



Illinois Farm Income Outlook

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Objectives

- Evaluate the financial condition of Illinois grain farms.
- Review the economics of crop rotations.

Approach

- Use a sample of Illinois FBFM grain farms with historical financial records.
- Use projections of NASS yields and prices to determine revenue for each farm.
- Adjust historical expenses and financial data for each farm.
- Project net farm income and net worth change for each farm in the sample.

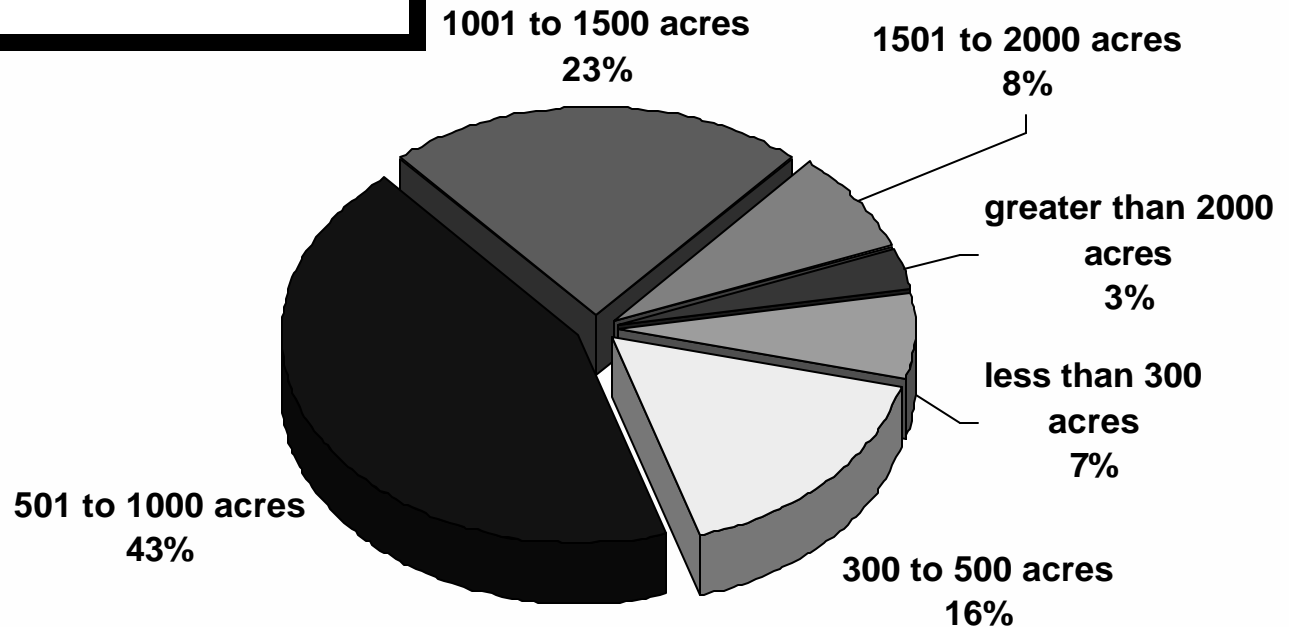
Sample Farms by Size

885 grain farms

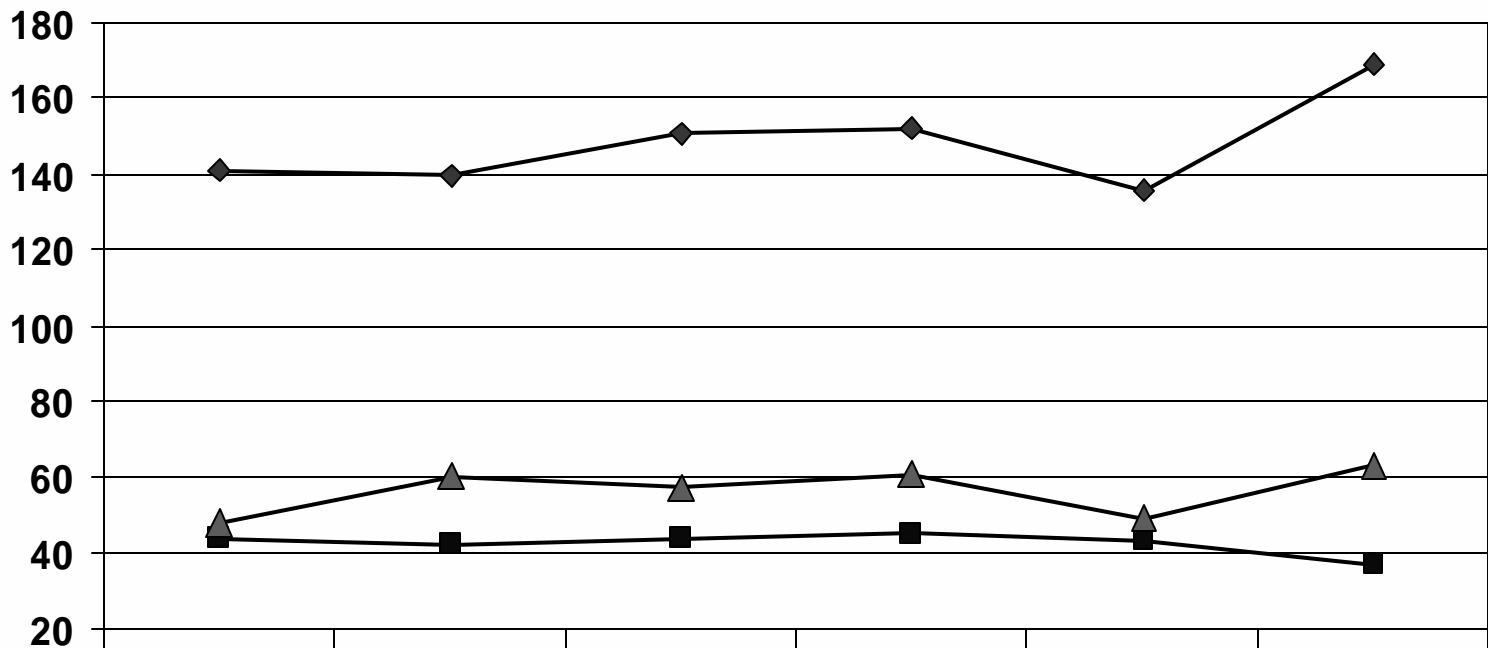
Average farm:

882 total acres

662 operator acres

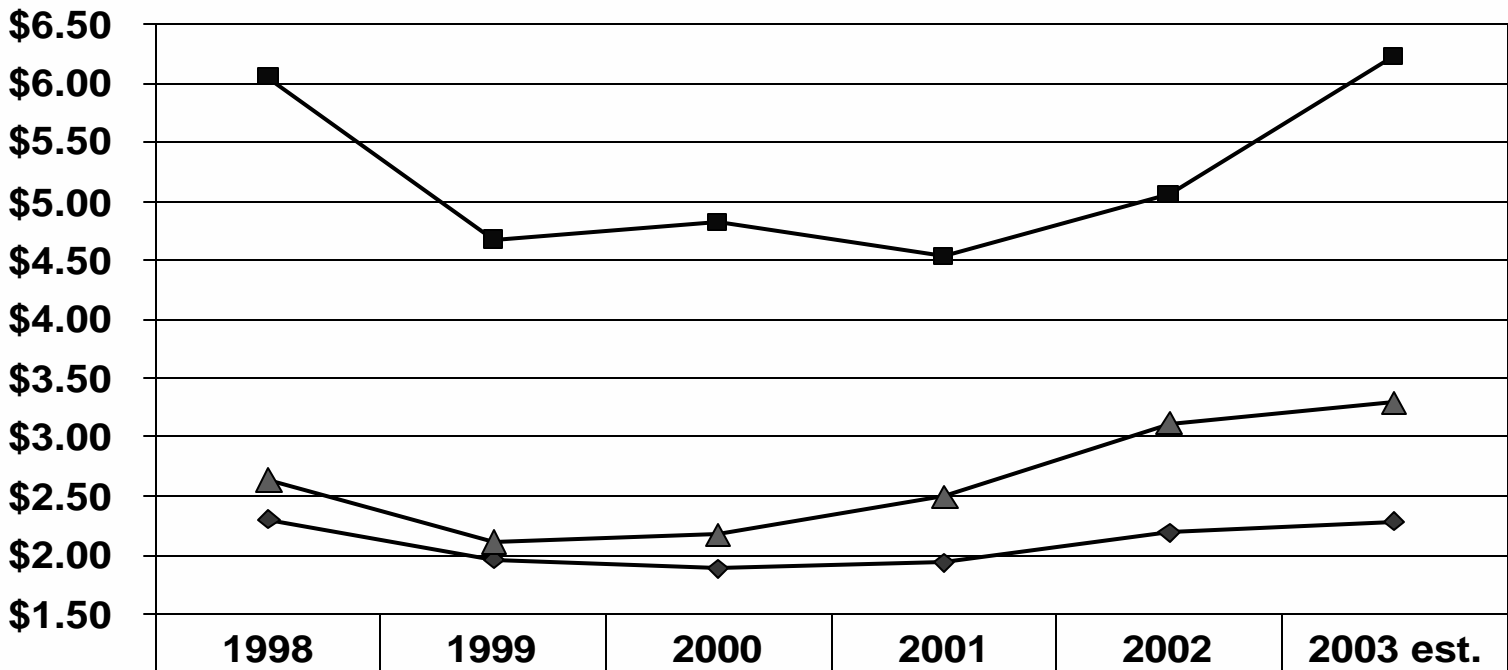


Record Corn Yields, Below Average SB Yields in 2003



	1998	1999	2000	2001	2002	2003 est.
◆ Corn	141	140	151	152	136	169
■ Soybeans	44	42	44	45	43	37
▲ Wheat	48	60	57	61	49	63

Increasing Grain Prices



◆ Corn	\$2.30	\$1.97	\$1.89	\$1.94	\$2.19	\$2.28
■ Soybeans	\$6.05	\$4.68	\$4.82	\$4.53	\$5.05	\$6.23
▲ Wheat	\$2.63	\$2.11	\$2.18	\$2.49	\$3.12	\$3.30

*Calendar year average

Key Assumptions

- Estimated prices received / year end inventory price
 - Corn: \$2.10 / bu.
 - Soybeans: \$7.00 / bu.
 - Wheat: \$3.25 / bu.
- No estimated LDPs included
- Counter-cyclical payments estimated at \$0.22 a bushel for corn and \$0.09 for wheat

Key Assumptions – cont.

- Marketing margins on old crop
 - Corn: Gain of \$0.02/bu. – 60% of crop
 - Soybeans: Gain of \$0.17/ bu. – 54% of crop
- Pricing opportunities on new crop
 - Corn – none included
 - Soybeans – 15% sold at \$6.00
- Use NASS November report of district projections of yields

Estimated Yields



FBFM Adjusted Yields Crop Reporting District	Soybean Yield		Corn Yield	
	2002	2003	2002	2003
Northwest	50	38	166	172
Northeast	46	38	139	175
West	48	44	157	189
Central	52	40	155	195
East	50	37	145	182
West Southwest	50	46	157	180
East Southeast	42	43	120	162
Southwest	35	37	84	108
Southeast	30	36	86	120
NASS Weighted Average	46	40	139	170

November 2003 NASS projections.
Yields adjusted to represent differences
between NASS and FBFM

Other Key Assumptions

- Average increase in farm size -- 3.0%
- Operating expenses adjustments from 2002
 - Crop expenses - - 2% increase
 - Fuel and oil - - 5% increase
 - All other expenses - - 1% increase
- Market value machinery -- no change
- Machinery depreciation --15% decrease
- Average increase in land values -- 3.5%
- Interest expense -- no change
(overall interest expense not rates)

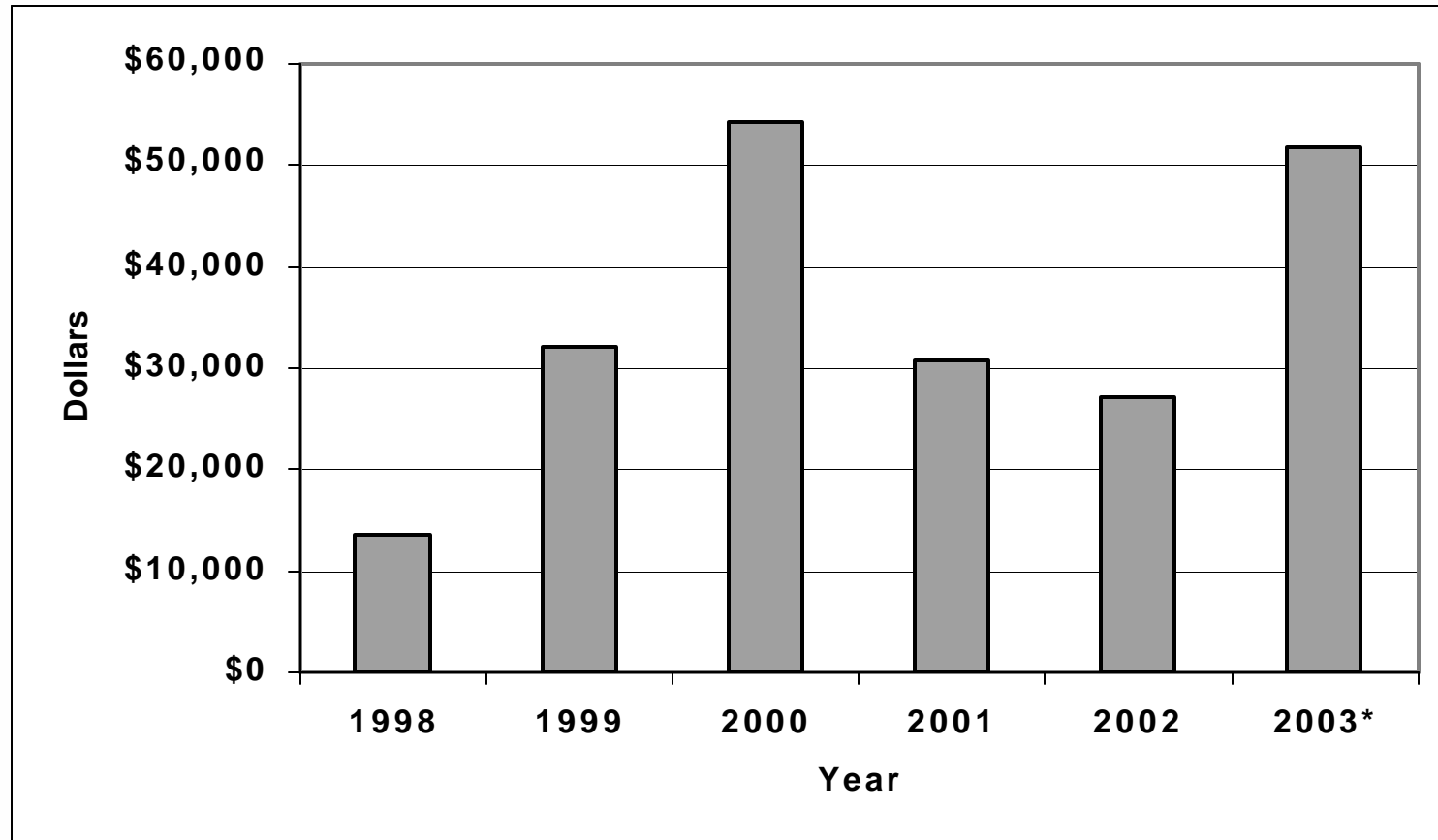
Net Farm Income

2000	\$54,073	}	Actual
2001	30,935		
2002	27,060		
2003	51,821		Estimate

Net farm income does not include:

- Payments for operator labor/family withdrawals
- Nonfarm income
- Income taxes

Net Farm Income 1998 - 2003



* Estimated

Sensitivity of Estimate

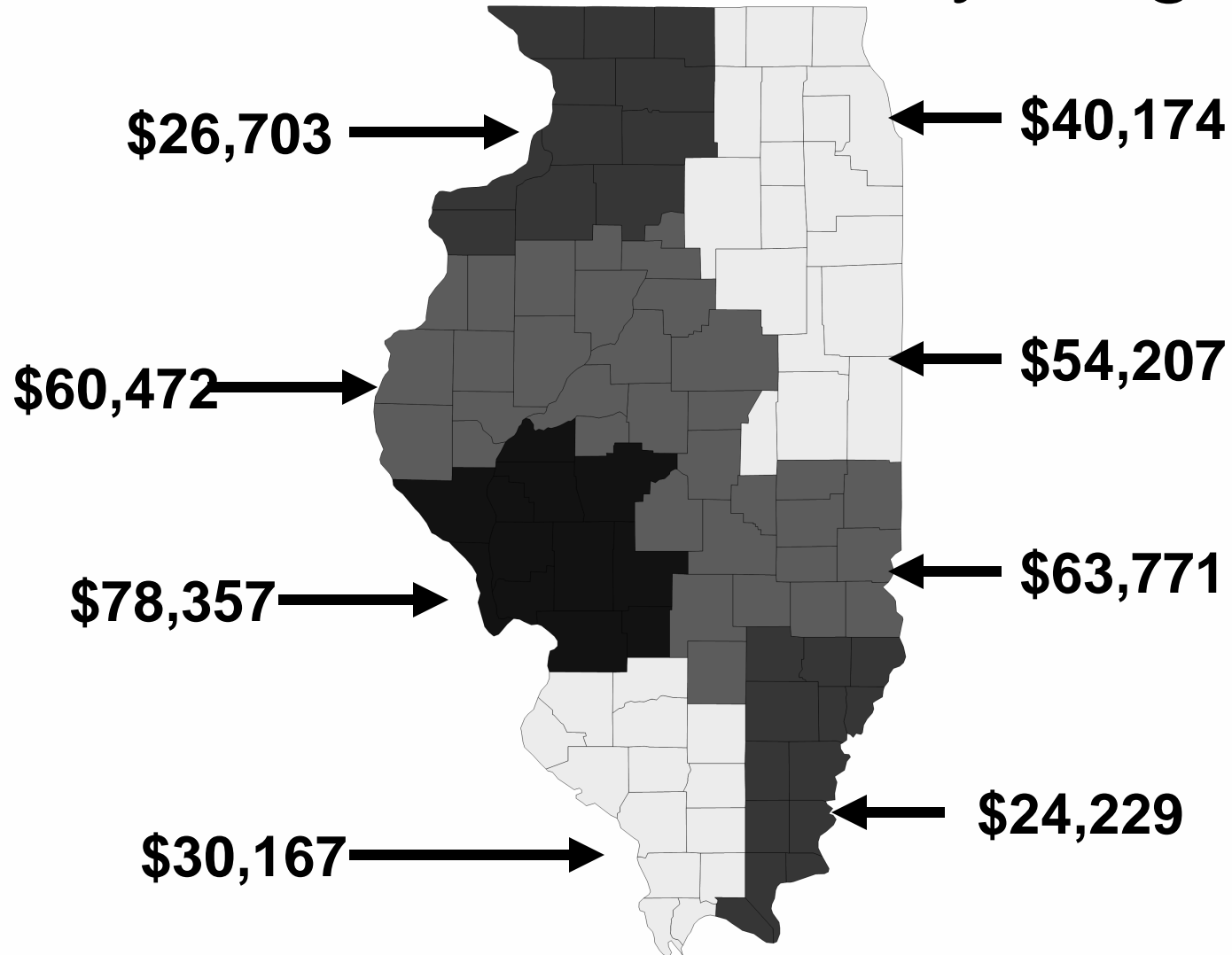
	<u>Change in Average Income</u>
One bushel change in	
Corn yields	\$ 729
Soybean yields	2,139
Change in effective price	
Corn price - \$.05	\$ 3,038
Soybean price - \$.20	2,630

Net Farm Income by Region

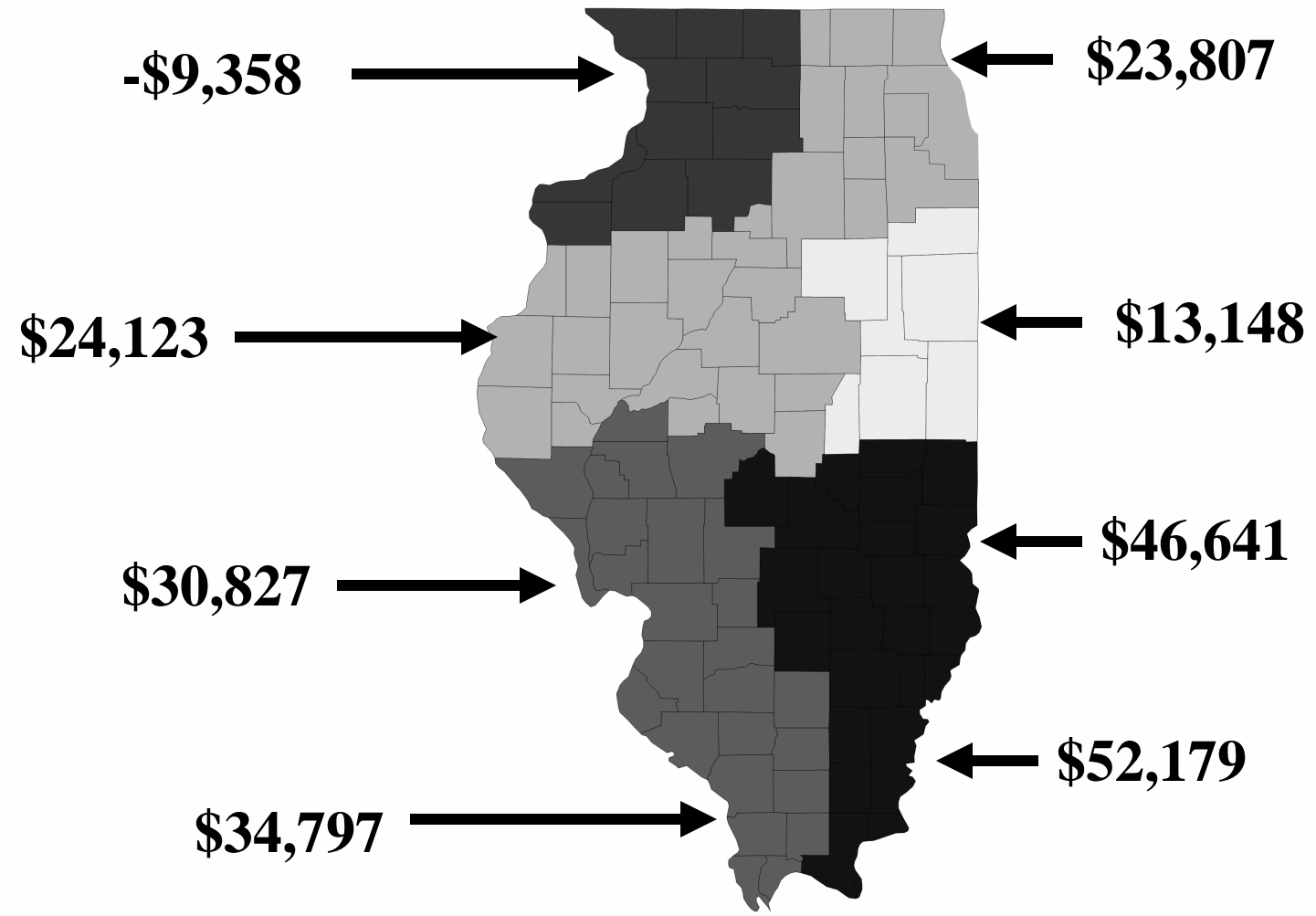


Crop Reporting District	Actual		Projected		
	1999	2000	2001	2002	2003
Northwest	\$ 35,571	\$ 40,663	\$20,237	\$36,061	\$26,703
Northeast	25,715	40,996	21,509	16,367	40,174
Central & West	34,396	51,019	28,137	36,349	60,472
East	38,725	45,506	34,655	41,059	54,207
West Southwest	36,830	65,596	27,250	47,530	78,357
East Southeast	29,416	59,334	45,447	17,130	63,771
Southwest	20,349	59,080	32,542	(4,630)	30,167
Southeast	17,197	75,752	49,227	(27,950)	24,229
NASS Weighted Average	32,136	54,073	30,935	27,060	51,821

2003 Net Farm Income by Region

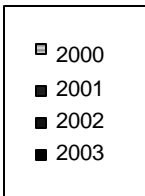
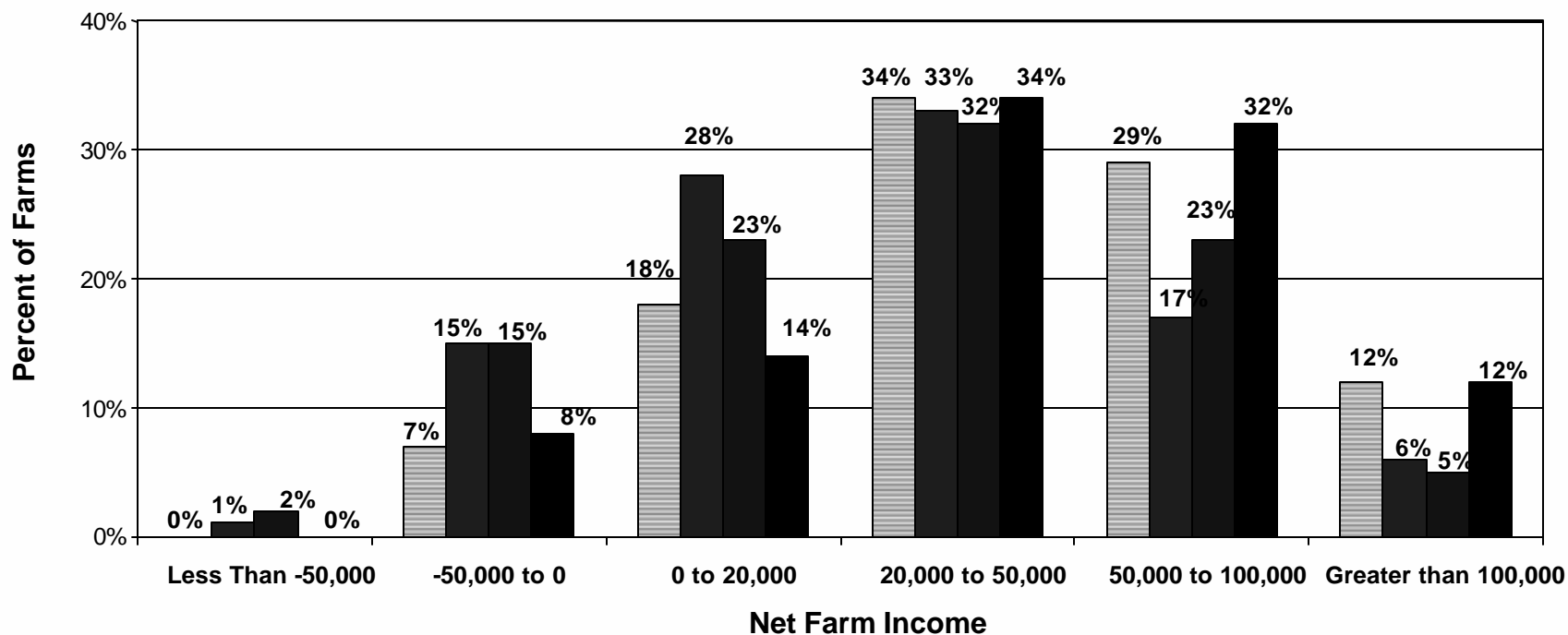


Change in Net Farm Income 2002 to 2003



Distribution of Net Farm Income

Distribution of Net Farm Incomes of 885 Illinois Grain Farms, 2000 - 2003



Maximum Counter-Cyclical Payment Rate

	Corn	Soybeans	Wheat
	-----\$ per bu. -----		
Target price	\$2.60	\$5.80	\$3.86
Direct payment rate	0.28	0.44	0.52
Trigger price ¹	2.32	5.36	3.34
Loan rate	1.98	5.00	2.80
Max. counter-cyclical payment ²	0.34	0.36	0.54

¹ Trigger price equals target price less direct payment rate.

² Equals trigger price minus loan rate.

Higher of loan rate or season average price used in rate calculation

Outlook for 2003 CC Payments

	<u>Corn</u>	<u>Soybeans</u>	<u>Wheat</u>
Trigger price	\$2.32	\$5.36	\$3.34
12 month est. price for 2003*	\$2.10	\$7.10	\$3.25
2003 CC Payments??	.22	0	.09

* Midpoint of Nov. 12 USDA Supply and Demand Report

** See Counter-cyclical tool in Marketing section of *farmdoc*

Significance of Government Payments

	Average	
Net Farm Income	\$ 51,821	
Government Payments	24,207	
Direct payments		14,811
Counter-cyclical payments		9,396
Loan deficiency payments		0

LDP Assumptions

Corn	0.00
Soybeans	0.00
Wheat	0.00

LDP and Market Loan Gains

Crop Year	LDP Payments	Market Loan Gain	% Bu. Receive LDP or Gain	Effective Bu. Rate
Corn				
2000	\$406,695,460	\$23,794,260	93.3%	\$0.26
2001	\$219,789,610	\$10,771,040	90.2%	\$0.14
2002	\$3,510	\$1,510,910	2.0%	\$0.00
Soybeans				
2000	\$398,277,200	\$32,709,100	99.5%	\$0.94
2001	\$551,305,980	\$28,563,400	98.2%	\$1.21
2002	\$3,439,920	\$34,810	9.1%	\$0.01

<http://www.fsa.usda.gov/dafp/psd/reports.htm>

Changes to Net Worth

Net Income	\$51,821
- Family Living	50,462
+ Nonfarm Income	26,754
- Income Taxes	16,096
-/+ Valuation Change	<u>15,577</u>
 Total Change in Net Worth 2002 to 2003	 \$27,594

Assumptions:

- 3.5% increase in land values
- no change in machinery values

Change in Net Worth

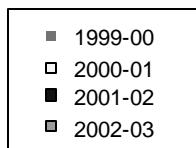
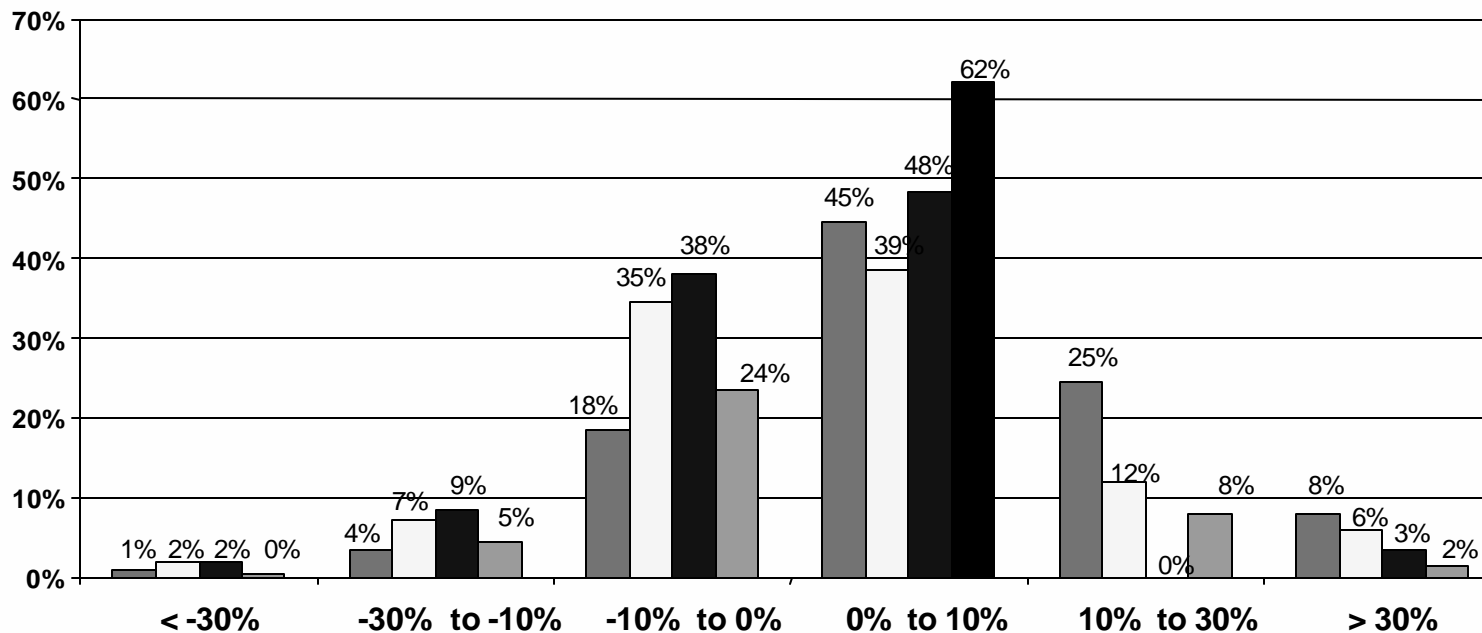
<u>Annual Change</u>	<u>Median</u>
1999-00	5.35%
2000-01	1.16%
2001-02	0.12%
2002-03	2.50%

Assumptions:

- **3.5% increase in land values**
- **no change in machinery values**

Distribution of Net Worth Change

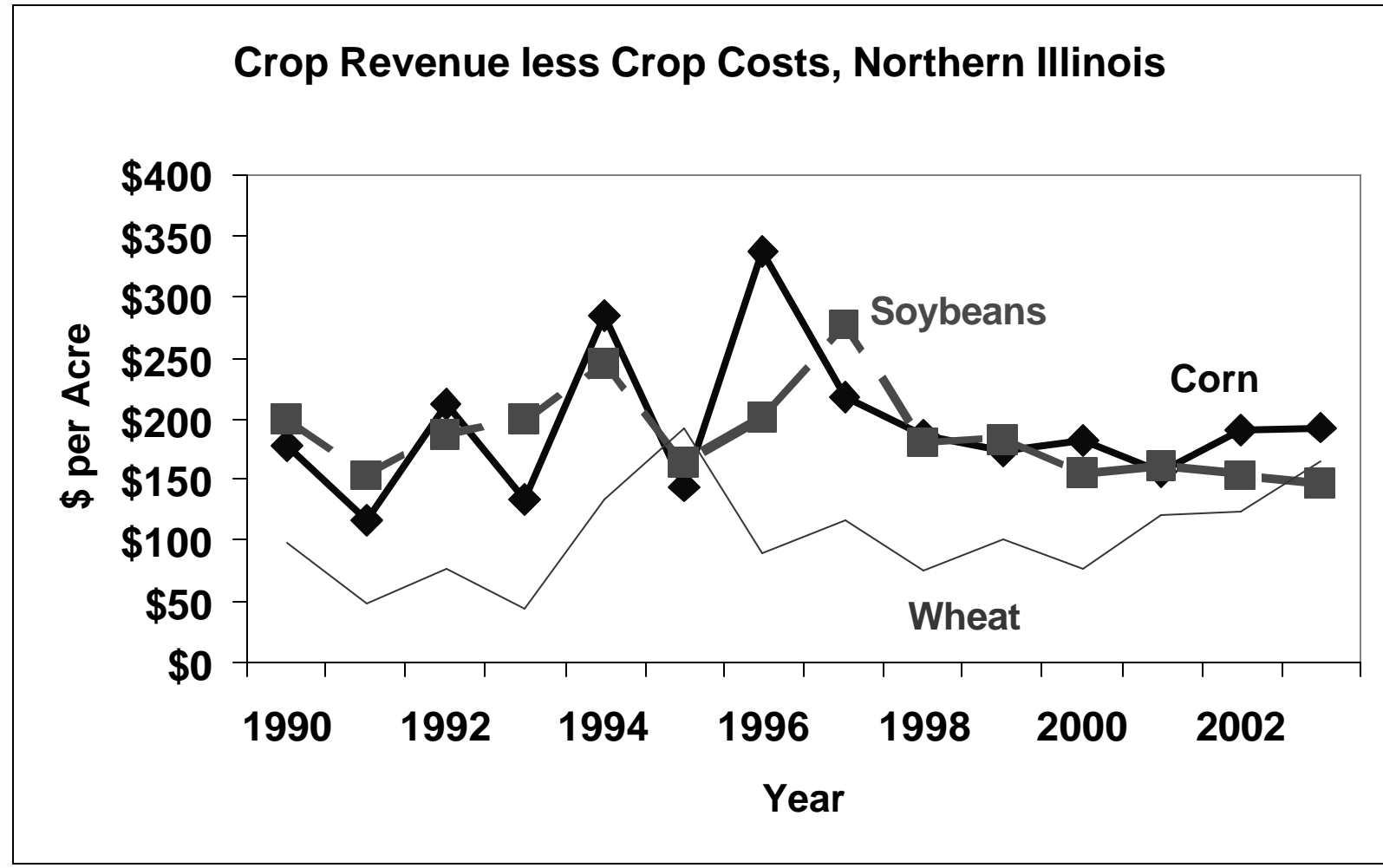
Distribution of Net Worth Change for Illinois Grain Farms



Conclusions and Limitations

- Changes in grain prices can have significant effect on farm incomes
- Grain farms only, no livestock returns
- 2003 incomes projected higher than 2002
- Highest income across the central part of the state, no large regions were disaster areas
- Government program payments include direct payments plus some counter-cyclical payments
- In general, financial well-being improves

Economics of Crop Rotations



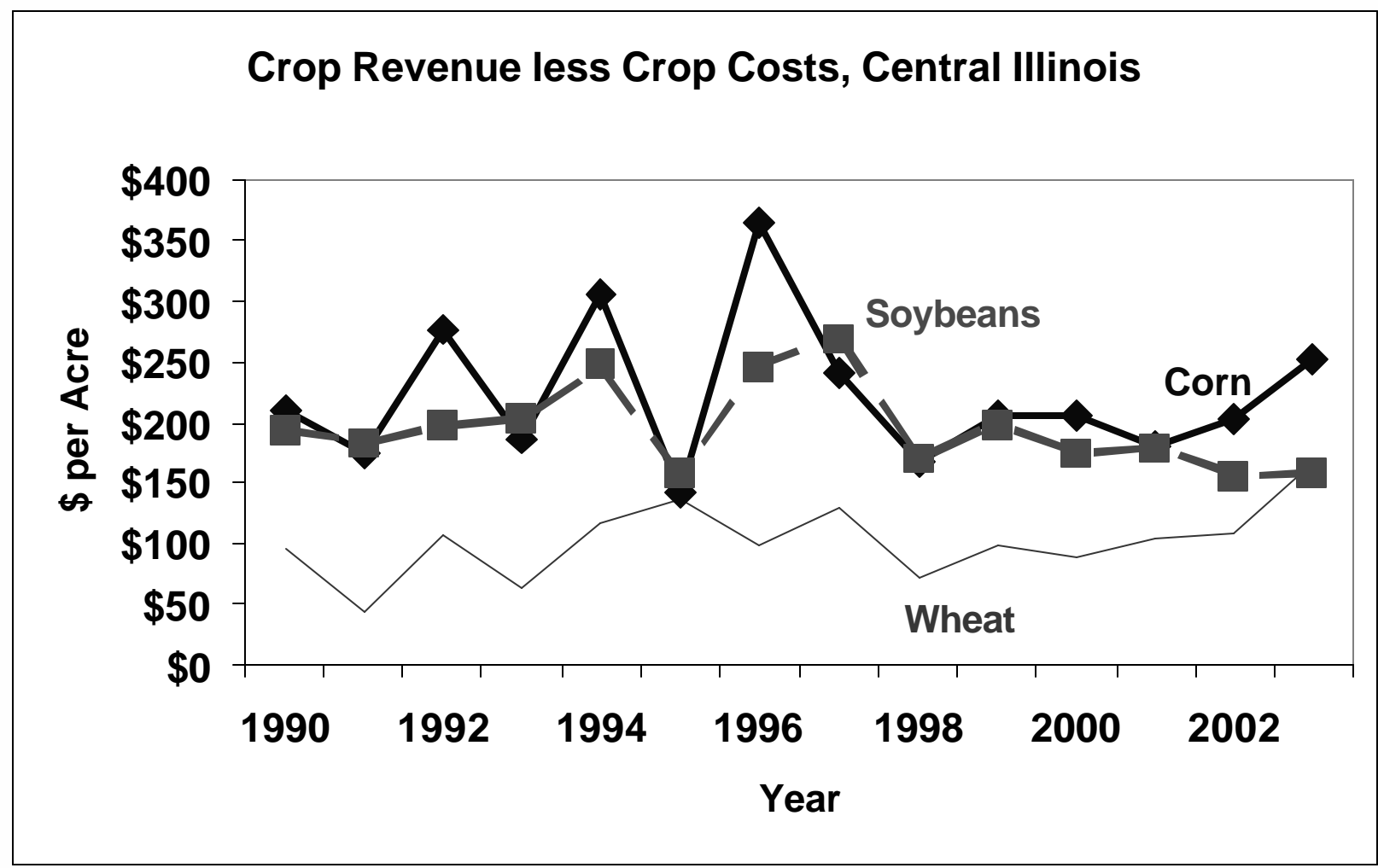
Crop Revenue Less Variable Costs, Northern Illinois

	1990 -	
	2003	2004P
Corn (after beans)	\$193	\$177
Corn (after corn)		\$148
Soybeans	\$186	\$162
Wheat	\$105	\$141

Crop Revenue less Crop Costs for Northern Illinois – 2004F

	Corn after Soybeans	Soybeans
Average yield	160	49
Effective price	\$2.25	\$5.70
Revenue	\$360	\$279
Fertilizer/lime	\$56	\$20
Pesticides	36	33
Seed	38	26
Drying and storage	14	5
Machinery repair, fuel, hire	<u>39</u>	<u>33</u>
Variable costs	\$183	\$117
Revenue less variable costs	\$177	\$162
Corn - soybeans	\$15	

Economics of Crop Rotations



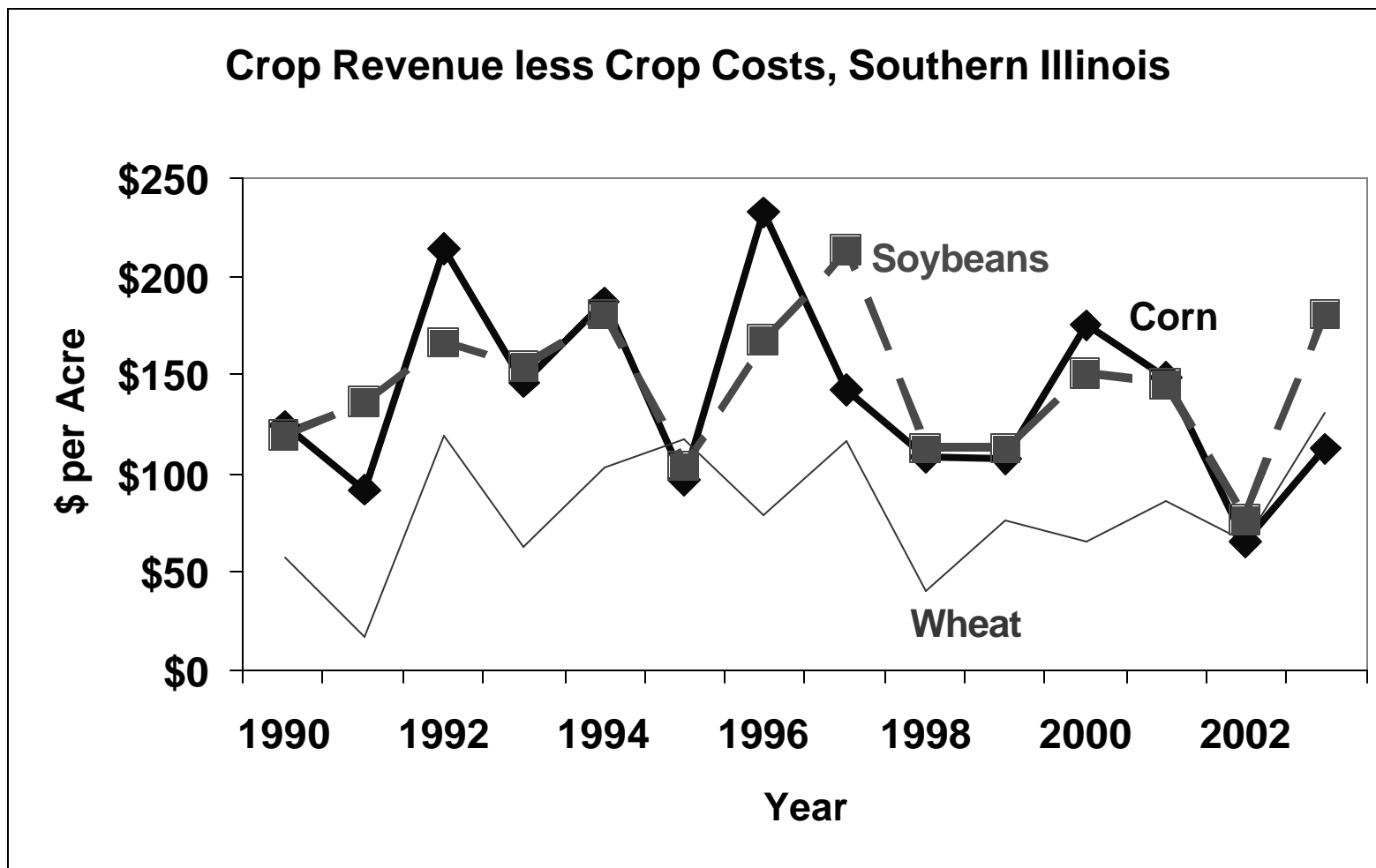
Crop Revenue Less Variable Costs, Central Illinois

	1990 -	
	2003	2004P
Corn (after beans)	\$222	\$205
Corn (after corn)		\$177
Soybeans	\$195	\$162
Wheat	\$102	\$135

Crop Revenue less Crop Costs for Central Illinois – 2004F

	Corn after Soybeans	Soybeans
Average yield	170	49
Effective price	\$2.25	\$5.70
Revenue	\$383	\$279
Fertilizer/lime	\$58	\$22
Pesticides	36	35
Seed	37	26
Drying and storage	16	4
Machinery repair, fuel, hire	<u>31</u>	<u>28</u>
Variable costs	\$178	\$115
Revenue less variable costs	\$205	\$164
Corn - soybeans	\$41	

Economics of Crop Rotations



Crop Revenue Less Variable Costs, Southern Illinois

	1990 -	
	2003	2004P
Corn (after beans)	\$140	\$119
Corn (after corn)		\$66
Soybeans	\$144	\$121
Wheat	\$81	\$96

Crop Revenue less Crop Costs for Southern Illinois – 2004F

	Corn after Soybeans	Soybeans
Average yield	128	41
Effective price	\$2.25	\$5.70
Revenue	\$288	\$234
Fertilizer/lime	\$56	\$22
Pesticides	33	31
Seed	37	23
Drying and storage	6	5
Machinery repair, fuel, hire	<u>37</u>	<u>32</u>
Variable costs	\$169	\$113
Revenue less variable costs	\$119	\$121
Corn - soybeans	-\$2	

Crop Rotation Considerations

- Any yield loss with corn after corn?
- Extra costs of raising corn (insecticide, drying, storage, machinery costs).
- Nitrogen credit from soybeans.
- Increase risk?
- Spreading out demands for labor and machinery.