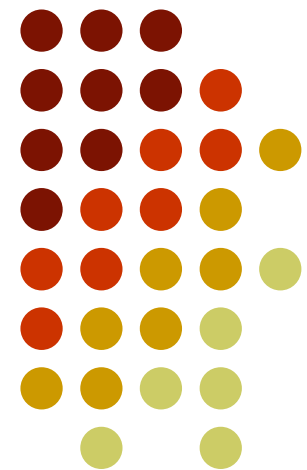


# On the Distinctiveness of Farmers of the Middle: A Preliminary Report on the Missouri Farm Poll, 2006

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What's New in Sustainable Agriculture  
February 26, 2007



Funded by USDA grant number 2005-35618-15672





# Some background

- Most U.S. farms are family farms, which the USDA defines as “proprietorships, partnerships, or family corporations that do not have hired managers”.
  - In 2003, 98.3% of US farms were “family farms.”
- Most farms have annual sales <\$250,000
  - 91.2% of US farms
  - 96.2% of Missouri farms (2002)



<http://www.freeporthistoricalsociety.org/pgillfarm.htm>



## On the other hand ...

- Nearly 50% of the value of all US farm production comes from non-family farms and large-scale family farms, or farms with sales of \$250,000 or more.
- In Missouri, slightly more than 60% of the value of year 2002 sales came from farms with sales in excess of \$250,000.



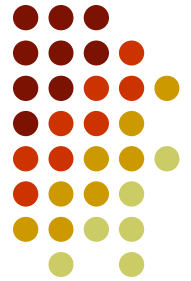




## On the other hand ...

- Nearly 75% of the value of all US farm production comes from non-family farms and large-scale family farms, or farms with sales of \$250,000 or more.
- In Missouri, slightly more than 50% of the value of year 2002 sales came from farms with sales in excess of \$250,000.



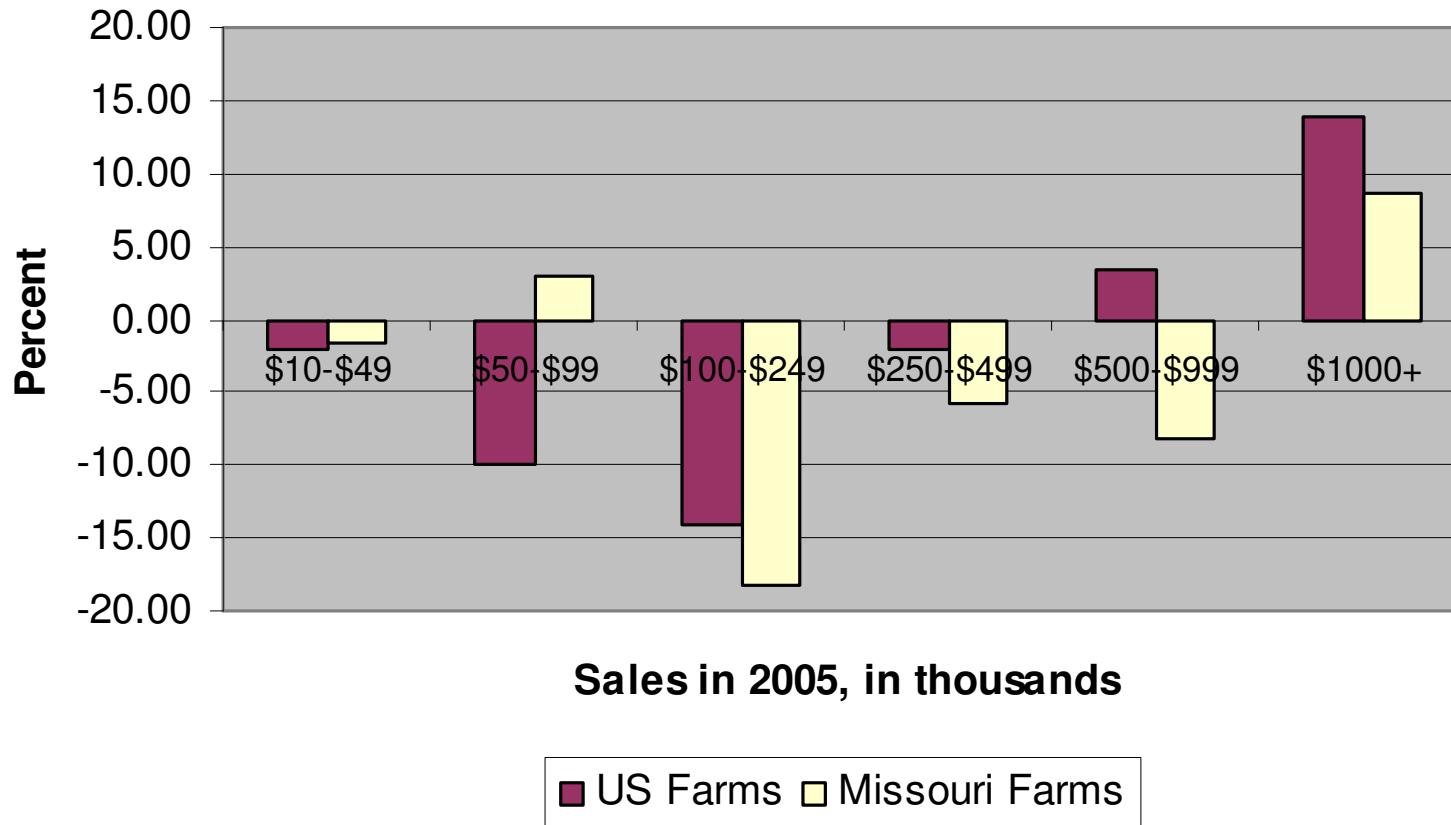


# Agriculture is not static

- Industrialization, specialization, globalization
- Concentration/consolidation
  - Shift from small scale and labor intensive farming to large-scale operations that rely on machinery and technology and the intensive use of land, chemicals and energy.
  - Reduction in the total number of farms and families in farming and the concurrent increase in farm size.
- There is more to the story ...



# Percent Change in U.S. and Missouri Farms by Sales Category, 1997 to 2002



# What is a “farmer of the middle”?



- Generally farms with gross annual sales between \$100,000 and \$250,000, although technically “not scale determined” but rather “scale related”
  - Any farm falling “between the vertically integrated, commodity markets and the direct markets,” but farms between \$100-\$250K vulnerable
- USDA’s “Farming-occupation farms, Medium-sales farms” designation



<http://www.kelderfarm.com/>



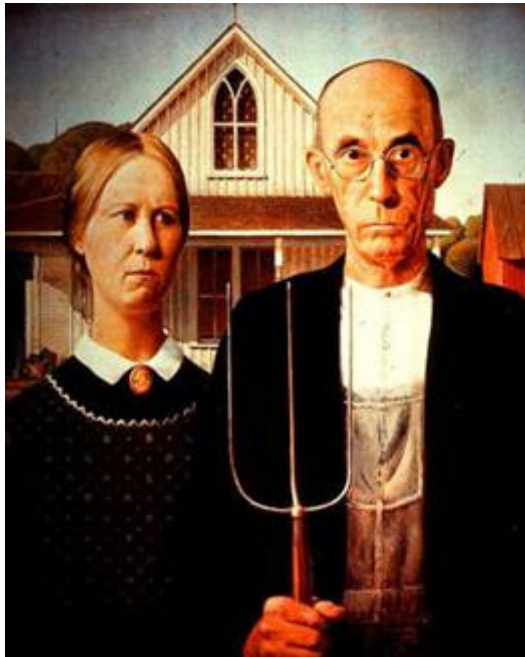


# Why worry?

- Emerging dualistic system where ...
  - Small farms focus on producing differentiated products catering directly to consumer markets
  - Large farms focus on the global commodity markets
- “if present trends continue, [middles] farms ... will likely disappear in the next decade.”



# Why worry?



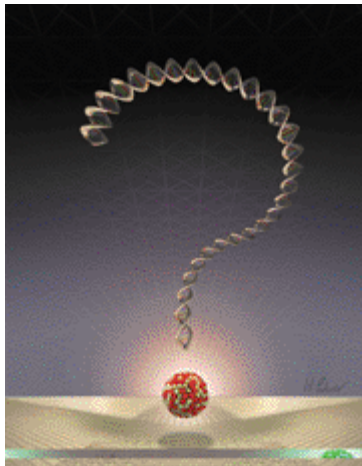
*American Gothic*, Grant Wood, 1930

- “Farmers of the Middle” are different, but in an important way:
  - They provide “social and environmental benefits”
  - “good land stewardship is a high priority”
    - Land stays in family
    - Ecological knowledge is handed down generation to generation
  - Farmers expected to take care of land, animals, environment, community, and provide for food security



# Research questions

- There is a perception and even expectation that “farmers of the middle” are different in ways important and unique to agriculture and society.



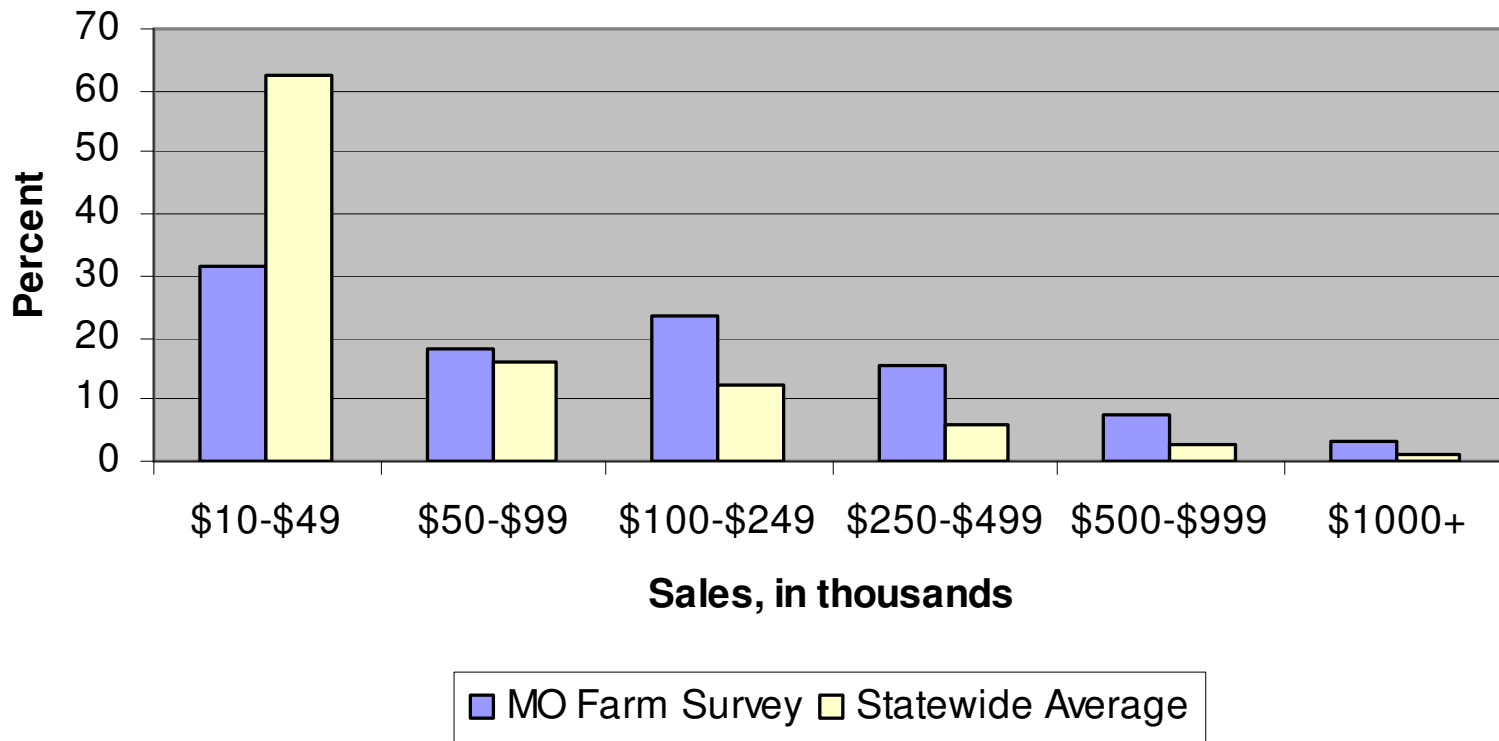
- Are “farms of the middle” different from small and large farms?
- If so, how? Do these farms reflect our perceptions of them as good stewards?



# Description of study

- Surveyed 3,000 Missouri farmers early 2006 from population of all farmers with total farm sales at least \$10,000 in 2005 (population is 41% of all MO farms)
- Stratified random sample (by farm sales) to allow comparison across groups
- Heads-up postcard, two mailings
- 2941 surveys deliverable, 692 returned (23.5%)
- This report looks at agricultural producers only (519 in current sample), thus excluding landowners, etc

# Distribution of sample







# A hint of things to come ...

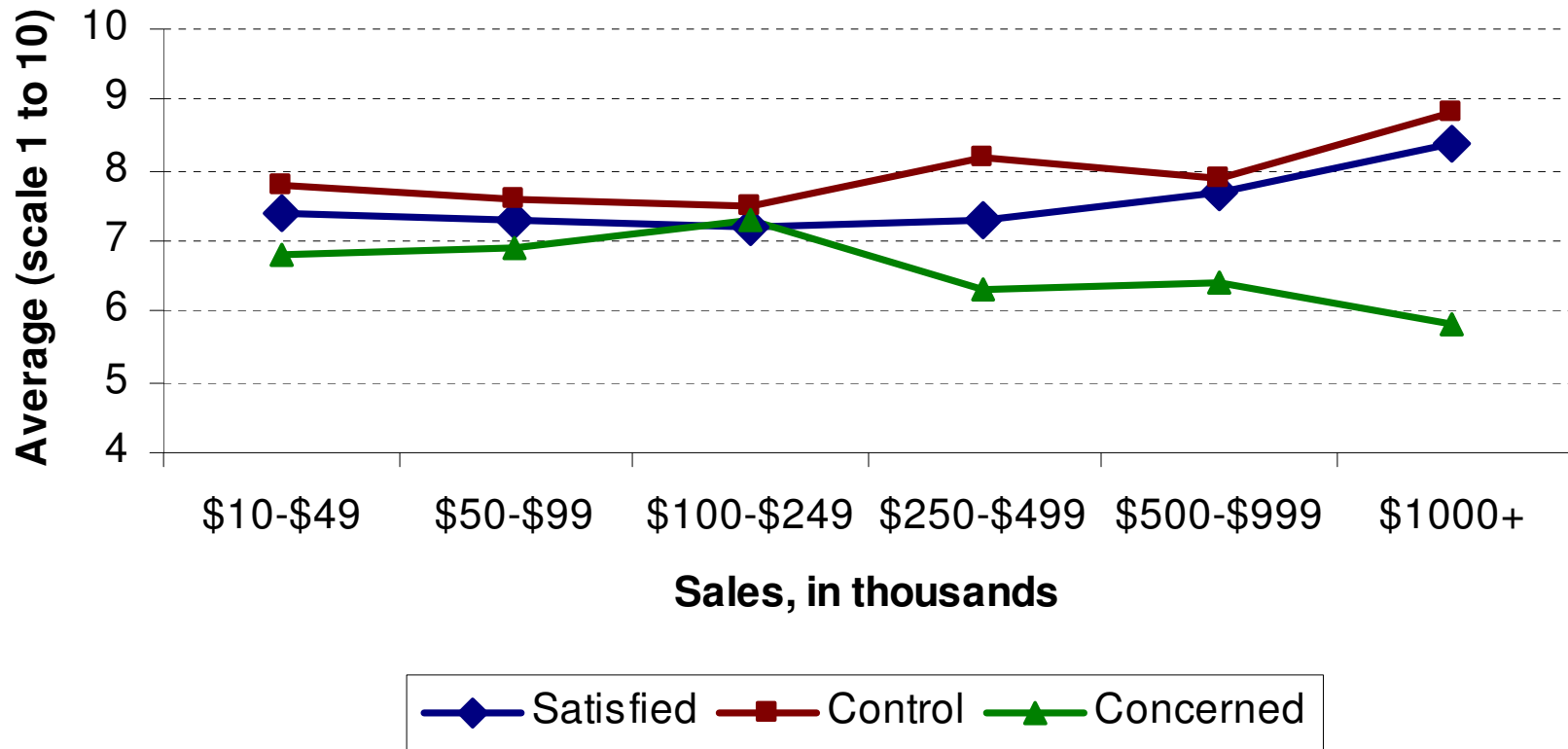
- We asked farmers to indicate on a scale from 1 to 10 ...
  - How satisfied they are with their life
  - How much free choice and control they have over their life
  - How concerned they are about their financial security



*The Farmer in the Field, Vincent Van Gogh*



# A hint of things to come ...



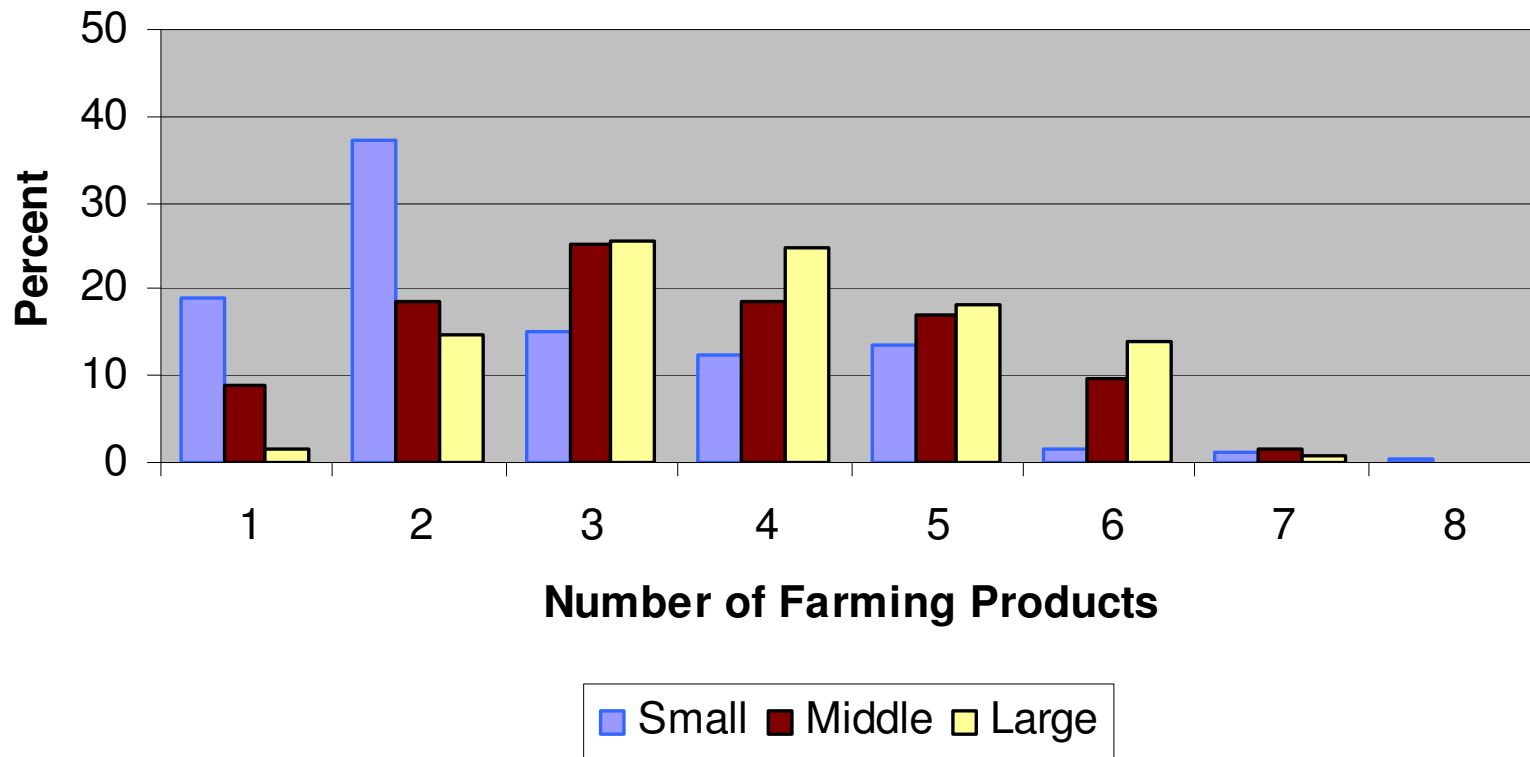
ANOVA  
Satisfied F-stat= 1.11, p=0.3533  
Control F-stat= 1.92, p=0.0897  
Concerned F-stat= 2.18, p=0.0551

# Descriptive characteristics



	Small	Middle	Large	Full Sample
Size, in sales	\$10,000-\$99,999	\$100,000-\$249,999	\$250,000+	
Number	260	123	136	519
Average acres	379	958	2036	961
Average years farming	31	30	32	31
Percent with >50% (>75%) farming income	33 (12)	82 (57)	88 (73)	59 (39)
Most common products (>50% indicated)	Beef, hay	Beef, soybeans, hay, corn	Soybeans, corn, wheat, hay, beef	Beef, hay, soybeans, corn

# Diversity of farming operations



# Do farmers identify the same issues as most important?



Animal welfare and treatment of farm animals

Biotechnology and the genetic modification of food and crops

Environmental pollution and degradation

Food safety and security

Farm structure and economic, social features of agriculture

Globalization and international trade

Government farm policies, including agricultural subsidies

Other



# Do farmers identify the same issues as most important?



Animal welfare and treatment of farm animals

Biotechnology and the genetic modification of food and crops

Environmental pollution and degradation

Food safety and security

Small farms (45%)

Farm structure and economic, social features of agriculture

**Middle farms (50%)**

Globalization and international trade

Government farm policies, including agricultural subsidies

Large farms (54%)

Other

# Do farmers identify the same issues as most important?

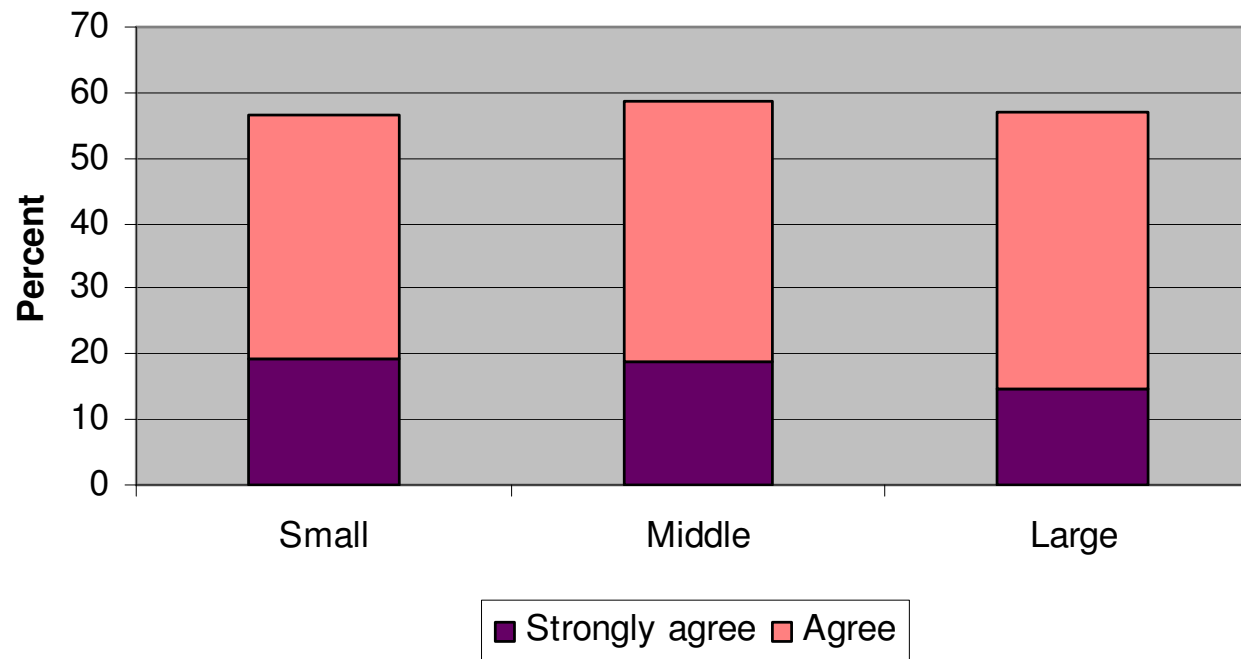


	Small	Middle	Large
Animal welfare and treatment of farm animals	15%	12%	2%
Biotechnology and the genetic modification of food and crops	14%	11%	24%
Environmental pollution and degradation	15%	15%	9%
Food safety and security	<u>45%</u>	35%	27%
Farm structure and economic, social features of agriculture	33%	<u>50%</u>	36%
Globalization and international trade	29%	31%	37%
Government farm policies, including agricultural subsidies	35%	37%	<u>54%</u>
Other	5%	9%	4%

# Some differences in attitudes regarding stewardship



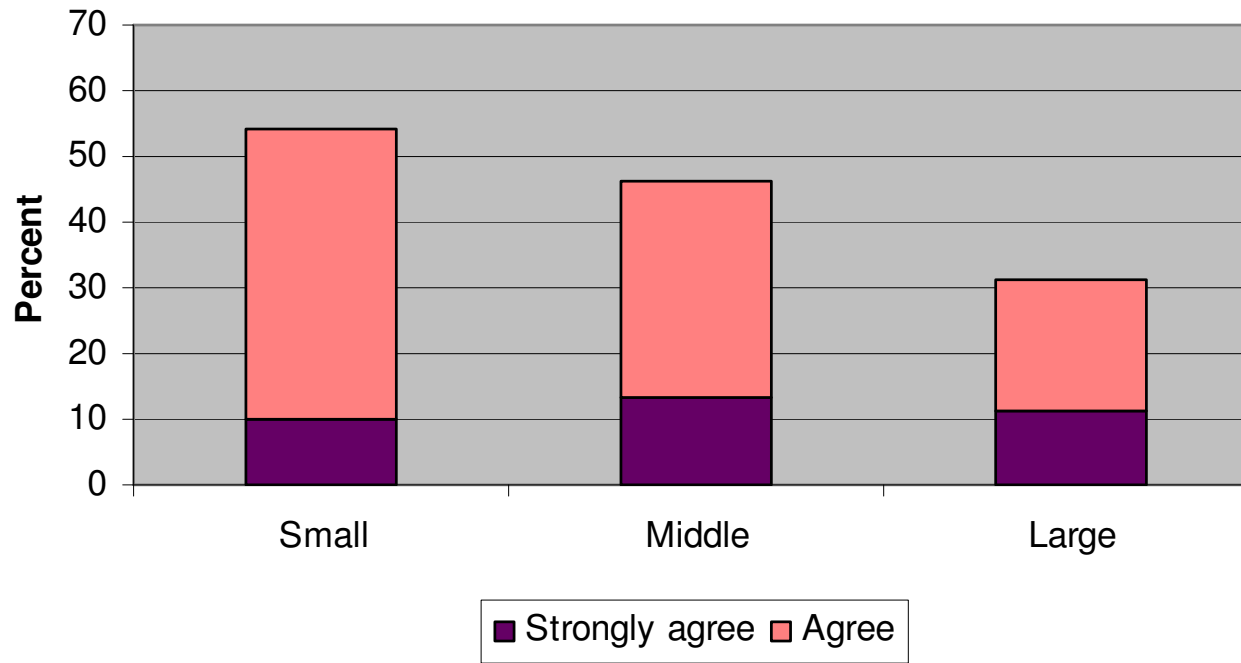
- Farmers have a responsibility to conserve their land, even if it hurts them financially



# Some differences in attitudes regarding stewardship



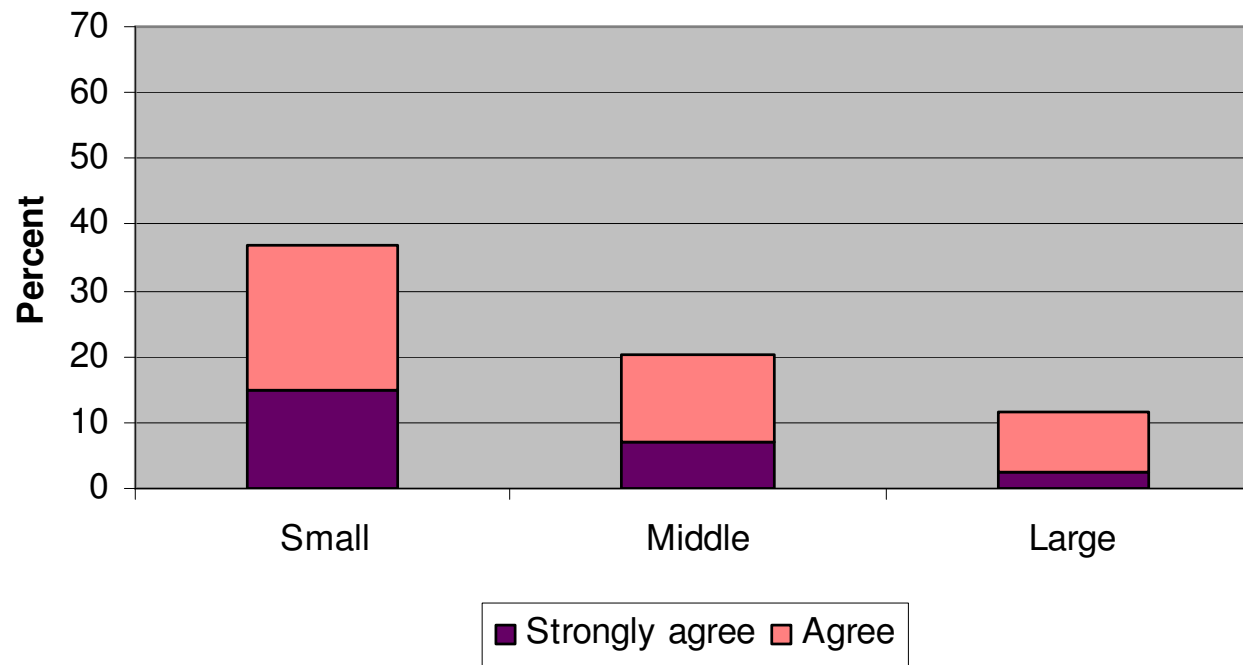
- A farmer who uses little or no artificial pesticides or herbicides is more responsible than a farmer who uses these chemicals extensively.



# Some differences in attitudes regarding stewardship



- A farmer who allows animals to forage in an open pasture is more responsible than a farmer who confines animals to buildings or cages.

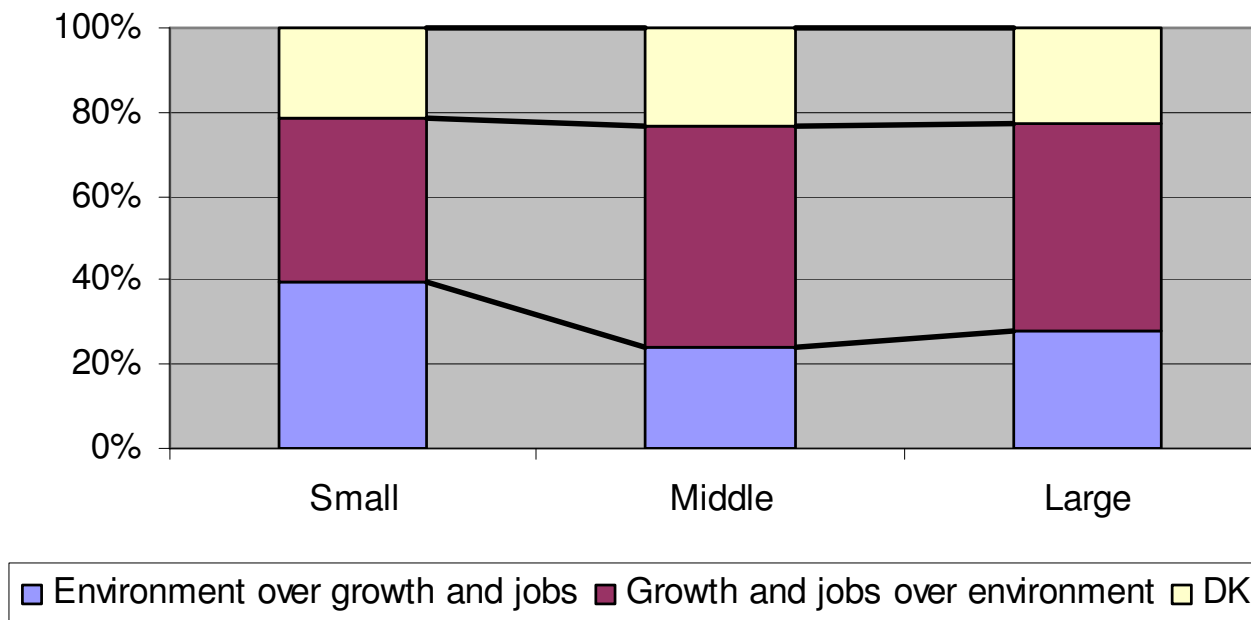




# Some differences in attitudes and outlook



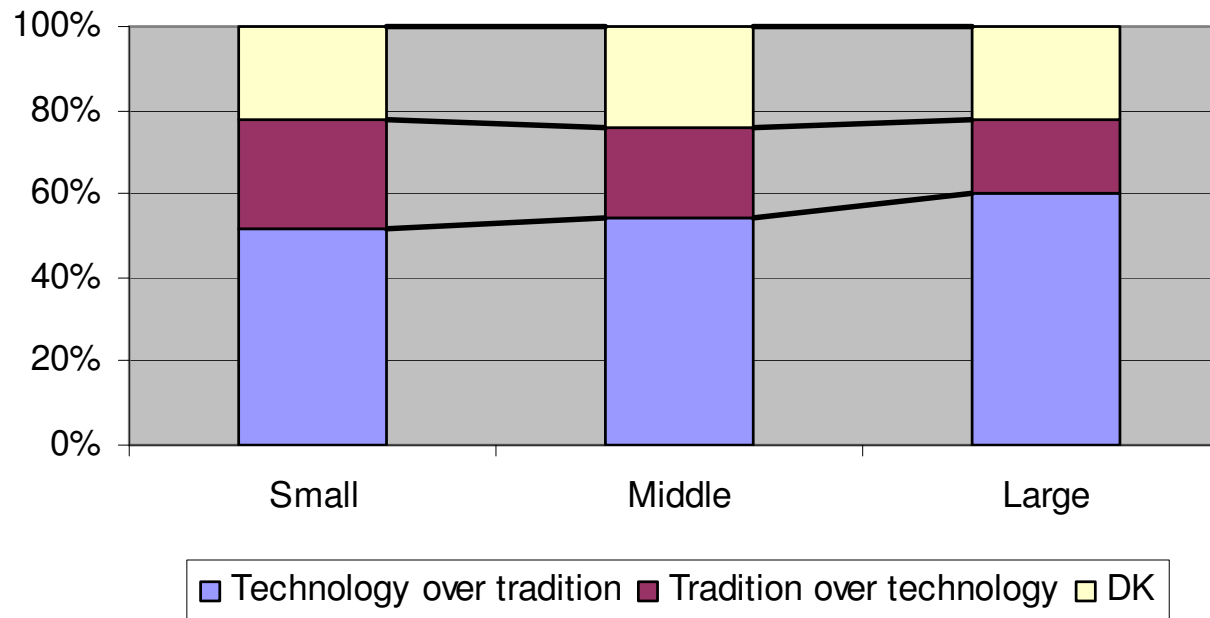
- Should protecting the environment or economic growth and job creation be given top priority?



# Some differences in attitudes and outlook



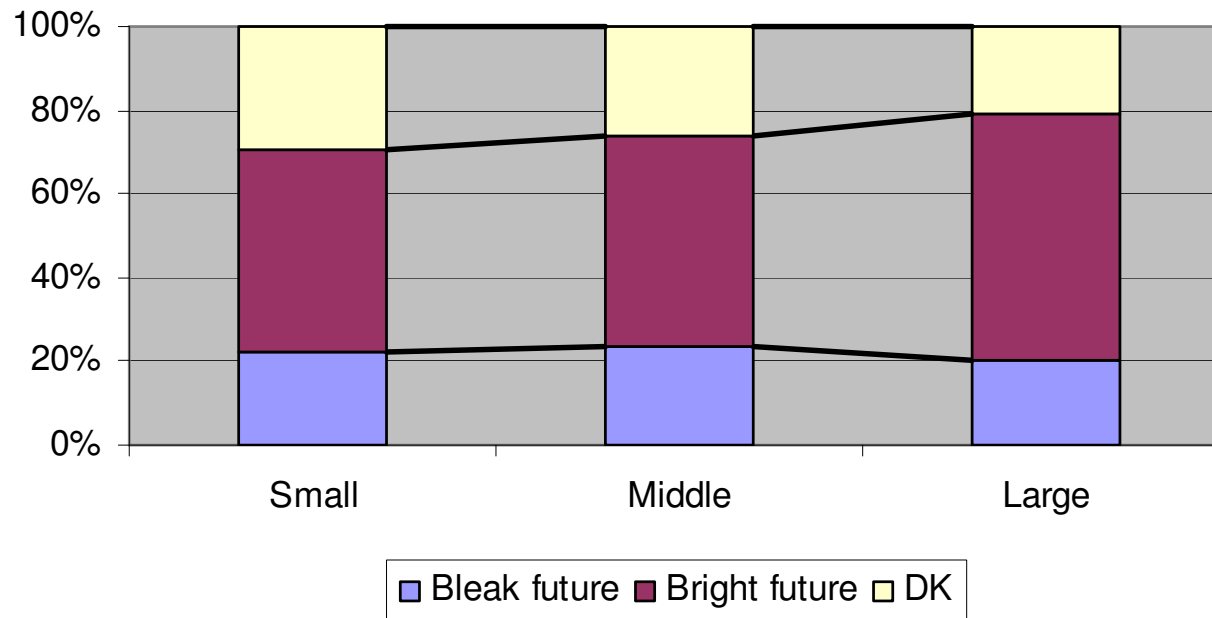
- Should we emphasize new technology or tradition?



# Some differences in attitudes and outlook



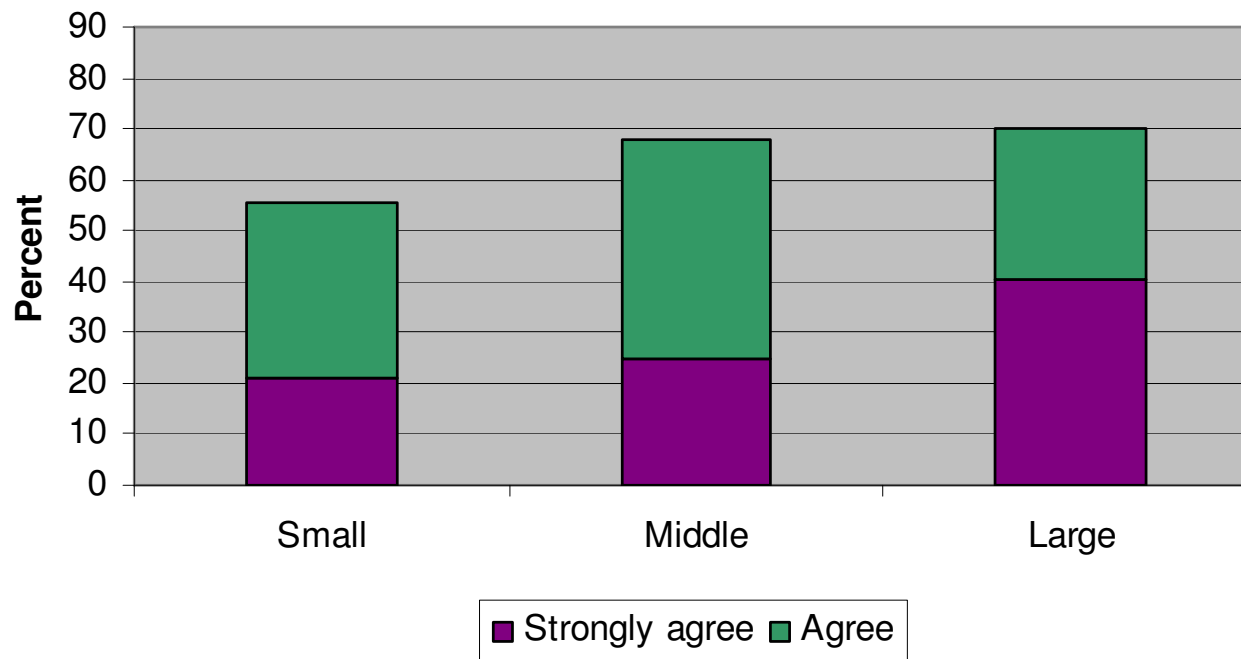
- Does humanity have a bleak or bright future?





# Thoughts on GMOs

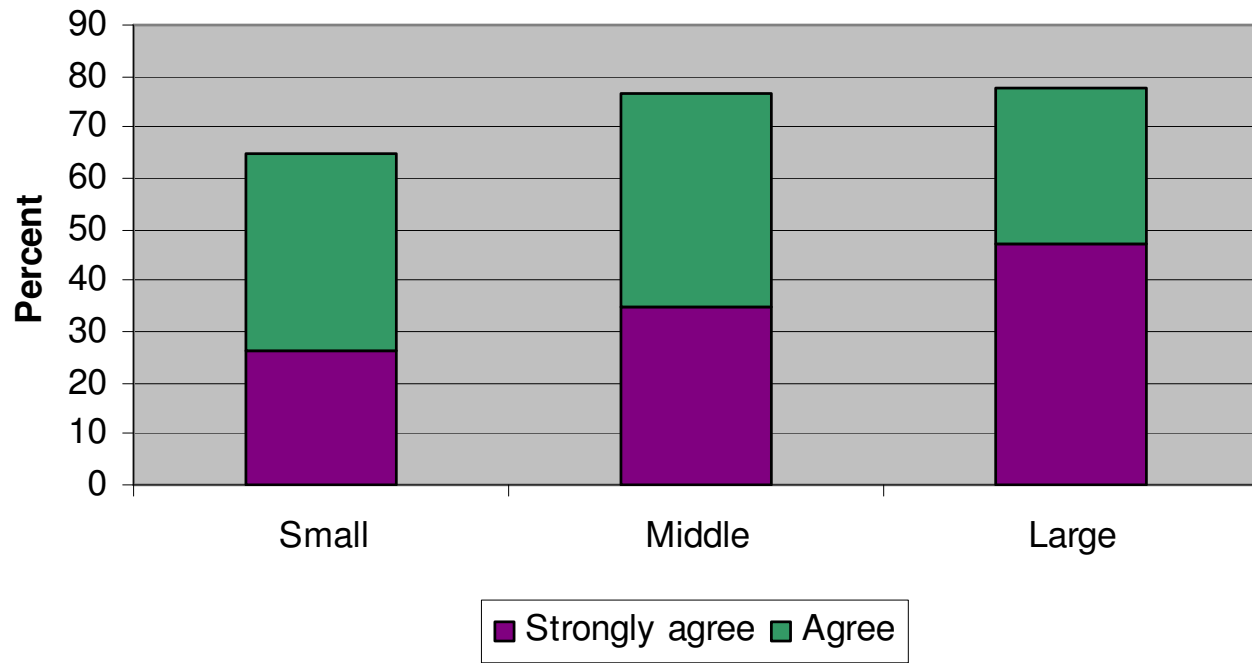
- The genetic modification of food and crops is good for farmers.





# Thoughts on GMOs

- The genetic modification of food and crops is good for agribusiness firms.

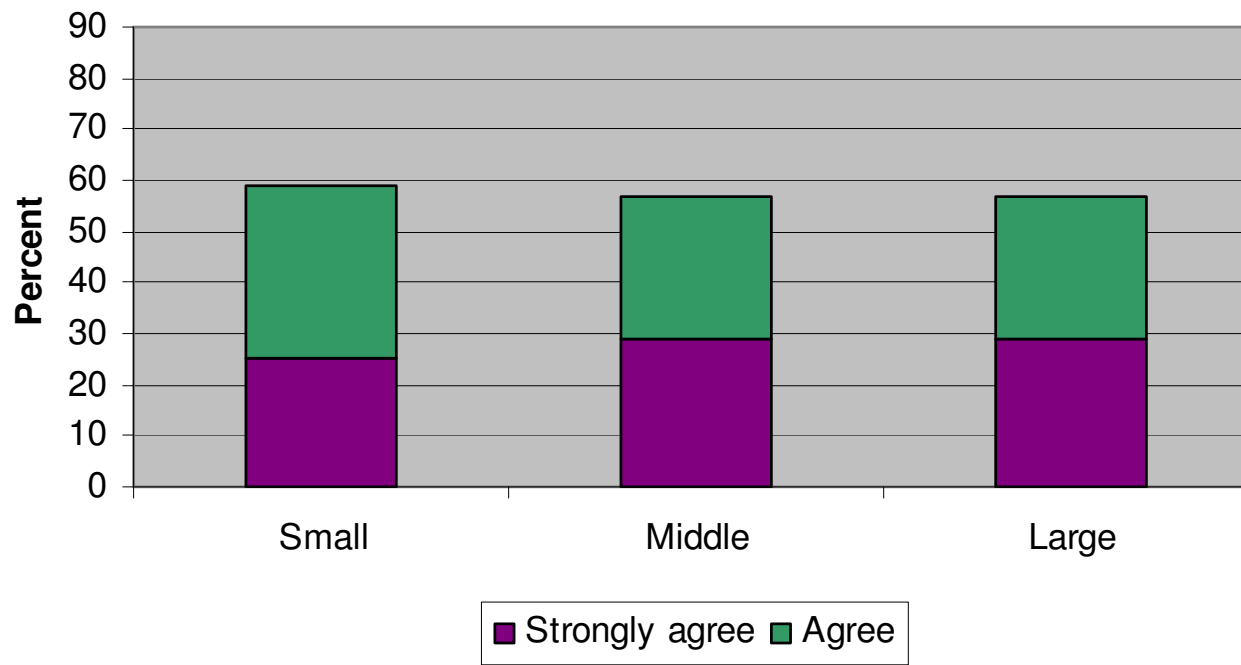






# Thoughts on GMOs

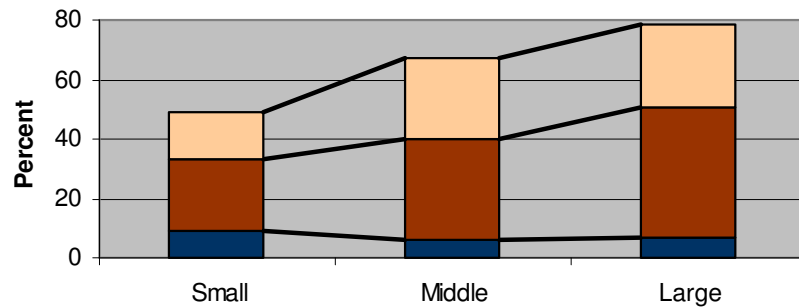
- The federal government should require that foods containing GM ingredients have labels showing GM content.



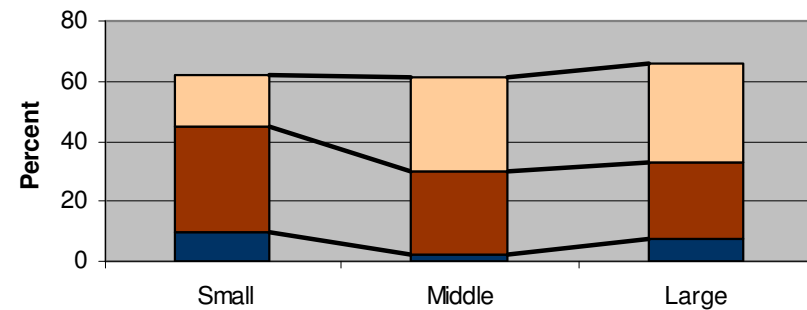


# Perceptions of quality of life

- During the past 5 years, the farmer's life ...
- During the next 5 years, the farmer's life will ...



■ Became much better ■ Became somewhat better ■ Remained the same

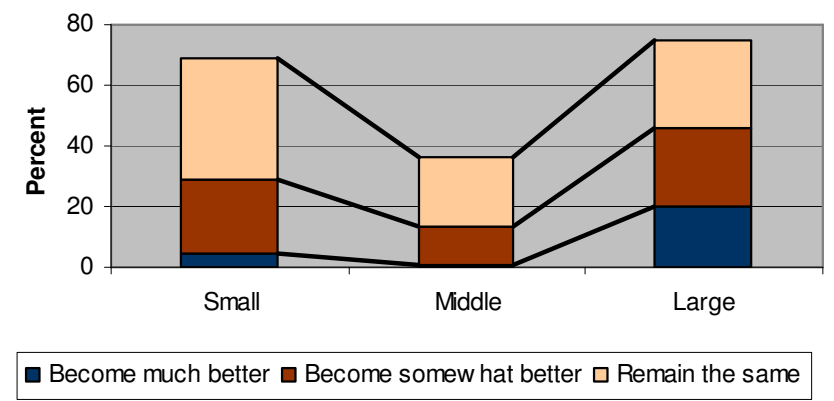
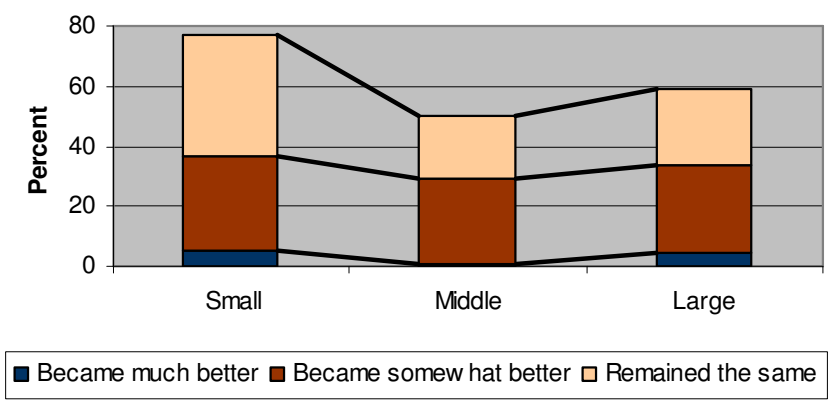


■ Become much better ■ Become somewhat better ■ Remain the same



# Perceptions of quality of life

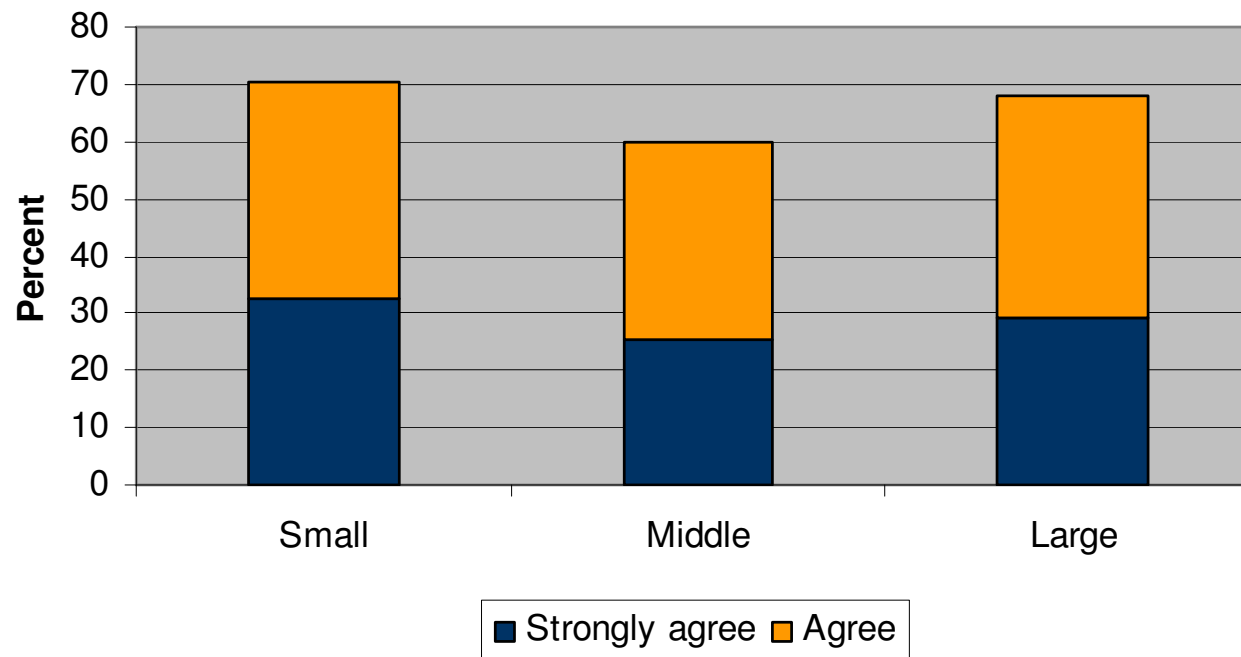
- During the past 5 years, economic conditions for MO farmers ...
- During the next 5 years, economic conditions for MO farmers will ...





# Ethical attitudes

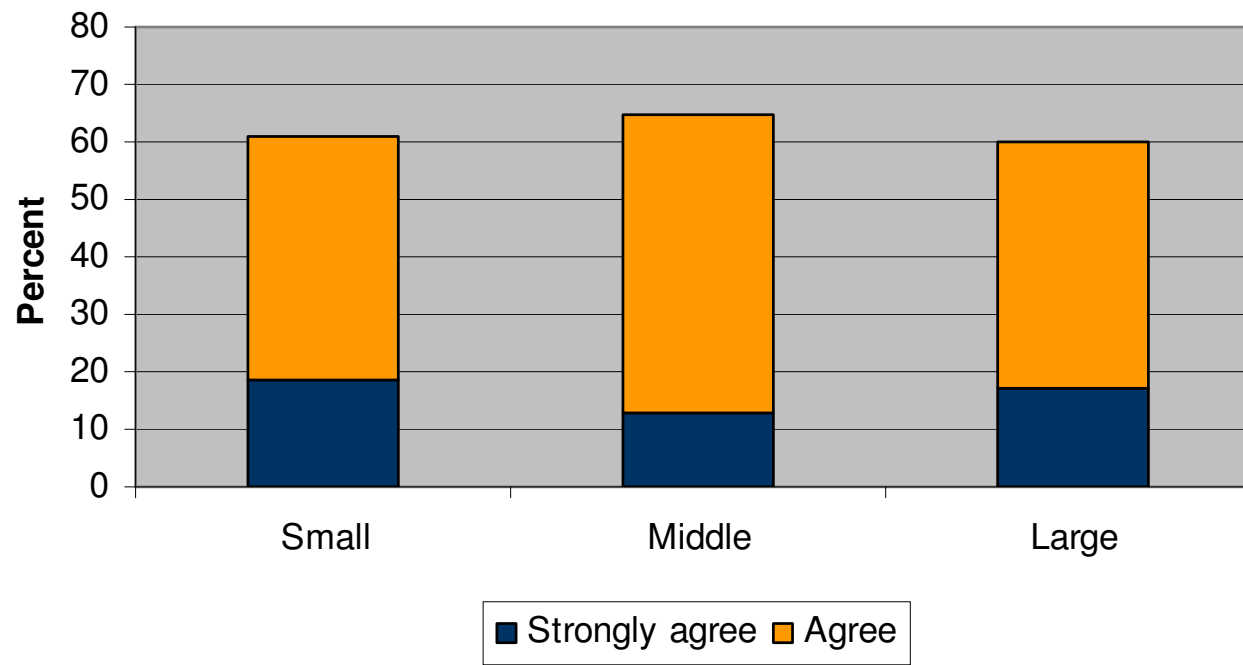
- Most farmers are ethical in their business dealings with others.





# Ethical attitudes

- Most people in business are ethical in their dealings with farmers.





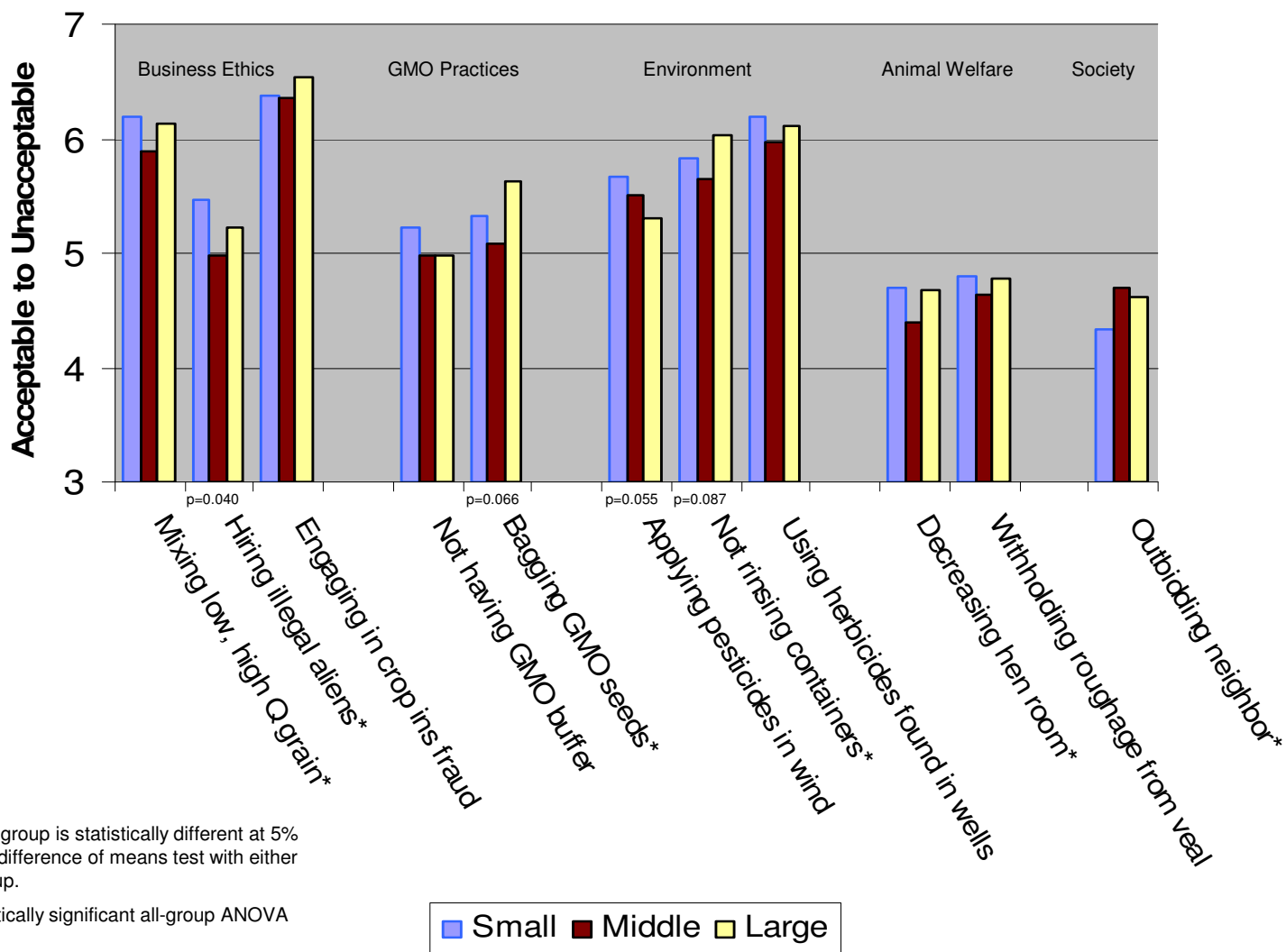
# Farmer ethics

- How do the ethical proclivities of farmers of the middle compare with farmers of small and large scale farms?



*Farmer reading his farm paper*, 1998 print from original negative, National Archives

# Farmer ethics



\* indicates Middle group is statistically different at 5% level in two-tailed difference of means test with either small or large group.

p-values for statistically significant all-group ANOVA



	<b>Dependent Variable: How unacceptable these ethical scenarios are</b>		
Variable	Harmful (N=388)	Unlawful (N=410)	Bad form (N=373)
Frequency	ns	–	–
Impossible rules	–	ns	ns
Satisfied life	ns	ns	ns
Control over life	+	+	ns
Satisfied finances	ns	ns	–
Concerned finances	ns	ns	+
Diversification	ns	ns	+
Age category	+	+	ns
Church attendance	ns	+	ns
Male	–	ns	–

Note: Something “improves farmer ethics” (i.e., causes farmers to consider the ethical problem less acceptable) if the sign of the coefficient is positive.





# Bottom line

- Based on initial descriptive statistics, we can conclude that in some respects “farmers of the middle” are different from other farmers.
- However, we cannot conclude that they have particularly strong, unique or noteworthy attitudes or inclinations with respect to environmental, social or animal stewardship.
- If anything we suspect there is a relative degree of anxiety among farmers of the middle, probably resulting from structural and economic conditions in agriculture.



# What does this mean to you?



- Do these findings reflect what you see happening in agriculture in Missouri?
- Is it appropriate for us to believe that “farmers of the middle” ought to take a greater interest in ecological stewardship, community well-being or animal welfare?
- Such farmers are already facing significant economic pressures resulting from industrialization, globalization, and the like. Do our perceptions that “farmers of the middle” are unique and special add to the pressures they feel?



# What does this mean to Missouri?



- What kind of policies will help farmers in Missouri given these research findings?
- How can farmers, farm organizations and communities across Missouri best use these findings?

