



Prospects for Crop Production Costs

Gary Schnitkey
University of Illinois
schnitke@illinois.edu



2008 Illinois Farm Economics Summit
The Profitability of Illinois Agriculture: Looking Ahead in Extraordinary Times

Outline



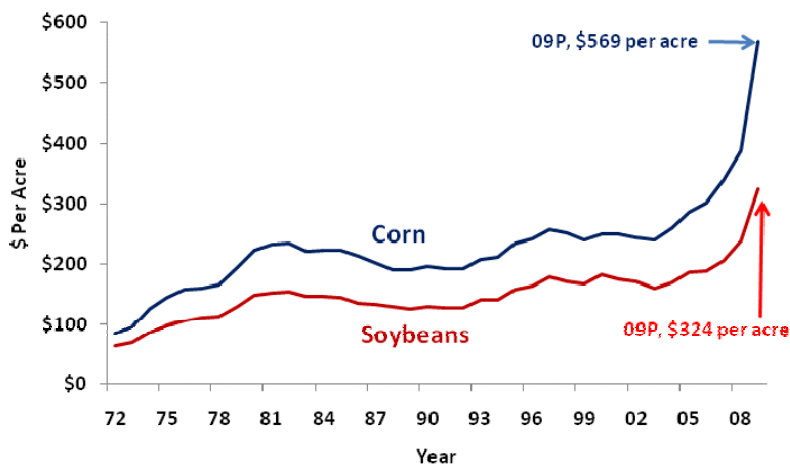
- Projected 2009 costs – pre “financial meltdown” (middle September)
- Projected 2009 costs – post “financial meltdown”
- Break-even prices, corn-minus-soybean returns
- Cash rents

Non-land cost for 2009



- All costs, except those associated with farmland.
- Pre meltdown prices
 - \$1,000 per ton anhydrous ammonia
 - \$1,000 per ton DAP
 - \$900 per ton potash
 - \$275 per unit on triple stack corn
 - \$200 per unit of refugee corn

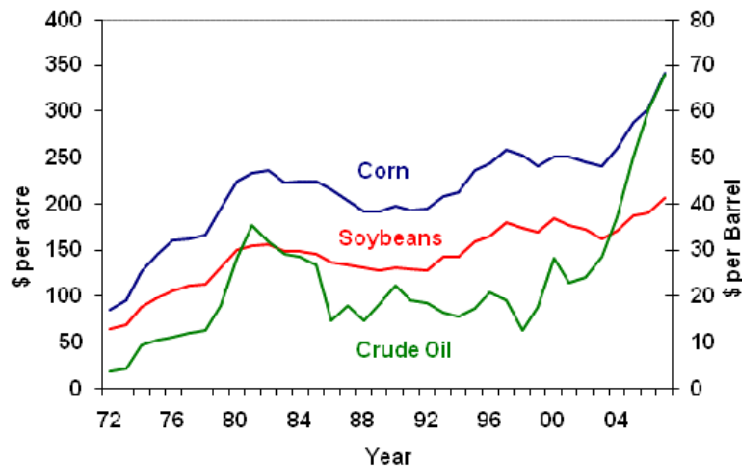
Corn and Soybean Non-Land Costs, Central Illinois, High Prod. Farmland, 1972 – 2009P



2009 Non-land Costs by Region (per acre)

| | Corn | Soybeans |
|----------------------------|-------|----------|
| Northern | \$579 | \$331 |
| Central, High-productivity | \$568 | \$324 |
| Central, Low-productivity | \$577 | \$328 |
| Southern | \$555 | \$303 |

Not much difference in per acre costs across regions or productivity levels.



Per Acre Change in Costs,
2008 to 2009P



| Item | Corn | Soybeans |
|----------------|--------------|-------------|
| Fertilizer | \$97 | \$53 |
| Seed | 48 | 13 |
| Power * | 12 | 9 |
| Crop insurance | 7 | 4 |
| Interest | 4 | 3 |
| Other | <u>13</u> | <u>4</u> |
| Total | \$181 | \$85 |

* Includes machinery repairs, depreciation, hire, and fuel.

2008 Illinois Farm Economics Summit



Post-Meltdown



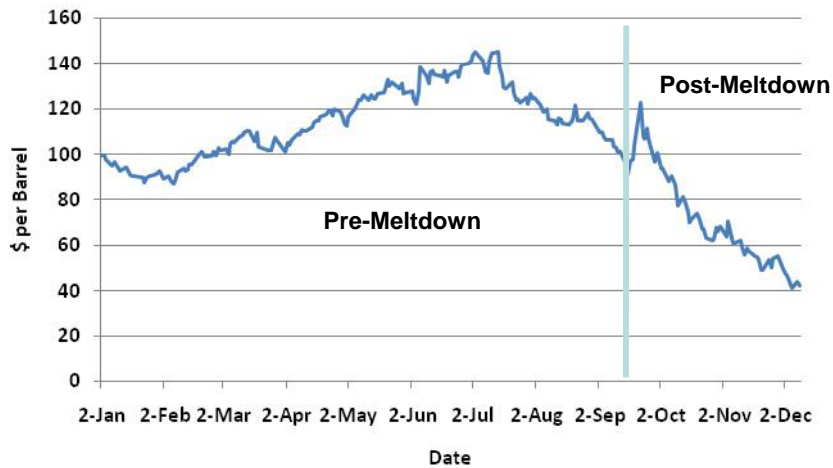
2008 Illinois Farm Economics Summit
The Profitability of Illinois Agriculture: Looking Ahead in Extraordinary Times

Crude Oil Prices

(Spot Price, Cushing, OK)



Harness the Power of the Internet



2008 Illinois Farm Economics Summit

9

Wholesale Prices



Harness the Power of the Internet

| Commodity | September 2008 | November 2008 |
|---|----------------|---------------|
| Crude Oil, Cash (\$ per barrel, OK) | About \$100 | About \$57 |
| Anhydrous Ammonia (\$ per ton, Gulf) | Over \$800 | About \$350 |
| DAP (\$ per ton, Gulf) | Over \$1,000 | About \$550 |

Above fertilizer prices are wholesale (fertecon.com), as of yet not seen much price decline at retail level.

Above prices will put downward pressure on farmer-paid prices. **If prices come down fast, input suppliers may face financial difficulties.**

2008 Illinois Farm Economics Summit

10

Seed Costs



Per Acre Seed Costs, Projected 2008 and 2009

| | 2008 | 2009 |
|----------|------|-------|
| Corn | \$61 | \$110 |
| Soybeans | \$43 | \$53 |

- **USDA projects 90 million planted acres in 2009**
 - 4 million more acres in 2008
 - In last 30 years, only 2007 had more corn acres (94 million)
- **Difficult to get 90 million acres in 2007 without return changes**

Non-land Costs



| | Pre-Meltdown | Post-meltdown |
|---|--------------|---------------|
| Anhydrous price (per ton) | \$1,000 | \$600 |
| DAP price (per ton) | \$1,000 | \$800 |
| Potash price (per ton) | \$900 | \$600 |
| Triple stack price (per unit) | \$275 | \$210 |
| Refugee price (per unit) | \$200 | \$180 |
| Central Illinois Non-land Costs: | | |
| Corn (per acre) | \$569 | \$470 |
| Soybeans (per acre) | \$324 | \$296 |

Aggressive cost reductions compared to what is currently observed.

Break-even Prices - Corn



Harness the Power
of the Internet

Break-even Corn Prices by Region, Pre and Post-Meltdown

| | Cash Rent | Expected Yield | Pre-Meltdown | Post-Meltdown |
|----------------|-----------|----------------|--------------|---------------|
| Northern | \$180 | 180 | \$4.22 | \$3.67 |
| Central - High | \$200 | 191 | \$4.02 | \$3.50 |
| Central - Low | \$160 | 171 | \$4.31 | \$3.73 |
| Southern | \$105 | 151 | \$4.37 | \$3.71 |

Break-even Prices - Soybeans



Harness the Power
of the Internet

Break-even Soybean Prices by Region, Pre and Post Meltdown

| | Cash Rent | Expected Yield | Pre-Meltdown | Post-Meltdown |
|----------------|-----------|----------------|--------------|---------------|
| Northern | \$180 | 51 | \$10.02 | \$9.47 |
| Central - High | \$200 | 54 | \$9.74 | \$9.22 |
| Central - Low | \$160 | 50 | \$9.76 | \$9.20 |
| Southern | \$105 | 47 | \$8.89 | \$8.29 |

- **Corn-minus-soybean returns**
= corn returns – soybean returns
positive number corn is more profitable
than soybean

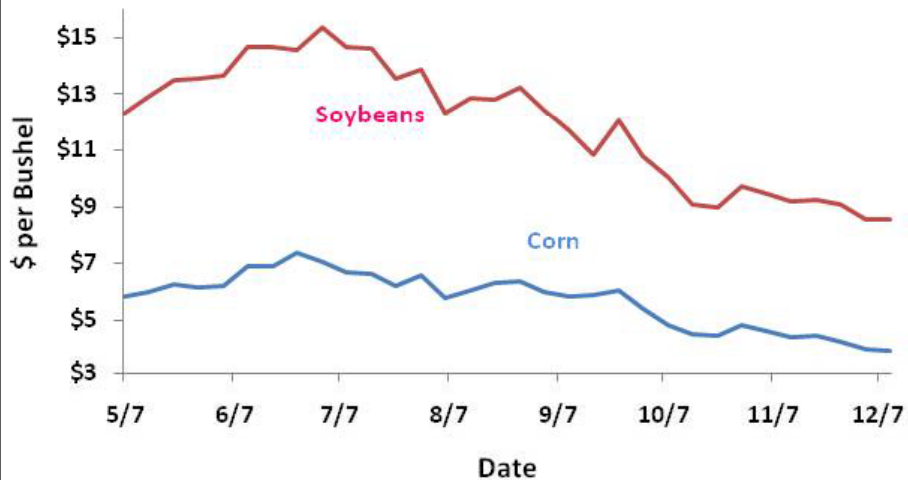
Per Acre Corn-Minus-Soybean Returns

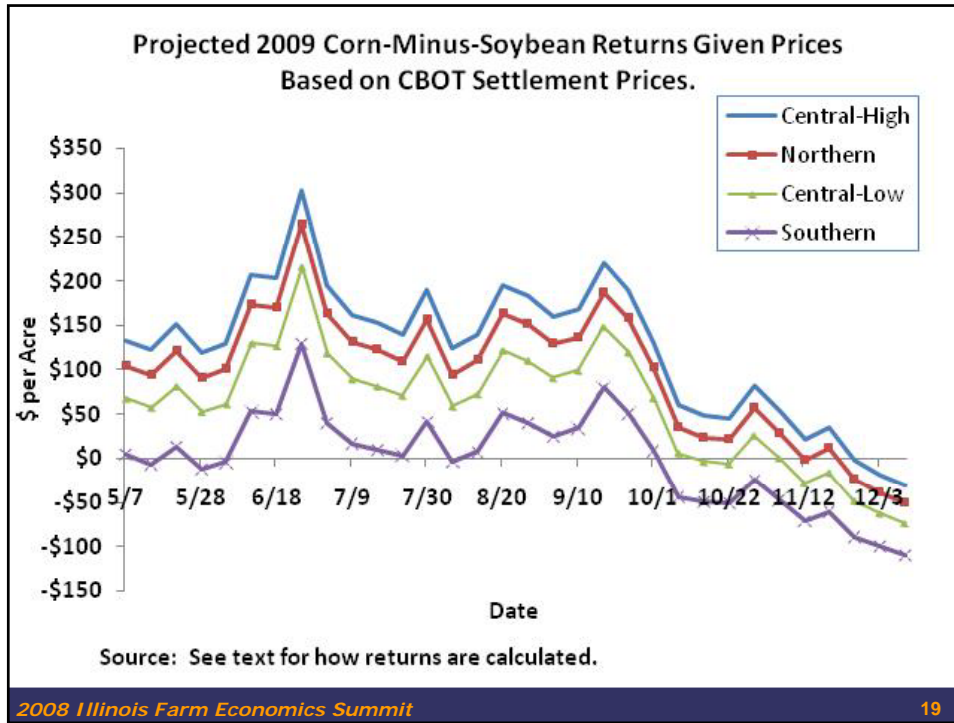
| | Period of Average | |
|---------------------|-------------------|-------------|
| | 2000-2007 | 2004-2007 |
| Northern | \$44 | \$60 |
| Central-High | \$42 | \$60 |
| Central-Low | \$23 | \$50 |
| Southern | \$43 | \$32 |

- Use pre-meltdown costs

- Project each Wednesday using CBOT futures prices
 - Dec 2009 corn contract
 - Nov 2009 soybean contract
 - Subtract \$.50 basis

Chicago Board of Trade Settlement Prices for the Dec. 2009 Corn and 2009 Nov. Soybean Contracts.





Dec 10, Projected Corn-Minus-Soybean Returns

Projected Corn-Minus-Soybean Return By Region, Dec 10 Futures Prices

| | Pre-Meltdown Costs | Post-Meltdown Costs |
|---------------------|--------------------|---------------------|
| Northern | -\$50 | \$31 |
| Central-High | -\$31 | \$50 |
| Central-Low | -\$73 | \$8 |
| Southern | -\$110 | -\$29 |

Still below the 2004-2007 averages when corn acres increase.

Much of the corn-belt outside of Illinois has central-low and southern Illinois yield and cost structure.

2008 Illinois Farm Economics Summit

20

Cash Rents



Operator and Land Returns, Per Acre

| | \$4.50 corn price \$10.00 soybean price | \$3.50 corn price \$9.00 soybean price |
|--------------|--|---|
| Northern | \$303 | \$185 |
| Central-High | \$358 | \$233 |
| Central-Low | \$282 | \$169 |
| Southern | \$238 | \$137 |

Operator and land return is amount remaining to pay farmland and provide farmer a return

Above are post meltdown costs.

Summary



- Will see costs declines, timing is the issue.
- Question: How much corn will we plant
- Will cash rents come down?