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Prospects for Land Values and Leases

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Agricultural and Consumer Economics

2008 Illinois Farm Economics Summit

The Profitability of Illinois Agriculture: Looking Ahead in Extraordinary Times

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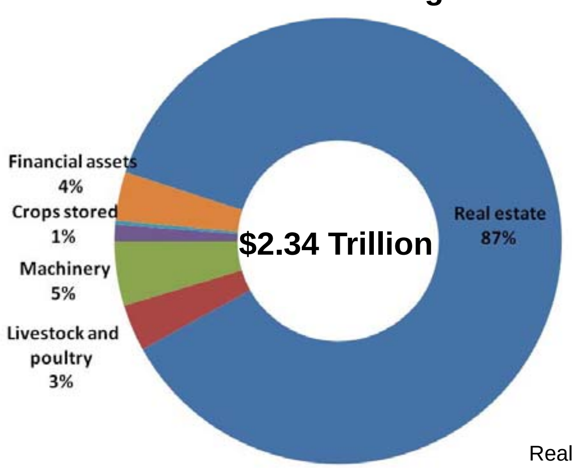
Total Assets Used in Farming: United States



	Trillion
Real Estate Assets	$2.042
Real Estate Debt	$0.111

Source: Economic Research Service

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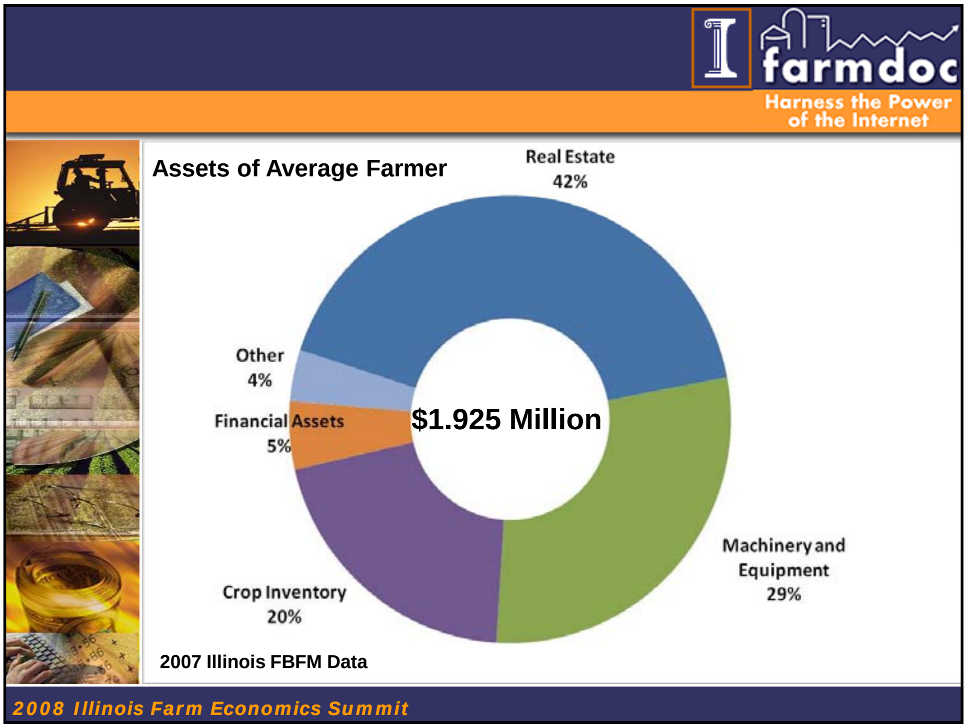
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Assets of Average Farmer
Real Estate 42%
Other 4%
Financial Assets 5%
$1.925 Million
Machinery and Equipment 29%
Crop Inventory 20%
2007 Illinois FBFM Data
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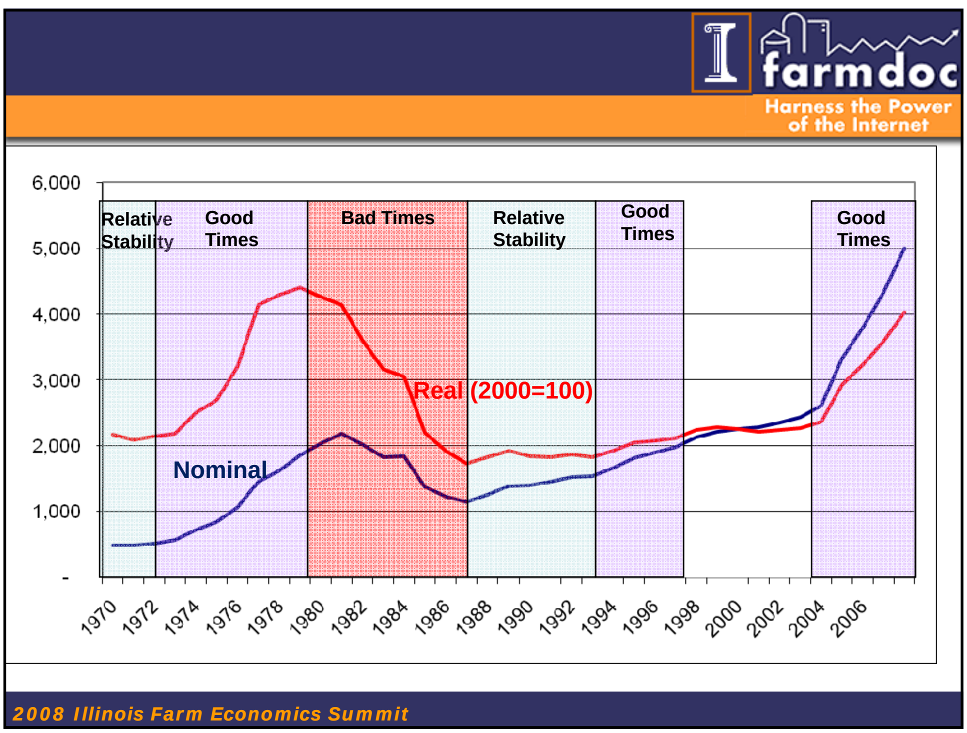
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6,000
5,000
4,000
3,000
2,000
1,000
-
Relative Stability
Good Times
Bad Times
Relative Stability
Good Times
Good Times
Real (2000=100)
Nominal
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
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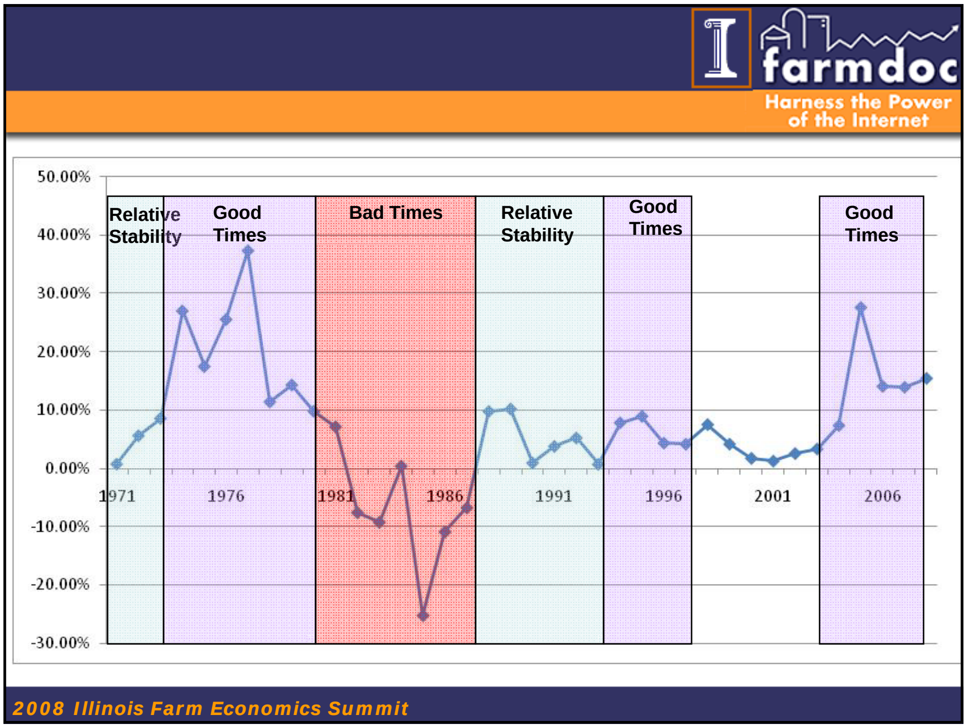
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50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
-10.00%
-20.00%
-30.00%
1971
1976
1981
1986
1991
1996
2001
2006
Relative Stability
Good Times
Bad Times
Relative Stability
Good Times
Good Times
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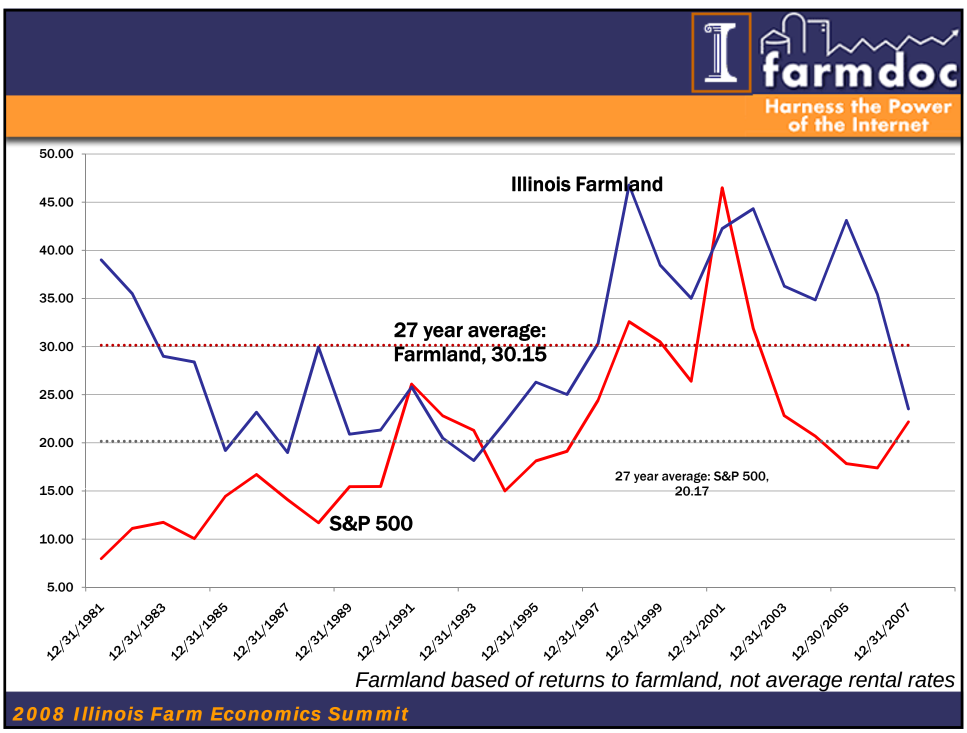
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Illinois Farmland
27 year average: Farmland, 30.15
27 year average: S&P 500, 20.17
S&P 500
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
12/31/1981
12/31/1983
12/31/1985
12/31/1987
12/31/1989
12/31/1991
12/31/1993
12/31/1995
12/31/1997
12/31/1999
12/31/2001
12/31/2003
12/30/2005
12/31/2007
Farmland based of returns to farmland, not average rental rates
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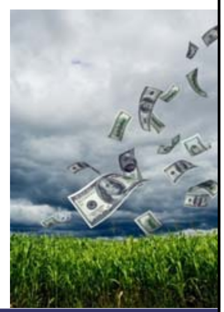
- Net returns to land
  - ➢Level
  - ➢Volatility
- Housing crisis
- Scope & economic situation of buyers
- Demand for recreational land
- Interest rates
- Capital gains tax rates



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	$4.50 corn price $10.00 soybean price	
	Low	High
Northern	$178	$253
Central-High	$232	$307
Central-Low	$155	$232
Southern	$117	$188

Assume a $50/acre return for operator
Interpreted as maximum available for cash rent
Low: Pre-meltdown costs, High: Post-meltdown costs

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	$3.50 corn price $10.00 soybean price	
	Low	High
Northern	$63	$138
Central-High	$110	$185
Central-Low	$45	$122
Southern	$18	$89

Assume a $50/acre return for operator

Interpreted as maximum available for cash rent

Low: Pre-meltdown costs, High: Post-meltdown costs

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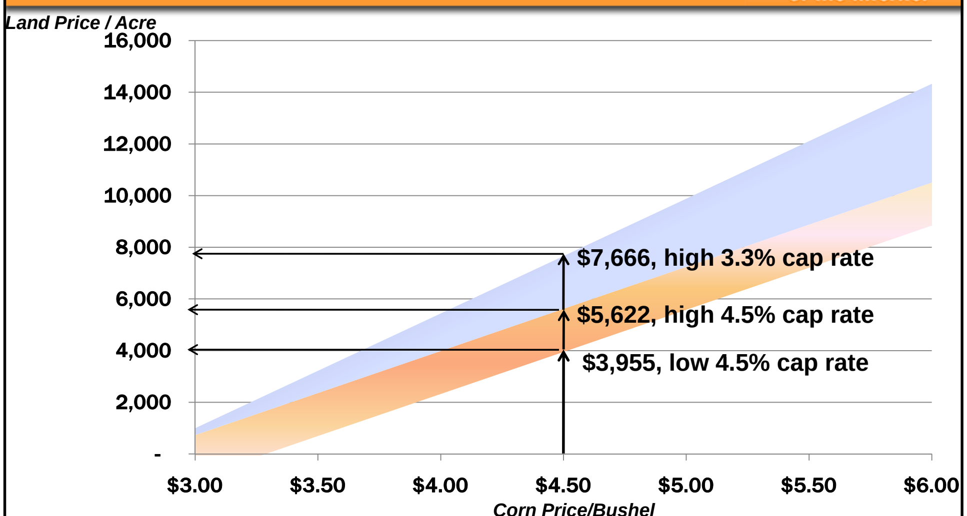

At $3.50 low: $696, high: $2,363 3.3% rate: $3,222

Corn price (soybean price = 2.22x)

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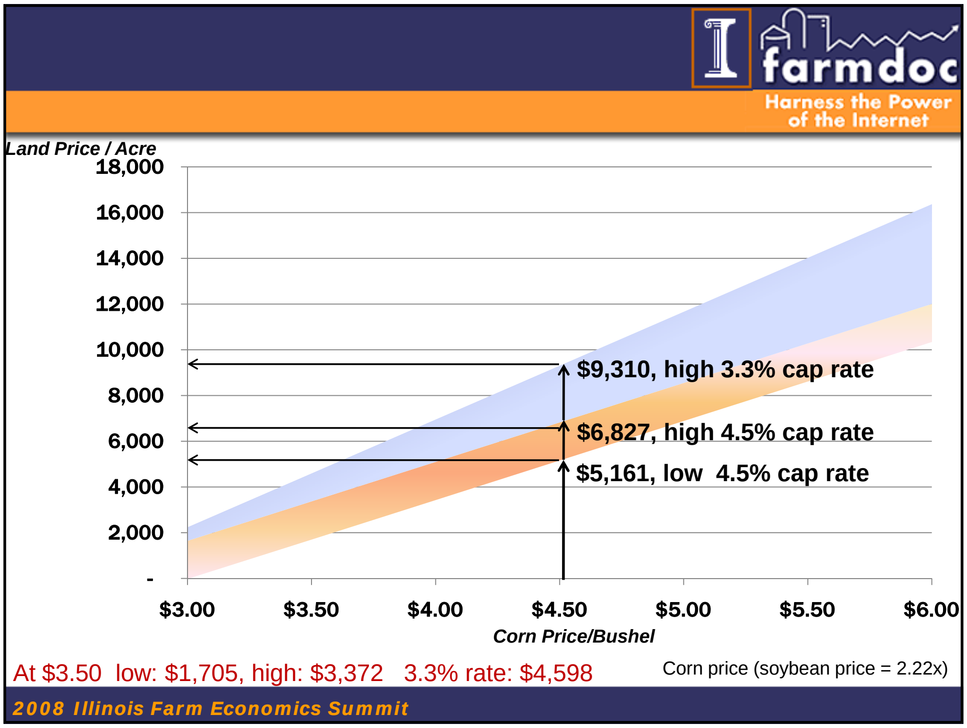
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Land Price / Acre
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
$9,310, high 3.3% cap rate
$6,827, high 4.5% cap rate
$5,161, low 4.5% cap rate
$3.00
$3.50
$4.00
$4.50
$5.00
$5.50
$6.00
Corn Price/Bushel
At $3.50 low: $1,705, high: $3,372 3.3% rate: $4,598
Corn price (soybean price = 2.22x)
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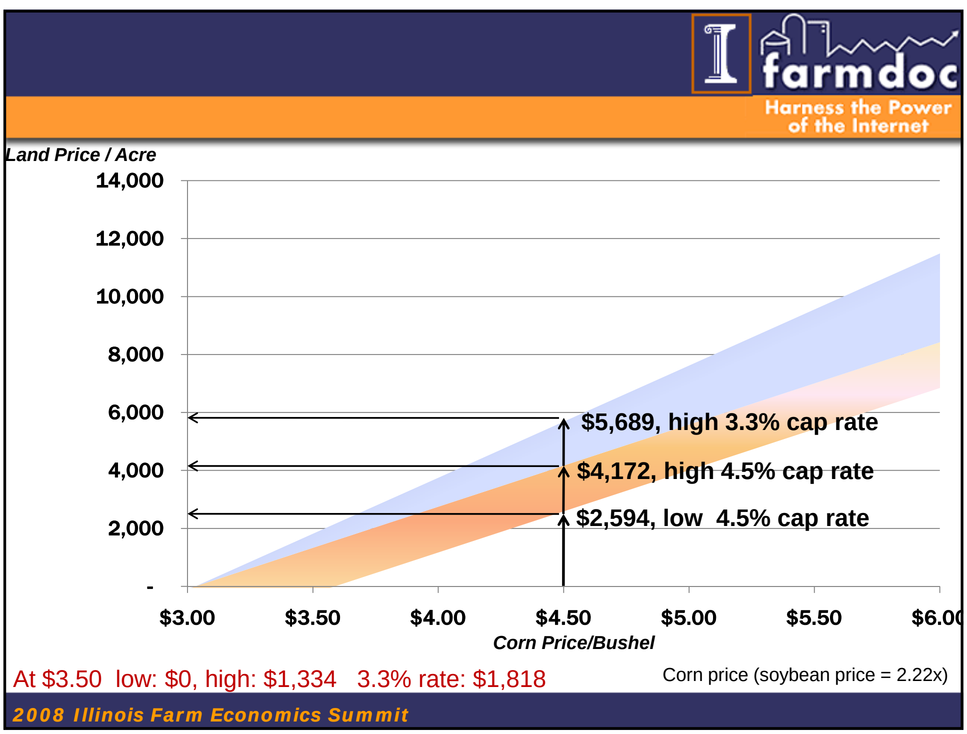
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Harness the Power of the Internet
Land Price / Acre
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
$5,689, high 3.3% cap rate
$4,172, high 4.5% cap rate
$2,594, low 4.5% cap rate
$3.00
$3.50
$4.00
$4.50
$5.00
$5.50
Corn Price/Bushel
At $3.50 low: $0, high: $1,334 3.3% rate: $1,818
Corn price (soybean price = 2.22x)
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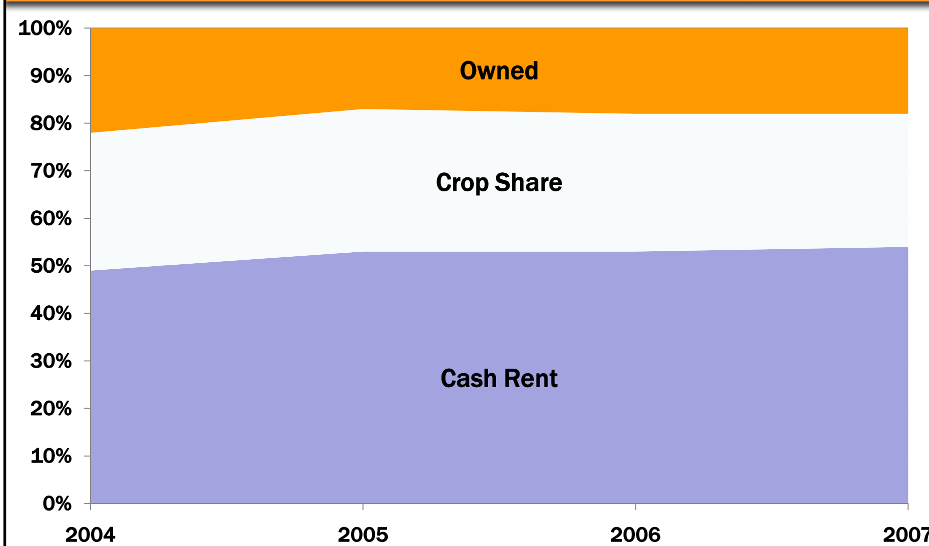

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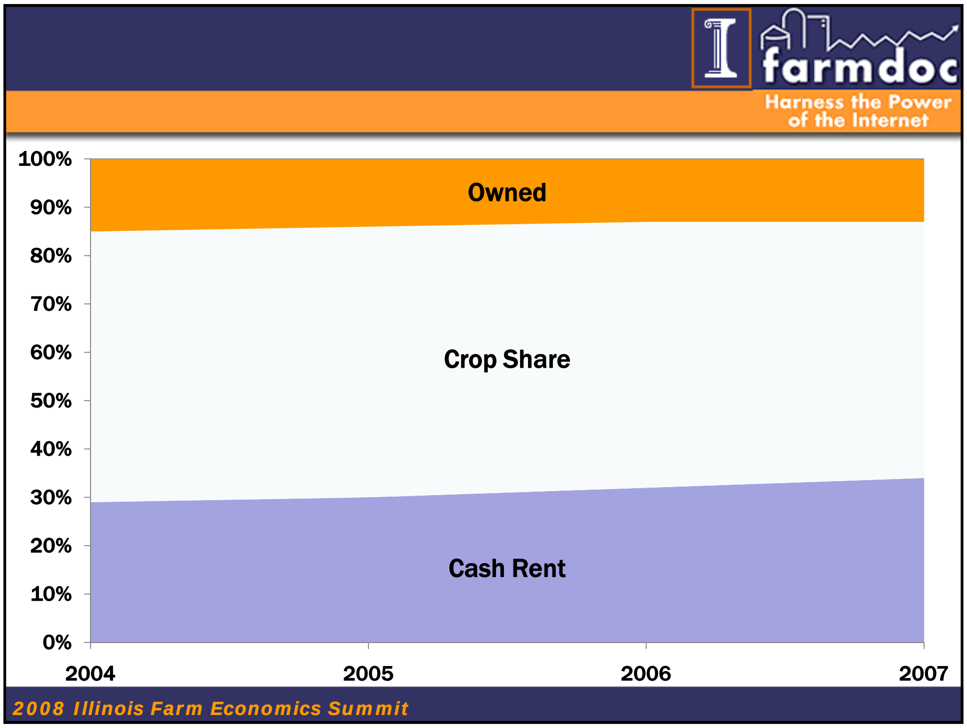
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100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Owned
Crop Share
Cash Rent
2004
2005
2006
2007
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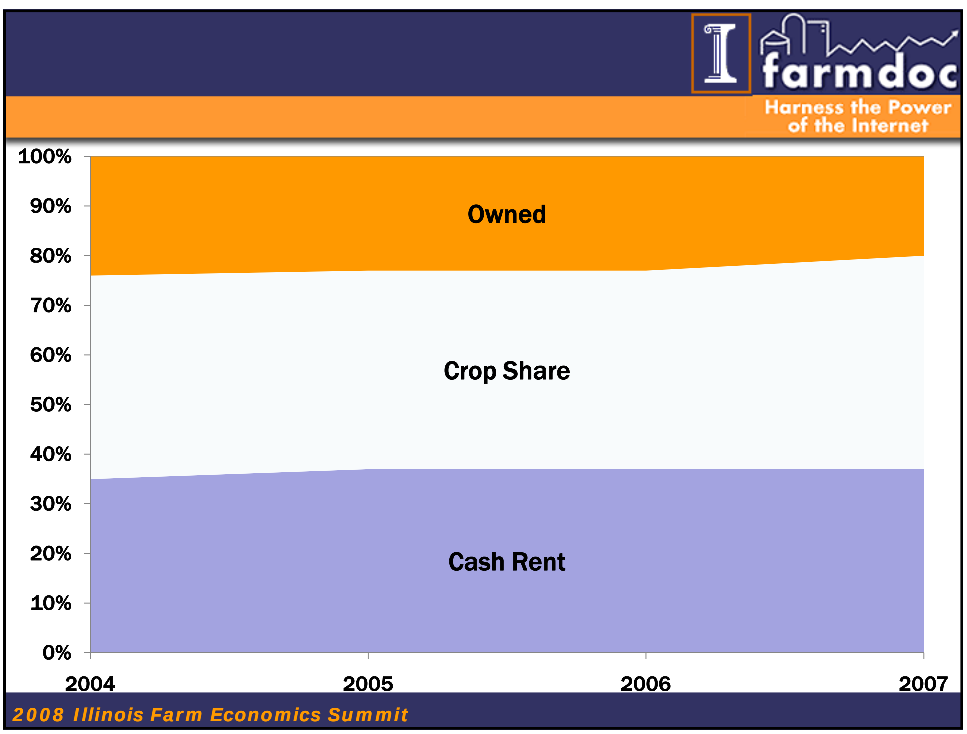
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Harness the Power of the Internet
100%
90%
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70%
60%
50%
40%
30%
20%
10%
0%
Owned
Crop Share
Cash Rent
2004
2005
2006
2007
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- Moderate movement towards cash leases
- Adjustments tend to favor land owner
- Time lags
- Average cash rents do not tend to decrease
- More interest in variable cash rental arrangements
- Some custom farming still part of mix

Per Acre Cash Rents for Top 1/3, Mid 1/3 and Low 1/3 Cash Rent Leases by Land Quality, 2008

	Land Quality			
Lease Type	Excellent	Good	Average	Fair
High 1/3	$295	$258	$201	$155
Mid 1/3	$241	$207	$172	$138
Low 1/3	$200	$173	$148	$120

Source: Illinois Society of Professional Farm Managers and Rural Appraisers, March 2008

Comments from Mid-Year (August, 2008) Land Value and Leasing Survey…

- *$43 per acre increase in cash rents from 2008 to 2009*
- *Overall, cash rents in 2008 averaged $238 on professionally managed farmland*
- *The average cash rent is expected to increase to $281 in 2009.*
- *Cash rent will vary with land productivity*

Why more interest now in variable cash rent leases?

- Use of cash rent leases in general are increasing.
- Increase in farm profitability (short term?), pressure to raise cash rents.
- Currently, more variability in corn and soybean prices, uncertainty about future price directions.
- Higher input costs result in potential for larger losses if drop in prices and/or yields.

Source: Schnitkey and Lattz, farmdoc FEFO 08-17

$$\text{Cash rent} = \text{base rent} \times \left[\frac{\text{actual yield} \times \text{actual price}}{\text{base yield x base price}} \right]$$

- **Base rent plus bonus payment, bonus payment based on yield, price or both.**
- **Cash rent is based on $ per bushel harvested.**
- **Fixed percentage of gross revenue.**

Source: Schnitkey and Lattz, farmdoc FEFO 08-17

$$\$171 \text{ Cash rent} = \$185 \times \left[\frac{\text{200 bu actual yield x \$3.50 actual price}}{\text{180 bu base yield x \$4.20 base price}} \right]$$

Example assumptions

- **Base rent is $185 / acre**
- **Base is set at 180 bu/acre and $4.20 corn price**
- **Actual yields: 200 bu and corn price of $3.50**

Source: Schnitkey and Lattz, farmdoc FEFO 08-17

- Maximum and minimum levels
- How to determine price?
- Yields determined: farm vs. county
- FSA payments

- Downward pressure on land values
- Landowner/tenant: communication a key
- Operator may want to be proactive and consider taking the lead in proposing changes to farm leasing terms.
- Farm operators are assuming a higher level of risk

- Try to avoid long term agreements in volatile economic conditions unless returns and costs are locked in.
- If fixed cash rent arrangement, may want to consider flexible cash rent arrangement or crop share lease.
- If fixed cash rent arrangement, may want to delay setting rent until more reasonable expectations for corn and soybean prices can be made.

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