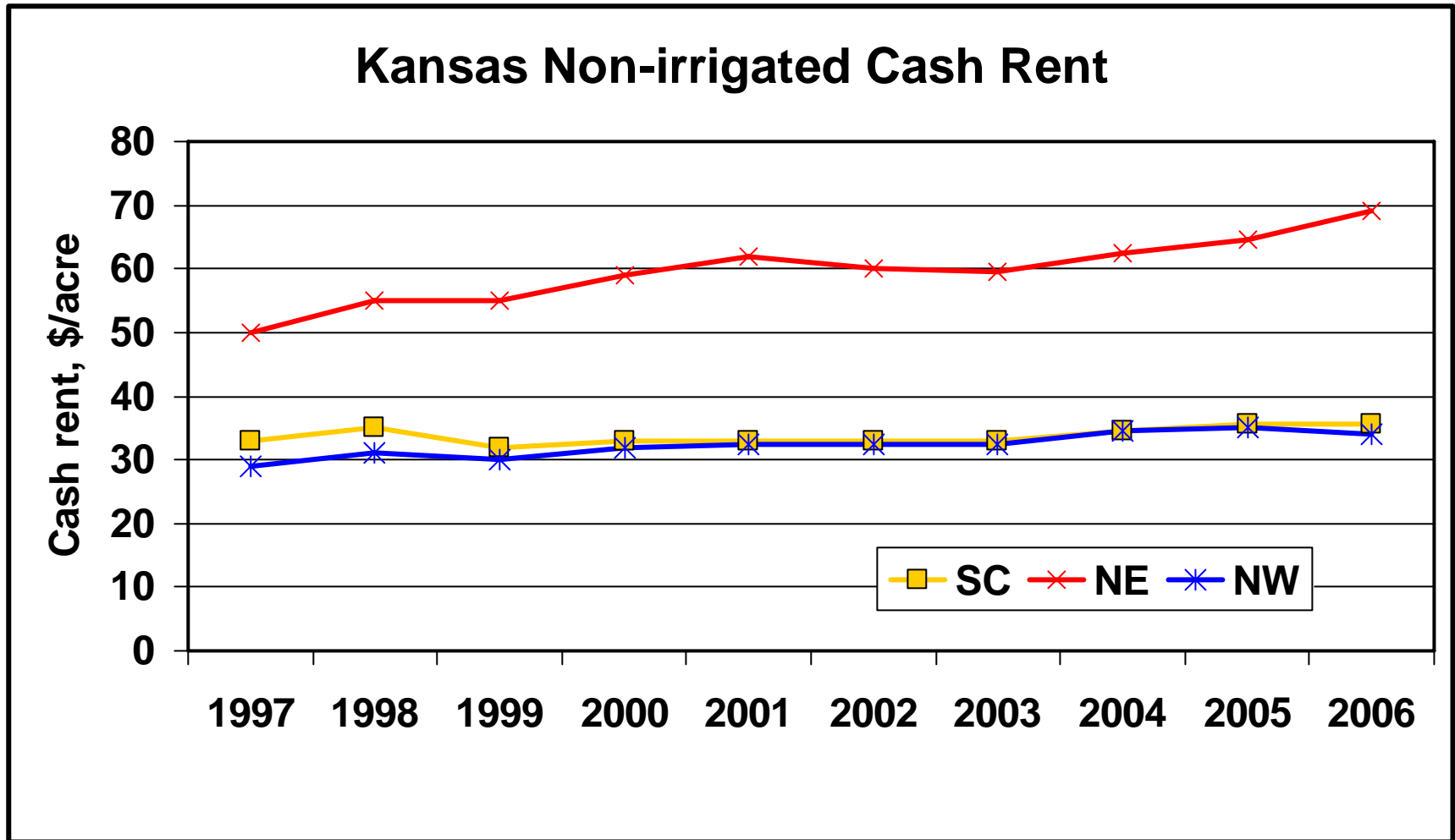
Tables 1 through 5 show average prices of land and buildings in each district and an average for the state for the most recent twenty years reported. Data are shown for each of the five land groupings: all land in farms, all cropland, nonirrigated cropland, irrigated cropland, and pasture. The annual data are based on February 1 for 1987-1989, and January 1 for 1990-2006.

Table 1. Price per acre of all land in farms and buildings, Kansas Agricultural Statistical Districts, 1987-2006.*

Year	NW	WC	SW	NC	C	SC	NE	EC	SE	State
1987 ¹	\$313	\$297	\$377	\$343	\$404	\$466	\$456	\$363	\$339	\$373
1988 ¹	338	328	421	390	446	513	485	396	373	413
1989	384	339	441	417	461	530	484	405	384	429
1990	395	361	440	408	486	556	527	425	400	450
1991	389	363	419	419	474	515	530	439	397	449
1992	378	366	418	465	462	490	534	482	394	460
1993	399	351	412	447	493	540	586	430	407	463
1994	435	386	453	521	488	561	628	487	449	503
1995	491	386	464	527	545	579	800	633	503	535
1996	488	399	469	526	521	554	811	813	548	553
1997	500	410	480	540	540	570	810	790	575	565
1998	490	410	490	550	560	590	830	800	590	577
1999	490	405	500	580	620	590	900	855	615	600
2000	530	435	525	605	610	640	920	850	650	625
2001	555	445	540	625	630	655	945	875	685	645
2002	550	460	550	640	660	685	990	920	690	665
2003	560	470	550	660	670	700	1,005	950	710	685
2004	580	490	590	690	690	725	1,045	985	750	715
2005	650	555	640	845	830	850	1,340	1,210	905	850
2006	660	590	660	900	850	975	1,625	1,350	1,010	930

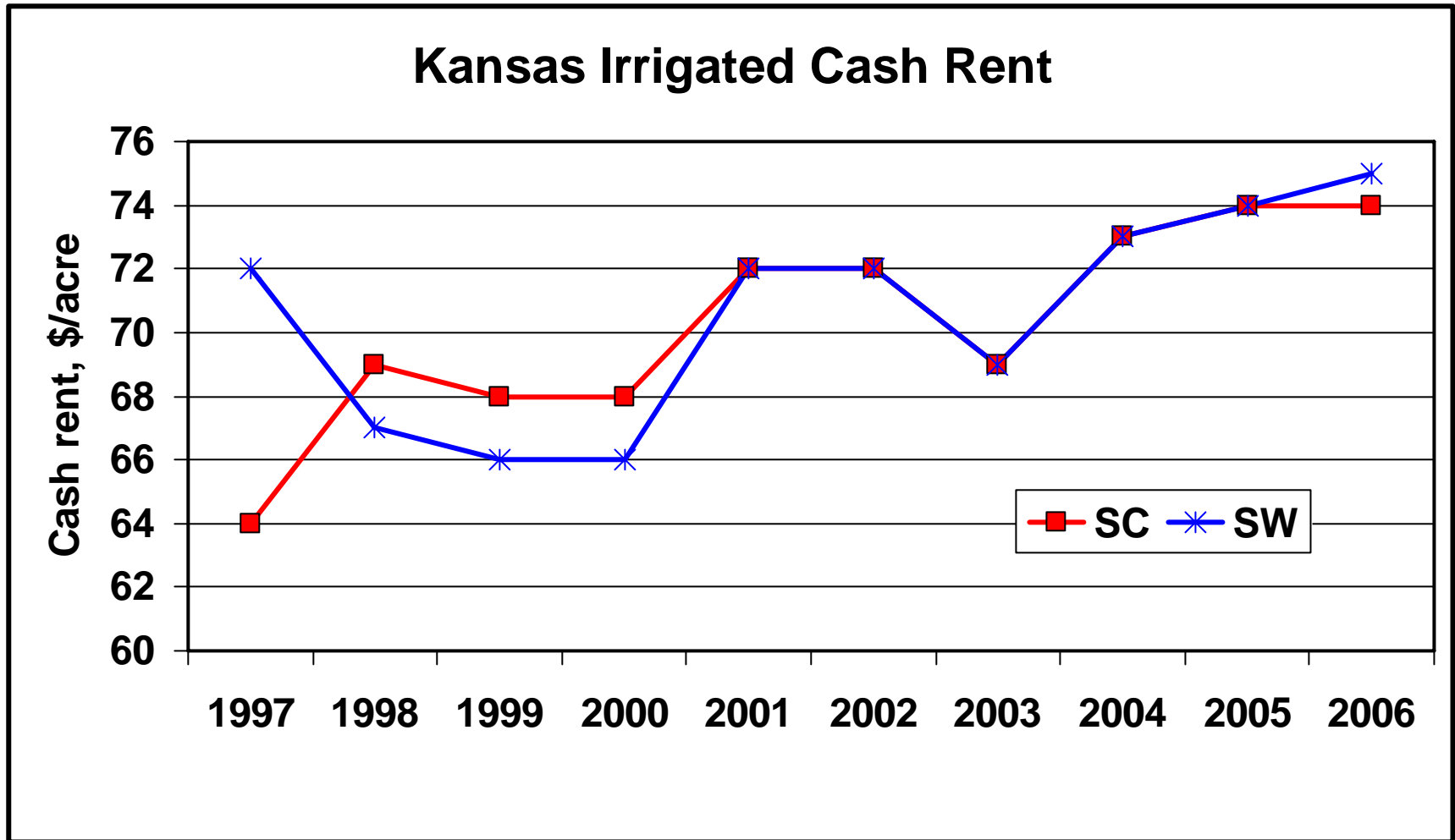
Land Economics 1 — Revised October 2006

Market going rate...



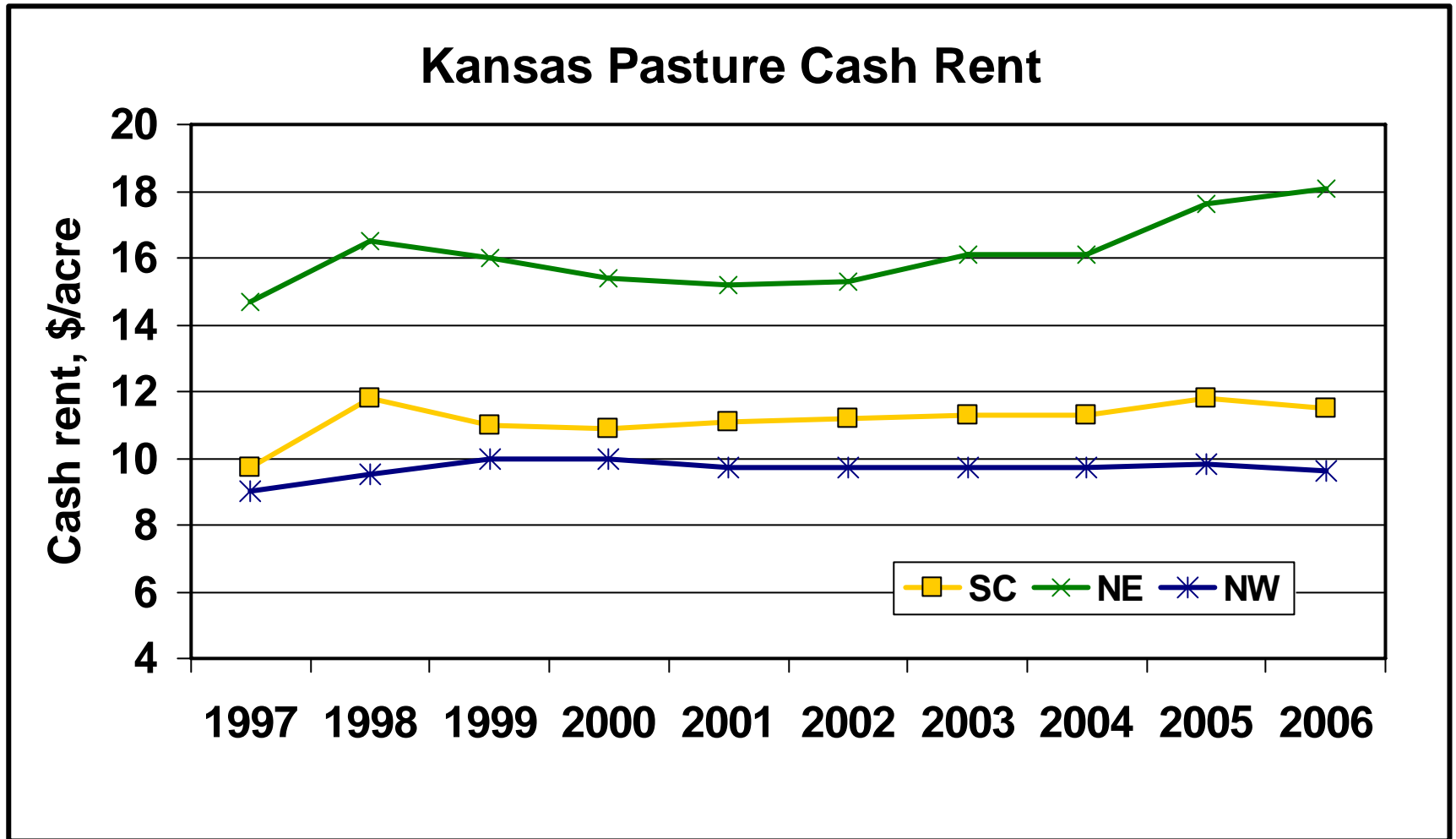
Source: Kansas Agricultural Statistics

Market going rate...



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Market going rate...

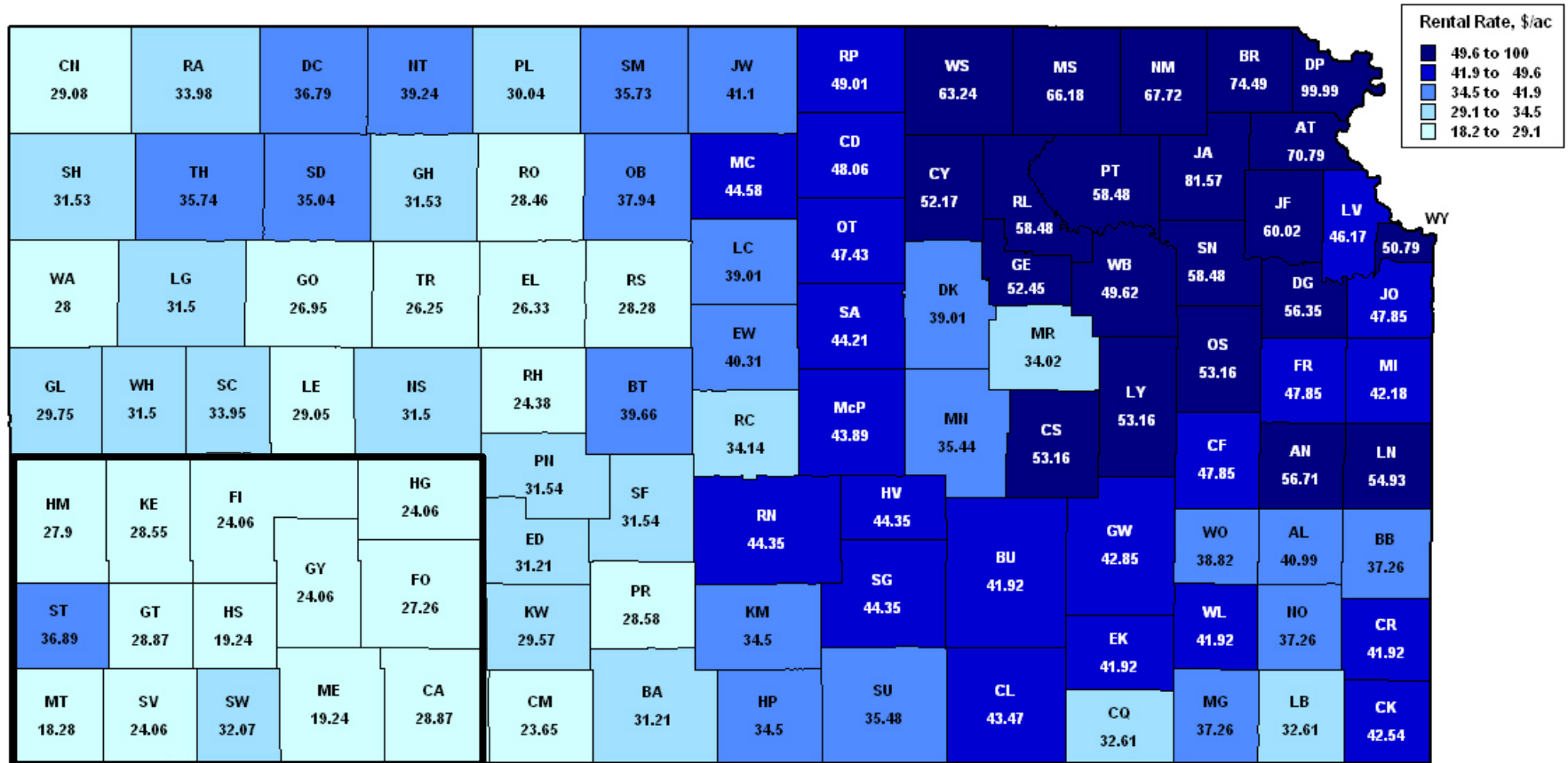


Source: Kansas Agricultural Statistics

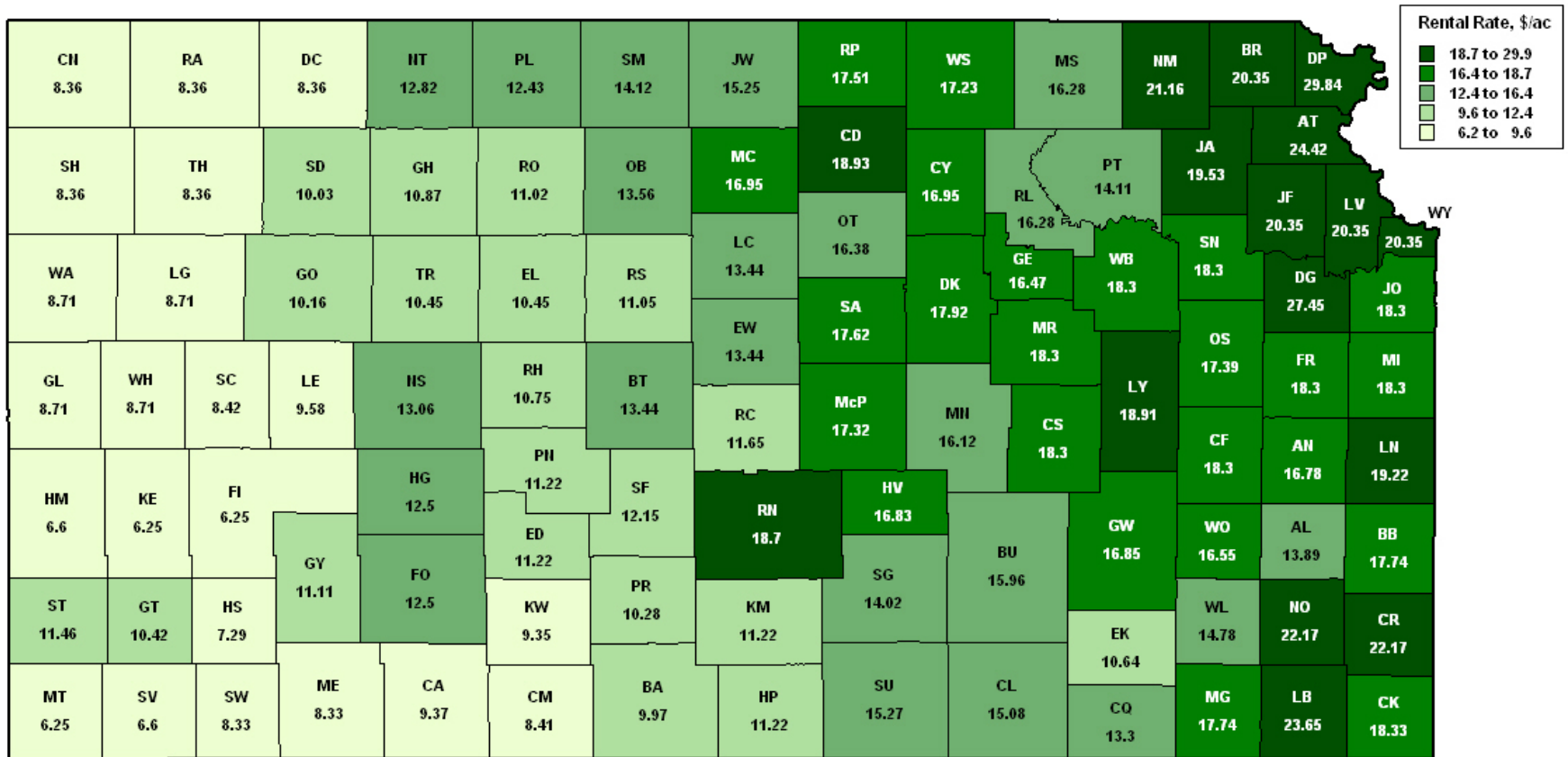
County-level cash rents ...

- **County-level cash rents were estimated for non-irrigated crop and pasture land based upon the KAS reported CRD values**
- **CRD values prorated to individual counties based on 3-year average of county-level rents from FSA and 2002 census acreage data**
- **Weighted average county-level cash rents are exactly equal to the KAS reported district value**
- **Similar procedure was done for land values**

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



Kansas county-level pasture cash rents ...



Based on KAS reported values for January 1, 2006

Problem:

The market equilibrium prices we observe (when they are available) often do not reflect individual situations.

That is, they reflect averages, but nobody is average...

... so what can we do to arrive at a price that reflects an equilibrium?



Way to find acceptable lease rates (crop shares and cash rents) ...

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.

A good crop share lease should follow five basic principles ...

- 1. Yield increasing inputs should be shared**
 - 2. Share arrangements should be adjusted as technology changes**
 - 3. Total returns divided in same proportion as resources contributed**
-
- 4. Compensation for unused long-term investments at termination**
 - 5. Good landlord/tenant communications**

Principle #1: Yield increasing inputs should be shared

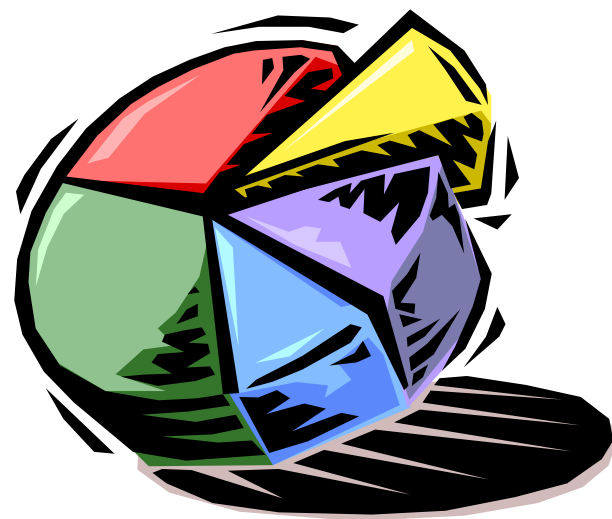
The reason it is recommended that yield increasing inputs should be shared is this provides the economic signal for the economic optimal amount of the input to be used.

Principle #3:

Returns divided in same proportion as resources contributed.

This requires annual contributions of both parties to be identified (budgeting type approach).

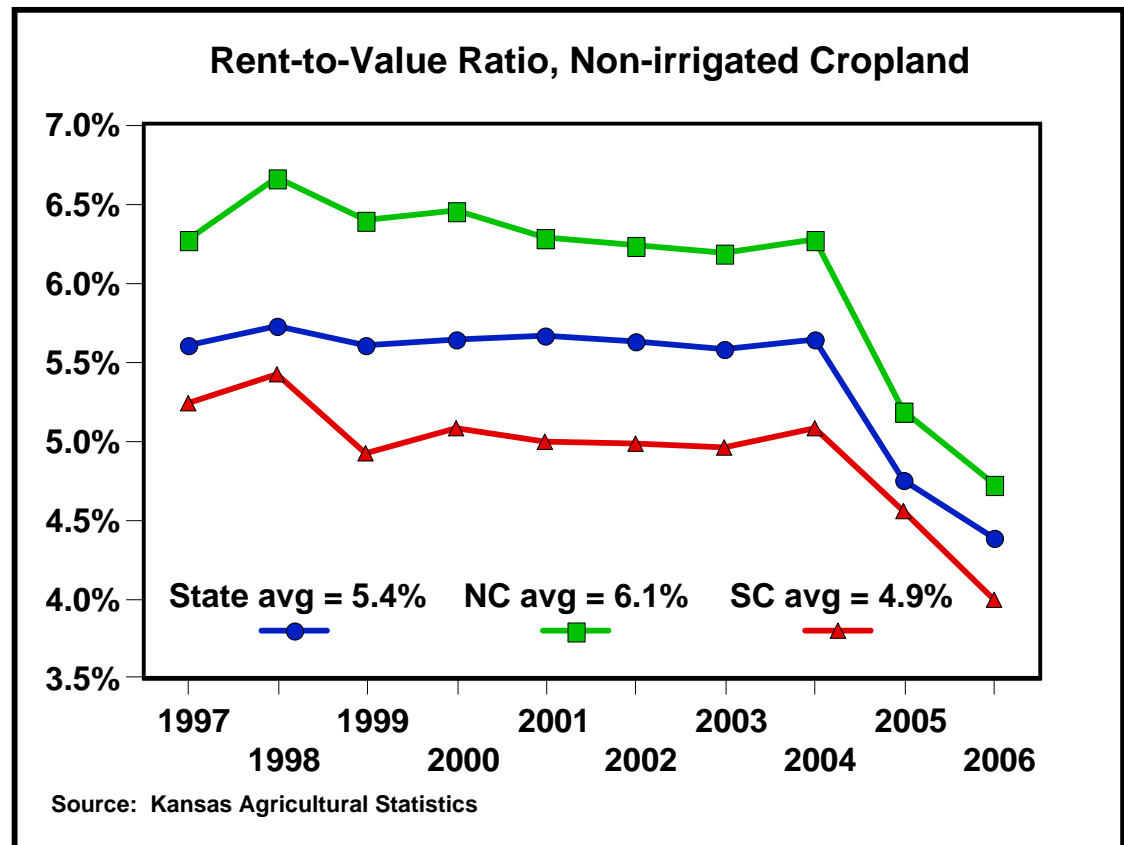
Valuing inputs can depend on whether the lease being developed is a one-year lease versus multiple-year lease.



Land contribution ...

The land contribution has typically been based on an “average market value” for the land along with an historical average return to land.

As cash leases become more common, the land contribution can be set equal to the cash rent.



Machinery contributions ...



Machinery contribution should be based on average costs. Two methods for estimating the machinery contribution:

- 1. Machinery investment approach - annual contribution is based on depreciation, interest, repairs, fuel and oil, and labor.**
- 2. Custom rates approach - annual contribution is based on reported custom rates and the typical operations.**



Crop production input contributions ...

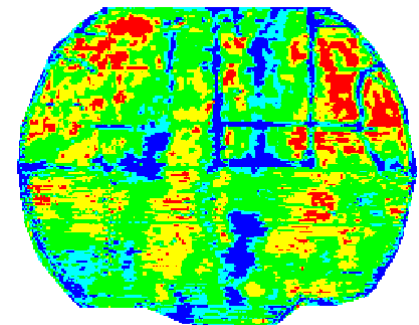
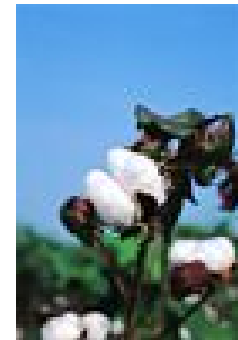
The value of contributions for input expenses such as seed, herbicides, insecticides, fertilizer, etc. are generally valued at current market prices and represent “typical” production practices.

What is “typical” today? While current prices might not be what we expect long-term, can we afford to ignore them with regard to leases?

Principle #2: Technology may affect share arrangements

Examples of technological change

- Reduced-/no-till
- New crops and/or rotations
- Center pivot irrigation
- Hybrid seed
- Bio-technology
- Precision agriculture (GPS)



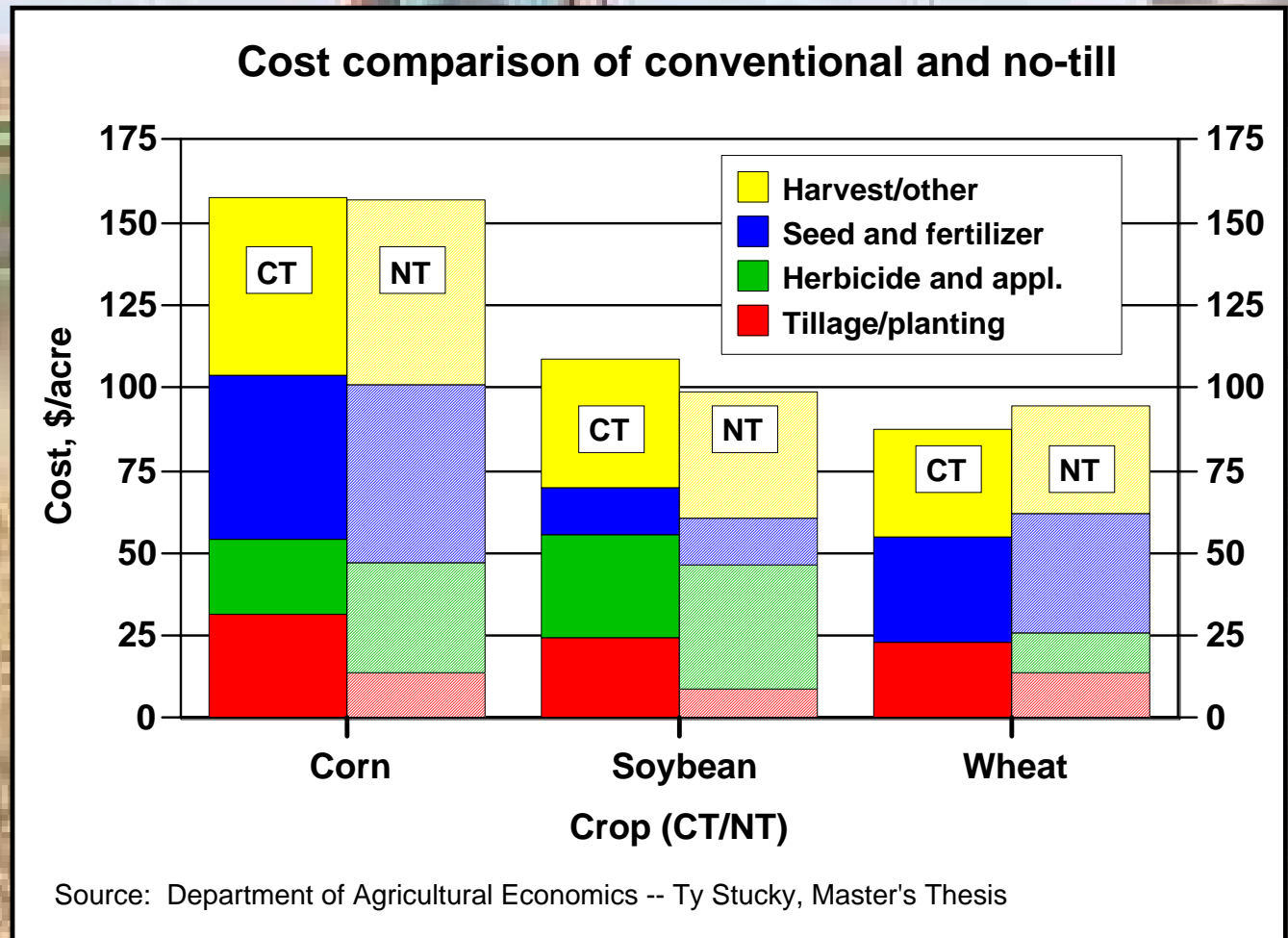
Adoption of new technologies ...

- ... tends to cause problems because traditional arrangements or rules-of-thumb are often not appropriate.**
- ... should not be a problem if we follow basic principles of a good lease.**
- ... if problems persist as to what is equitable, can lead to alternative leasing arrangements (e.g., cash lease).**

Lease examples of CT vs NT for NC Kansas

-- Corn, soybean, wheat rotation projected budgets

-- Average land values



Conventional (CT) vs. No-tillage (NT) Effect on Equitable Shares

(Rotation = 50% W, 25% C, 25% S)

Tillage system	<u>Farm #1</u>		<u>Farm #2</u>	
	CT	NT	CT	NT
Contribution	Contributor		Contributor	
Land	Landlord	Landlord	Landlord	Landlord
Machinery	Tenant	Tenant	Tenant	Tenant
Fertilizer/insect.	Shared	Shared	Shared	Shared
Herbicide	Tenant	Tenant	Shared	Shared
Herbicide appl.	Tenant	Tenant	Shared	Shared
Other	Tenant	Tenant	Tenant	Tenant
Contributions	32.5/67.5	33.1/66.9	36.3/63.7	40.6/59.4

If you were previously sharing herbicides ...

- **Rather than change the crop share splits, many producers/landowners continue to share “non-burndown” herbicides and the tenant pays 100% of the burndown herbicides.**
- **Is this equitable?**
- **Is there a problem with this arrangement?**

Conventional (CT) vs. No-tillage (NT) Effect on Equitable Shares

(Rotation = 50% W, 25% C, 25% S)

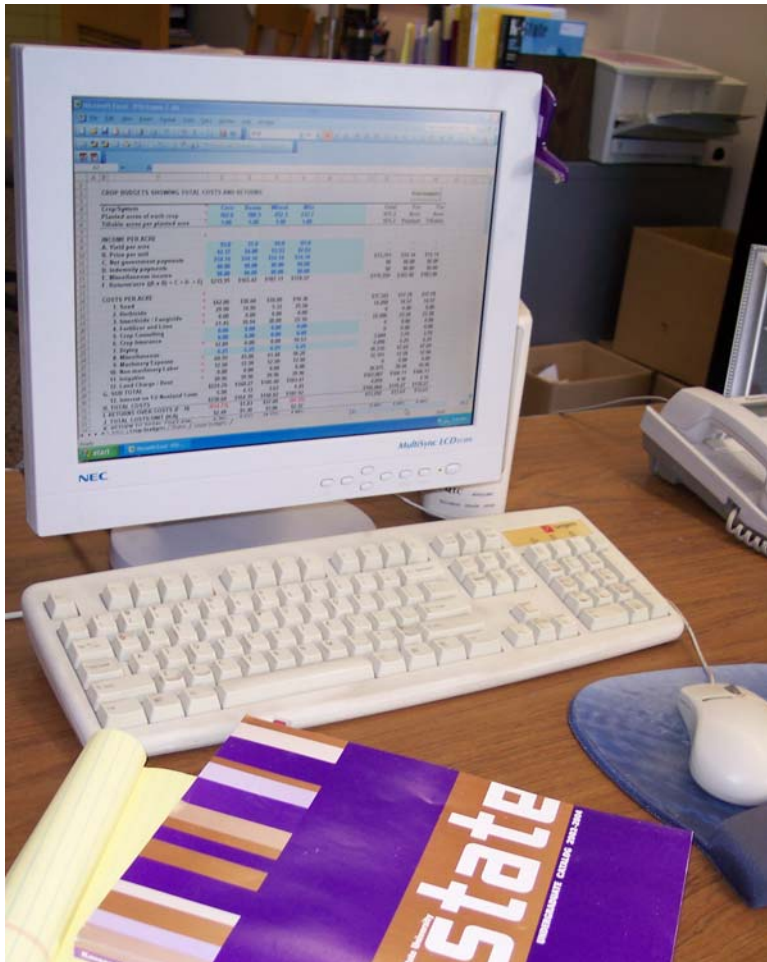
Tillage system	<u>Farm #1</u>		<u>Farm #2</u>	
	CT	NT	CT	NT
Contribution	Contributor		Contributor	
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Machinery	Tenant	Tenant	Tenant	Tenant
Fertilizer/insect.	Shared	Shared	Shared	Shared
Herbicide	Tenant	Tenant	Shared	Shared
Herbicide appl.	Tenant	Tenant	Shared	Shared
Burndown herbicide	Tenant	Tenant	Tenant	Tenant
Burndown appl.	Tenant	Tenant	Tenant	Tenant
Other	Tenant	Tenant	Tenant	Tenant
Contributions	32.5/67.5	33.1/66.9	36.3/63.7	36.7/63.3

If the goal is to have an “equitable” lease ...

... then crops should be divided in the same proportion that inputs are provided, regardless of whether or not herbicide costs are shared.

What is most important is communication.

Using “*KSU-Lease.xls*” to determine equitable crop share and cash leases ...



Information/data required:

1. Crop rotation/mix
2. Income information
3. Production inputs
4. Machinery costs
5. Land value
6. Irrigation equipment

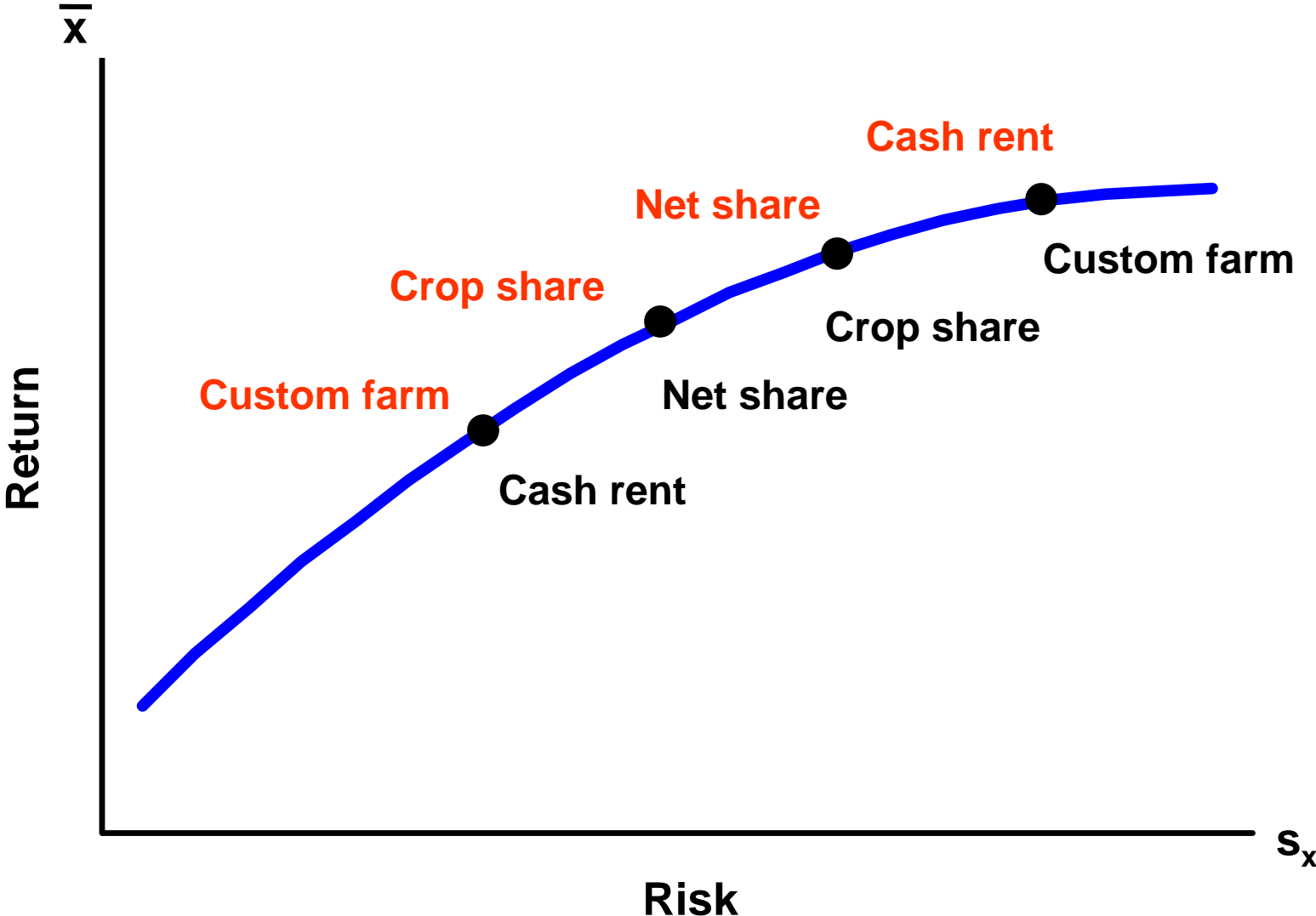
7. Contributor of input
8. Risk adjustment

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**

Landowner/**producer** risk-return tradeoff



Impact of high commodity and energy prices on leases

Impact of high costs on leases ...

KSU-Lease.xls is a tool that can be used to analyze the impact of current costs have on equitable crop share leases as well as their cash-rent equivalents

The impact high costs have on leases will depend on each specific situation due to how producers change (or not change) production practices in response to these high prices

→ producers should “run their own numbers”

Dryland example assumptions ...

- **67% of land cropped annually (33% wheat and 33% milo) with other 33% fallow**
- **Equitably share all fertilizer on both crops (tenant pays application costs)**
- **Equitably share herbicide costs on milo**
- **Initial analysis is based on fuel and fertilizer costs at 2000-04 averages**
- **Examined impact on equitable crop share and cash rent equivalent with increased costs and higher prices(all else held constant)**

Dryland example summary* ...

	Equitable share	Cash rent	Profit
Base scenario	65.0 / 35.0	\$27.06	\$-5.20
Increased fertilizer costs	65.0 / 35.0	\$25.26	\$-9.37
Increased fuel costs	66.7 / 33.3	\$25.16	\$-9.61
Increased fuel and fert costs	66.7 / 33.3	\$23.33	\$-13.76
Increased costs and crop prices	66.7 / 33.3	\$45.21	\$36.07

* Based on fertilizer, fuel and commodity price forecasts on 1/16/07

Other important considerations

- **Written agreements are encouraged**
- **By law, oral leases are one-year leases that automatically renew unless notice of termination is given**
- **Termination requirements**
 - **Proper notice must be given to tenant 30 days prior to March 1 for both crop and pasture land unless a written lease identifies another date for termination**
- ***Kansas Agricultural Lease Law***

Publication on Agricultural Lease Law available on www.agmanager.info



Kansas Agricultural Lease Law

Department of Ag Economics C-668

Ag Law

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Kansas Agricultural Lease Law

It is estimated that more than 50 percent of Kansas farmland and pastureland is rented. In some areas of the state, this figure is higher. Many producers cannot maintain a viable business without operating through lease arrangements. Leases are growing in prominence and will play an increasingly important role in production agriculture as fewer and fewer producers manage and operate our state's agricultural resources.

Different lease types have developed to meet the needs of the modern Kansas farmer and rancher. For example, some agribusinesses use standard cash leases involving a flat rental fee for the use of land. For other farm operations, a crop-share or crop-share cash lease is appropriate. Those involved in raising livestock may operate on either a pasture rental basis or a livestock share lease. Publications are available at your local K-State Research and Extension Office and online at www.agmanager.info/farmmgmt/land/lease that explain and provide examples of these lease arrangements.

It is important that both parties to a farm or ranch lease understand the details of their lease agreement and the laws that affect their lease. A lease is a contract and terms of the lease will be interpreted and enforced in light of contract law. Furthermore, if a farm or pasture lease is oral, not in writing, certain provisions in the Kansas Statutes automatically become a part of the lease.

Some leases are simple oral arrangements, while others are complex, lengthy written documents. An oral agreement may be legally enforceable, but it is

much more desirable to spell out the agreement's details in writing.

By definition, a lease is a contract for the exclusive use of land for a specific period. There are at least two parties to any lease: 1) the landowner who owns the land, also known as the lessor; and 2) the tenant who farms or operates the land, also known as the lessee. Certain rights and obligations binding both parties arise from the relationship. When land is leased, the lease is equivalent to a sale of the premises for the length of the lease. The tenant essentially becomes the owner for a time and has the responsibilities of one who is in possession of the land.

Parties to a lease are presumed to know of laws existing at the time the lease is entered. Provisions of statutes, ordinances, and regulations are read into and become a part of the contract by implication as though they were expressly written into the contract, *except where the parties have shown a contrary intention*. For example, if a written lease says the lease will terminate December 31 and Kansas law states oral leases on farm and pastureland will terminate March 1, the lease will terminate December 31 under the written agreement. When a court construes a lease agreement, it will consider the lease agreement, the negotiations, and communications between the parties to determine their intent. However, if the terms of a lease are clear, plain, and unambiguous, the intent of the parties will be determined solely by the contents of the lease. Further, when asked to interpret a lease, a court does not just consider individual provisions of the lease but considers and construes the lease in its entirety.

Lease agreements that cannot be performed within 1 year from the time the lease agreement is made must be in writing to be legally enforceable. For example, if a landowner and tenant orally agree to a 2-year lease of property, the agreement is unenforceable if either party decides to back out. Other legal arguments exist that can be raised that *might* require the parties to fulfill their agreement. However, to avoid the problem of an unenforceable contract, the parties are best advised to put the lease in writing.

If a farm or pastureland tenant decides to improve the leased land or sow perennial crops, the tenant should have a written, long-term lease in order to reap the future bounty of his or her labor. Otherwise,



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