

ILLINOIS FARM INCOME SITUATION FOR 2001

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Executive Summary

Estimates of 2001 financial performance for 1,032 Illinois grain farms are compared to actual financial performance in 1998, 1999 and 2000. Comparisons indicate that:

- The average net farm income for these farms in 2001 is projected at \$31,109. It would be \$17,059 without the additional market loss assistance and oilseed payments. The average net farm income for the same farms was \$12,894 in 1998, \$32,256 in 1999 and \$52,168 in 2000.
- Approximately 18 percent of the farms will have negative net incomes during 2001 while 21 percent of the farms are projected to have net farm incomes greater than \$50,000.
- Projected net farm income levels for 2000 are the highest in the west southwest region of Illinois. Projected incomes are lowest in the northeast region.
- Government farm program payments, including market loss assistance and oilseed payments, continue to have a very significant effect on farm incomes. Net farm income levels would be negative if not for the total of all types of government farm program payments (AMTA, market loss assistance, oilseed, loan deficiency payments and/or marketing loan gains).
- Projected 2001 net income levels do not lead to an overall strengthening or weakening of the financial position of Illinois grain farms. Some farms, however, will face severe financial stress.
- About 14 percent of the farms are projected to have net worth declines of over 10 percent while only 2 percent of the farms are projected to increase their net worth by more than 2 percent between 2000 and 2001.
- Actual net farm income and net worth changes on individual farms will depend on a number of factors, including actual grain yields, the efficiency and equity position of the farm, land ownership and lease arrangements, actual valuation changes in machinery and land, and strategies used in marketing the 2000 and 2001 crops.



Illinois Farm Income Situation for 2001

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<http://www.farmdoc.uiuc.edu/>

Objectives

- Evaluate the financial condition of Illinois grain farms.
- Examine the impact of Federal government farm programs.

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.

Last Year's Results

Last year's projection

\$52,168 actual income

\$37,112 projection on

Nov 1

\$15,056 difference

⊕ **Expenses were projected on the mark**

⊕ **Missed revenue**

Reason for 2000 Revenue Difference

- Nov 1: Used loan rate prices (corn, \$1.95, soybeans, \$5.45) for market sales and LDPs
- Actual experience
 - Corn (\$1.95 inventory value + \$.25 LDP)
 - Beans (\$4.95 inventory value + \$.95 LDP)

What About 2001???

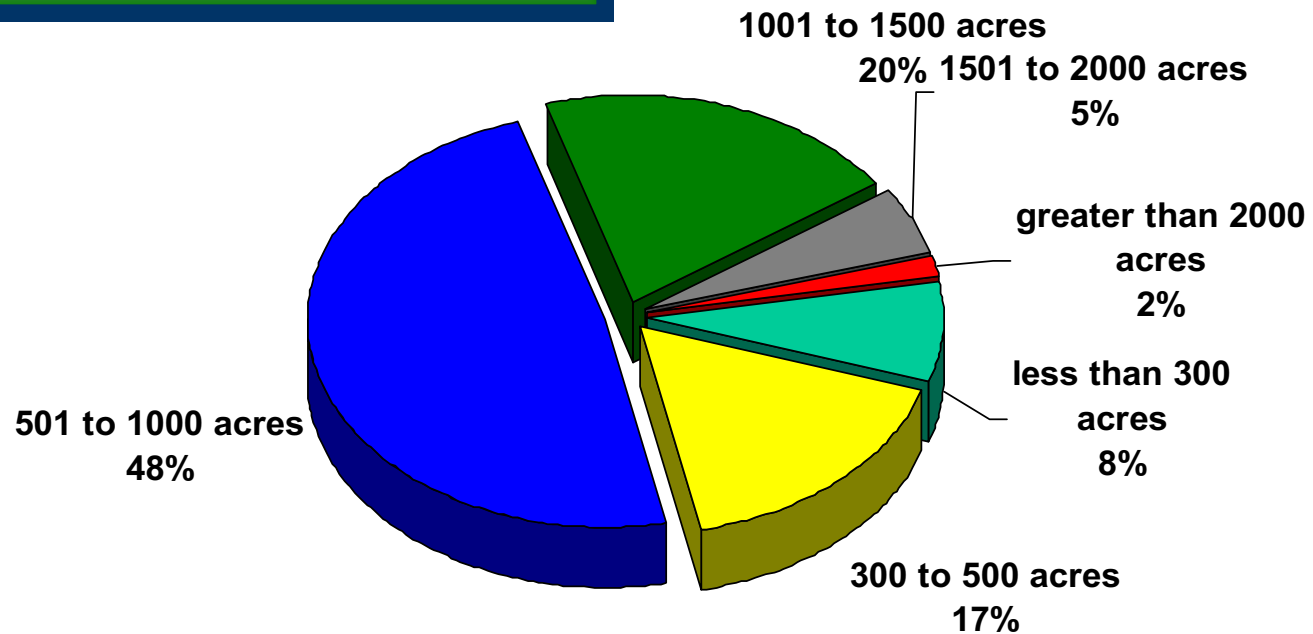
Sample Farms by Size

1032 grain farms

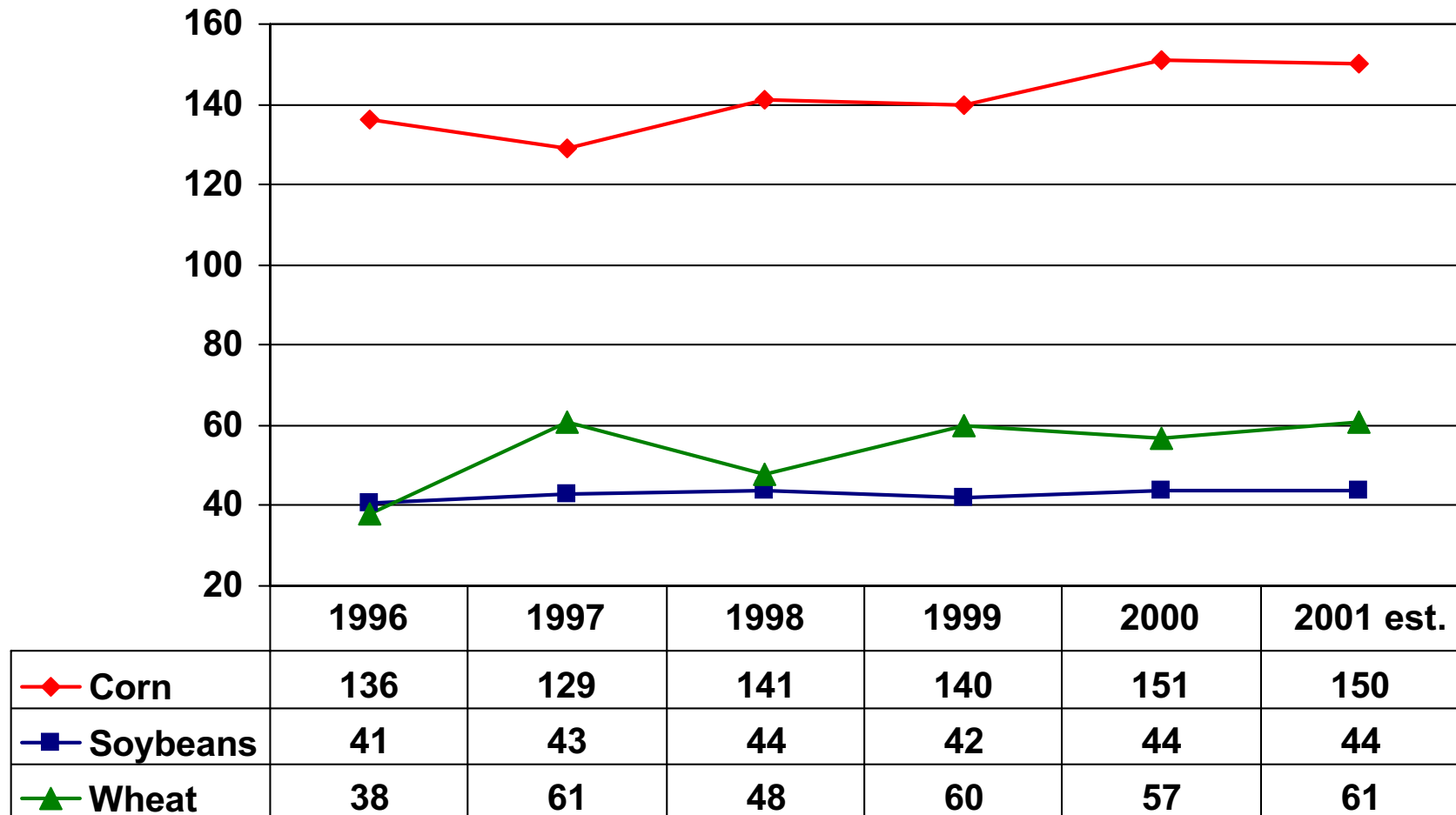
Average farm:

840 total acres

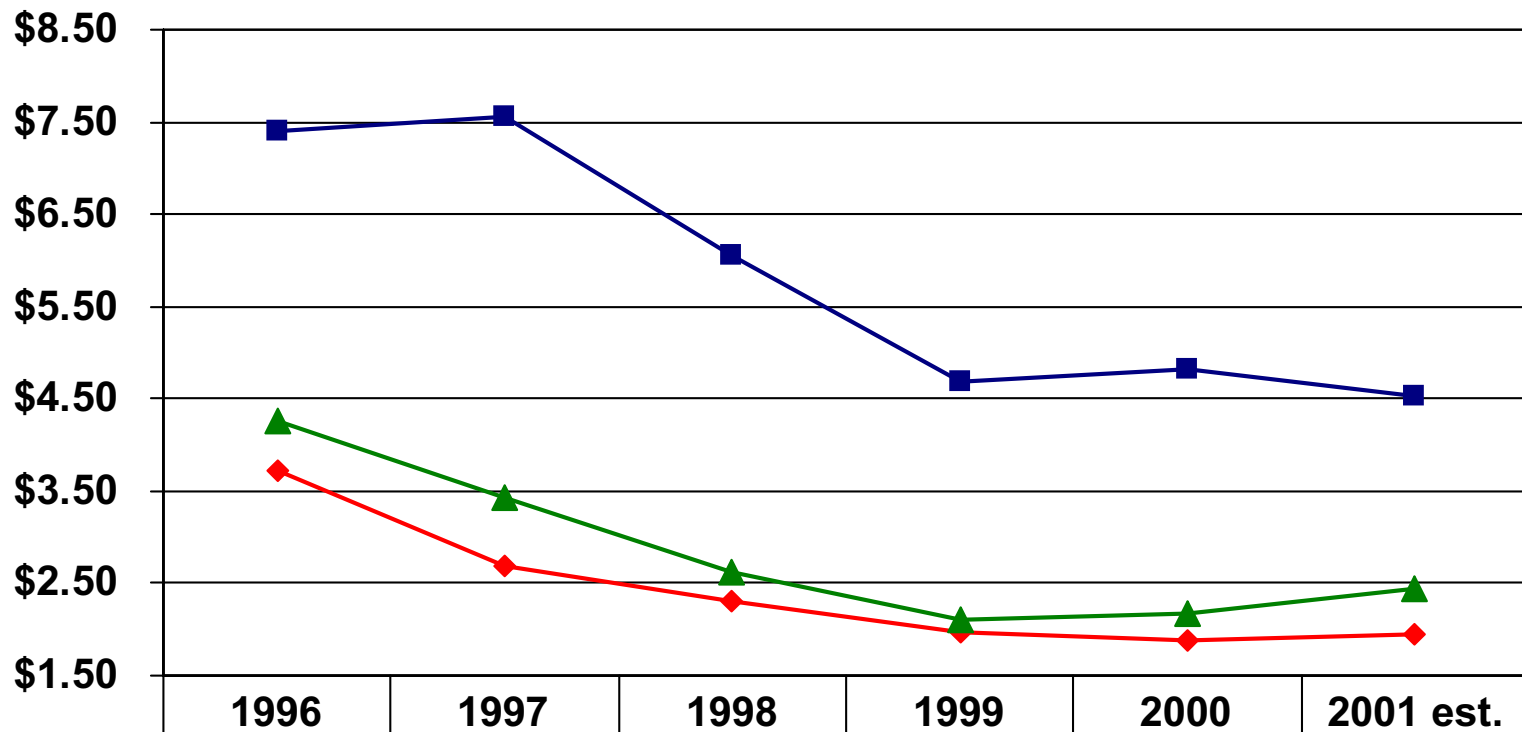
617 operator acres



Above Average Yields in 2001



Continued Low Commodity Prices



—◆— Corn	\$3.71	\$2.70	\$2.30	\$1.97	\$1.89	\$1.94
—■— Soybeans	\$7.41	\$7.55	\$6.05	\$4.68	\$4.82	\$4.53
—▲— Wheat	\$4.25	\$3.43	\$2.63	\$2.11	\$2.18	\$2.44

Key Assumptions

- Estimated prices received / year end inventory price
 - Corn: \$1.95 / bu.
 - Soybeans: \$4.40 / bu.
 - Wheat: \$2.30 / bu.
- Estimated LDP rates
 - Corn: \$0.17 / bu.
 - Soybeans: \$1.25 / bu.
 - Wheat: \$0.34 / bu.
- Estimated total price (price + LDP rate) **KEY ISSUE**
 - Corn: \$2.12 / bu.
 - Soybeans: \$5.65 / bu.
 - Wheat: \$2.64 / bu.

Key Assumptions – cont.

- Marketing margins on old crop
 - Corn: none (basically sold at inventory price)
 - Soybeans: Lost \$0.45/ bu. – 60% of crop
- Pricing opportunities on new crop
 - Corn \$0.10 / bu. – 10% of crop
 - Soybeans – none
- Use NASS November report of district projections of yields

Estimated Yields



BFM Adjusted Yields Crop Reporting District	Soybean Yield		Corn Yield	
	2000	2001	2000	2001
Northwest	47	52	148	156
Northeast	46	46	158	152
West	48	48	155	157
Central	48	50	165	165
East	45	48	149	147
West Southwest	47	51	173	166
East Southeast	47	44	151	148
Southwest	44	39	140	134
Southeast	45	43	135	135
NASS Weighted Average	47	48	154	153

November 2001 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 2000
 - Crop expenses - - 3% increase (nitrogen cost)
 - Fuel and oil - - **15% decrease**
 - All other expenses - - 1% increase
- Market value machinery and machinery depreciation – no change from 2000
- Average increase in land values 1.5%
- Interest expense **decrease 1%** from 2000
(overall interest expense not rates)
- Other farm income increase 3% from 2000

Net Farm Income

1998	\$12,894	}	Actual
1999	32,256		
2000	52,168		
2001	31,109		Estimate

Net farm income does not include:

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

Sensitivity of Estimate

	Change in Average Income
One bushel change in	
Corn yields	\$ 684
Soybean yields	1,728
\$0.05 change in LDP or effective price	
Corn price	\$ 2,452
Soybean price	735

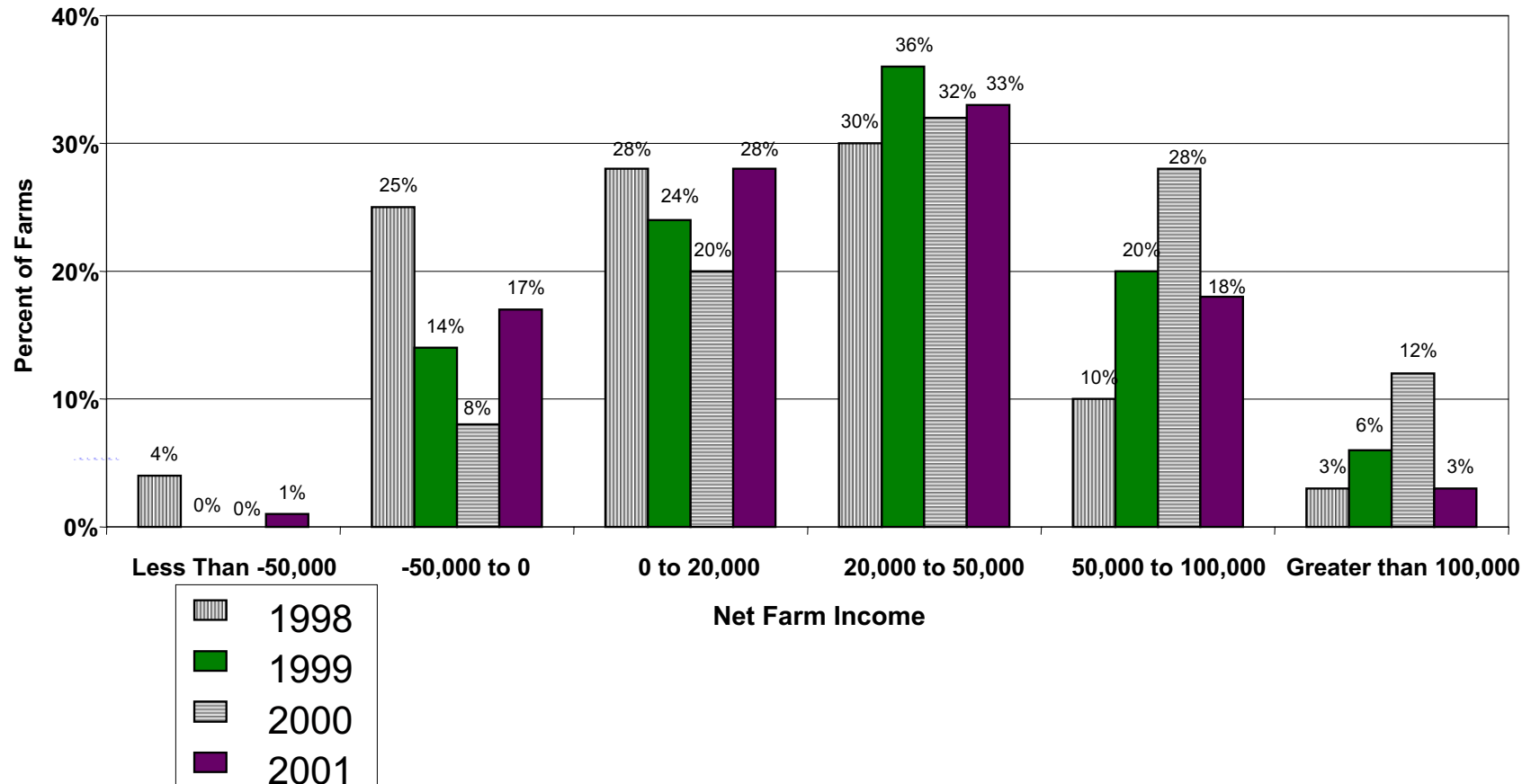
Net Farm Income by Region



Crop Reporting District	Actual					Projected				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Northwest	48,919	20,226	36,557	38,775	26,163					
Northeast	50,339	24,181	23,167	37,497	13,298					
Central & West	45,842	17,704	34,041	51,054	31,663					
East	51,714	12,263	39,051	45,208	29,740					
West Southwest	49,775	24,627	35,952	59,558	43,760					
East Southeast	50,649	5,446	28,672	54,275	28,735					
Southwest	43,023	1,008	26,146	54,821	24,374					
Southeast	33,107	(19,284)	16,831	75,503	28,391					
NASS Weighted Average	49,519	12,894	32,256	52,168	31,109					

Distribution of Net Farm Income

Distribution Net Farm Incomes of 1,032 Illinois Grain Farms:
1998-2001



Changes from August Estimate

August Estimate	\$23,899
Current Estimate	<u>31,109</u>
	7,210

Reasons:

New yield estimates	+ 2,677
Increased effective commodity prices (LDP + cash price)	+ 4,533

Significance of Government Payments

Net Farm Income	\$	Average 31,109	
Government Payments		51,441	↓
AMTA			10,220
Market loss assistance			11,719
Oilseed provisions			2,331
Loan deficiency payments			27,171

LDP Assumptions

Corn	0.17
Soybeans	1.25
Wheat	0.34

LDP and Market Loan Gains

Crop Year	LDP Payments	Market Loan Gain	% Bu. Receive LDP or Gain	Effective Bu. Rate
Corn				
1998	\$121,033,959	\$43,739,750	56.7%	\$0.11
1999	\$304,112,898	\$42,270,630	88.6%	\$0.23
2000	\$406,701,360	\$22,814,180	92.9%	\$0.26
Soybeans				
1998	\$168,346,103	\$45,075,070	90.9%	\$0.46
1999	\$365,461,088	\$25,881,150	98.4%	\$0.88
2000	\$398,344,090	\$31,765,920	99.4%	\$0.94

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

Changes to Net Worth

Net Income	\$31,109
- Family Living	49,148
+ Nonfarm Income	22,853
- Income Taxes	11,130
-/+ Valuation Change	<u>6,007</u>
Total Change in Net Worth 2000 to 2001	(\$309)

Assumptions:

- 1.5% increase in land values
- no change in machinery values

Change in Net Worth

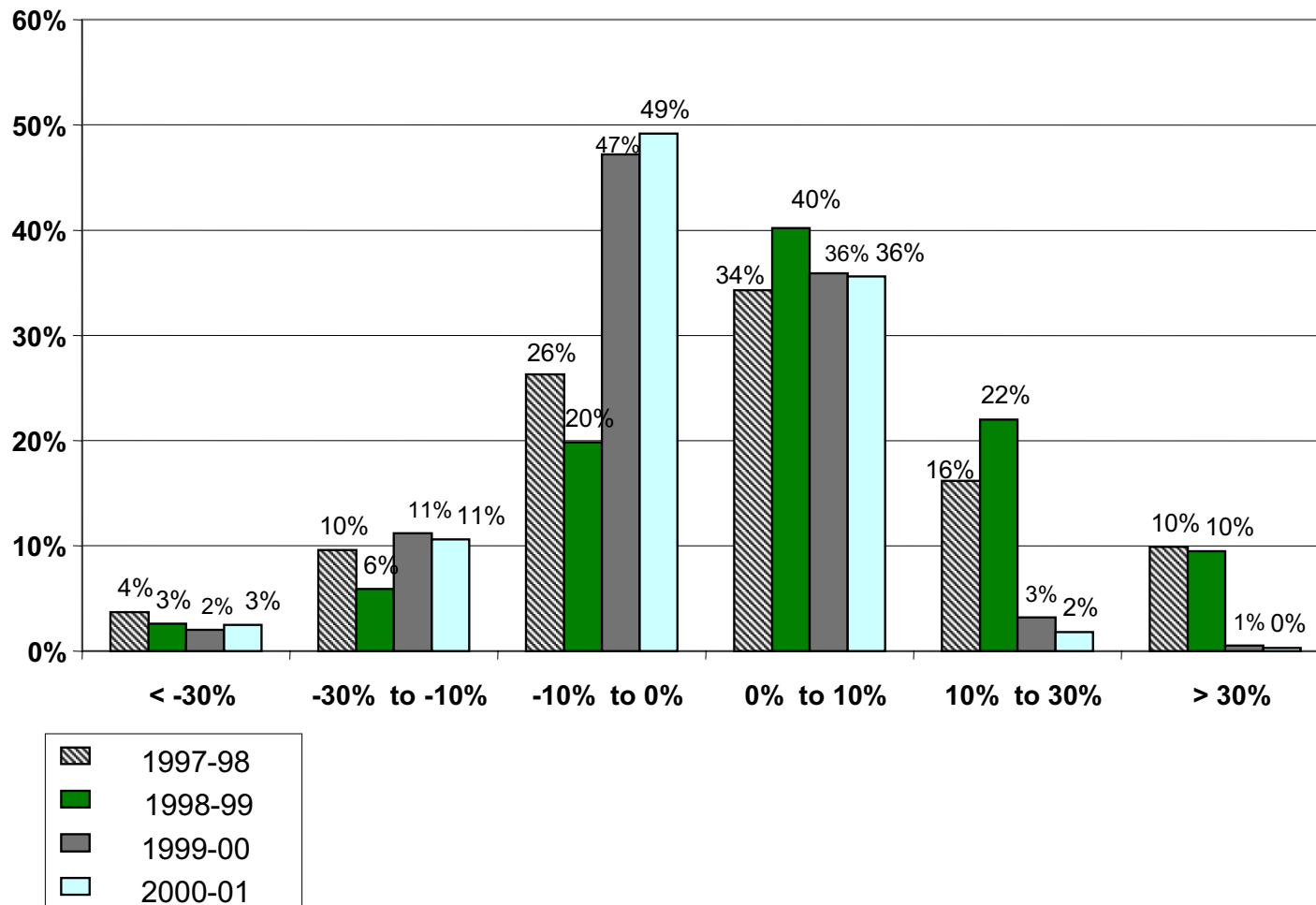
<u>Annual Change</u>	<u>Median</u>
1997-98	2.17%
1998-99	4.48%
1999-00	4.99%
2000-01	-1.39%

Assumptions:

- **1.5% increase in land values**
- **no change in machinery values**

Distribution of Net Worth Change

Distribution of Net Worth Change for Illinois Grain Farms



Simple Risk Rating Model

Positive Working Capital (Current Ratio greater than 1)

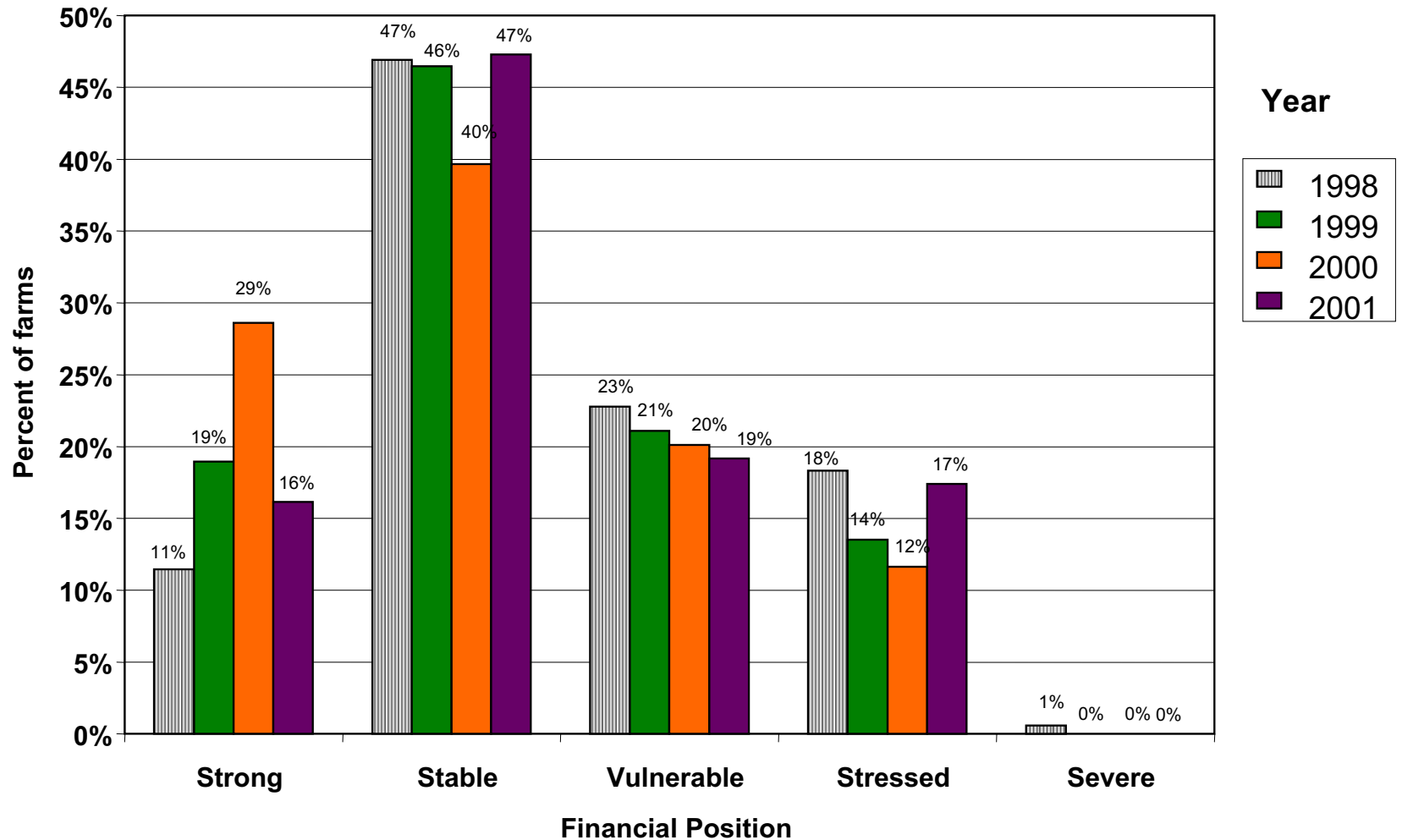
Debt to Asset Ratio	Rate of Return on Equity (before depreciation)				
	Less Than -20%	-20% to -5%	-5% to 5%	5% to 20%	Greater Than 20%
0 to 10%	Vulnerable	Vulnerable	Stable	Strong	Strong
10% to 40%	Vulnerable	Vulnerable	Stable	Strong	Strong
40% to 70%	Vulnerable	Vulnerable	Vulnerable	Stable	Stable
70% to 100%	Vulnerable	Vulnerable	Vulnerable	Vulnerable	Vulnerable
Greater than 100%	Severe	Severe	Severe	Severe	Severe

Negative Working Capital (Current Ratio less than 1)

Debt to Asset Ratio	Rate of Return on Equity (before depreciation)				
	Less Than -20%	-20% to -5%	-5% to 5%	5% to 20%	Greater Than 20%
0 to 10%	Stressed	Stressed	Vulnerable	Stable	Stable
10% to 40%	Stressed	Stressed	Vulnerable	Stable	Stable
40% to 70%	Stressed	Stressed	Stressed	Vulnerable	Vulnerable
70% to 100%	Stressed	Stressed	Stressed	Stressed	Stressed
Greater than 100%	Severe	Severe	Severe	Severe	Severe

Financial Position

Distribution of Illinois Grain Farms by Financial Position Category, 1998-2001



What commodity price levels are needed if government payments are eliminated?

- To achieve Net Farm Income of \$31,109 with 2001 estimated yields

Commodity prices would need to increase to

Corn	\$2.40
Soybeans	\$6.39
Wheat	\$2.83

- To achieve Net Farm Income of \$50,000 with 2001 estimated yields

Commodity prices would need to increase to

Corn	\$2.62
Soybeans	\$6.96
Wheat	\$3.09

Conclusions and Limitations

- Many assumptions made in study
- Sensitivity of projections to prices and LDP rates
- Grain farms only, no livestock returns
- 2001 incomes projected lower than 2000
- Government program payments continue to have significant impact on income
- In general, financial health remaining stable
- Higher commodity prices needed to increase income and reduce dependence on government payments

Looking ahead to 2002

- Lower nitrogen and interest costs
- Yields - Are we due for below average?
 - 19,000 decrease in net farm income given a 10% yield reduction and no price response
- Slightly lower AMTA payments
 - Corn \$.269 down to \$.261
 - Wheat \$.474 down to \$.461
 - } Reduce income \$700
- Market Loss Assistance payments
 - \$11,719 in 2001, what about 2002?
- 2002 last year of current farm policy
 - Afternoon session!!