Crop Consolidation and Implications to the Industry

November 16, 2010

Presented by:
E. Allen Lash
CEO, FamilyFarms

FamilyFarms

FamilyFarms
Basic Information

FamilyFarms

How fast could crop consolidation occur?

FamilyFarms

2002 USDA

Farm Size Data

Annual Revenue	Percent of Farms	Revenue Percent
Less than $250,000	92.80%	23.90%
$250,000 - $1M	5.80%	28.60%
$1M - $2.5M	1.0%	15.30%
$2.5M up	0.40%	32.20%

$1,000,000+ **47.5%**

FamilyFarms

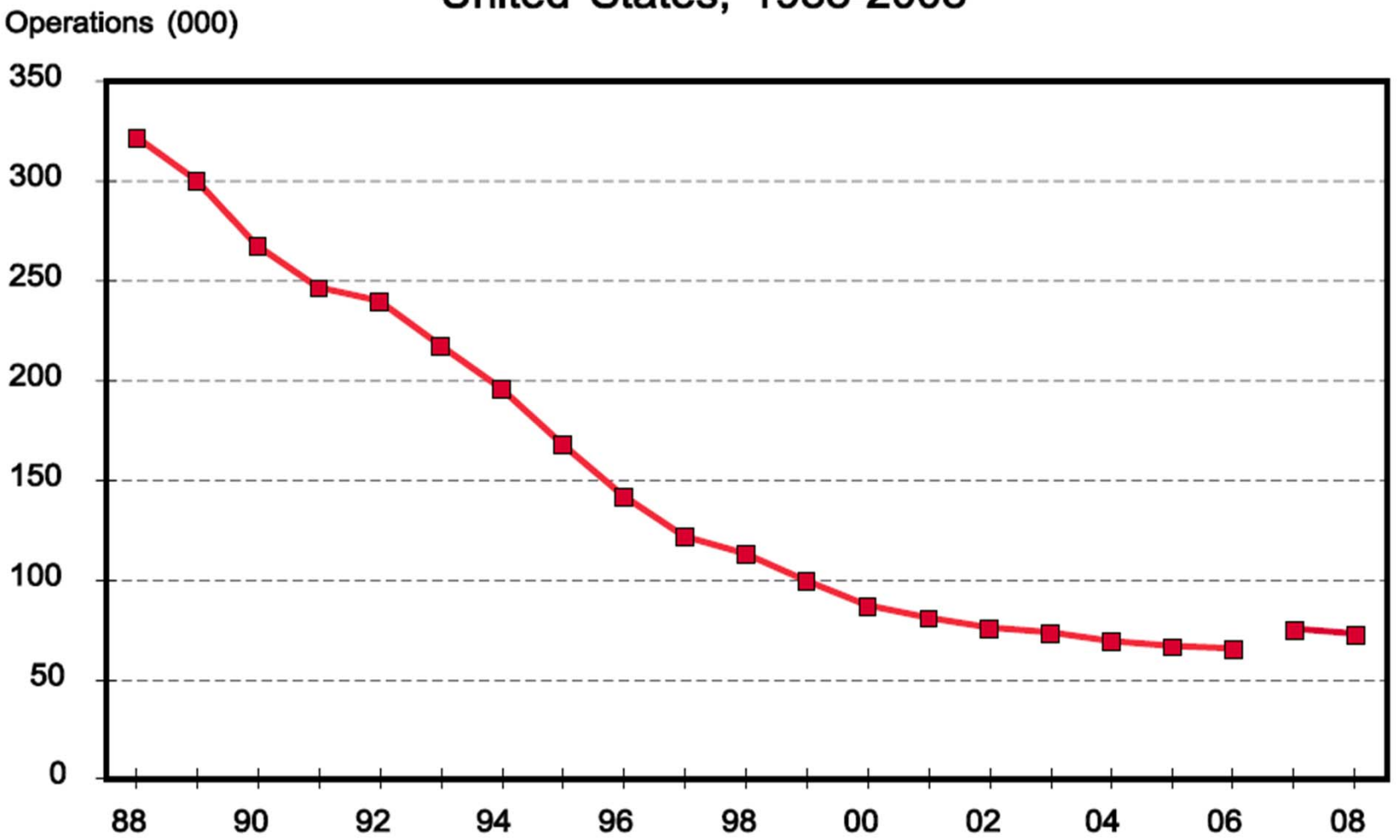
2007 USDA Farm Size Data

Annual Revenue	Percent of Farms	Revenue Percent
Less than $1,000	31%	0.00%
$1,000 - $500,000	63.5% **94.7%**	26.2% **26.2%**
$500,000 - $1M	2.8%	14.40%
$1M - $2.5M	**1.8%**	**20.40%**
$2.5M - $5M	**0.4%**	**10.90%**
$5M up	**0.3% 2.5%**	**27.9% 59.2%**

$1,000,000+ **59.2%**

FamilyFarms

Number of Hog Operations
United States, 1988-2008



Sources of Data: USDA Data

FamilyFarms

Total United States # of Sows vs. Top 20 Powerhouses # of Sows

Year	# of Sows	Top 20 Powerhouses	
		# of Sows	% of Sows Owned
1988	7,053,000.00		
1989	6,857,000.00		
1990	6,847,000.00		
1991	7,229,000.00		
1992	7,109,000.00		
1993	7,166,000.00		
1994	6,998,000.00	1,010,000.00	14.4%
1995	6,770,000.00	1,300,000.00	19.2%
1996	6,578,000.00	1,430,000.00	21.7%
1997	6,957,000.00	1,690,000.00	24.3%
1998	6,682,000.00	2,067,000.00	30.9%
1999	6,233,000.00	2,088,000.00	33.5%
2000	6,267,000.00	2,211,000.00	35.3%
2001	6,201,000.00	2,298,000.00	37.0%
2002	6,058,000.00	2,324,000.00	38.4%
2003	6,019,000.00	2,370,000.00	39.4%
2004	5,980,000.00	2,465,000.00	41.2%
2005	6,031,000.00	2,573,000.00	42.7%
2006	6,116,000.00	2,996,000.00	49.0%
2007	6,233,000.00	3,125,000.00	50.1%
2008	6,081,000.00	2,947,800.00	48.4%

Source of Data: USDA Data

Successful Farming Magazine

FamilyFarms

U.S Pork Industry Structure Study, 2006

Estimated Total Number of Operations & Share of U.S. Slaughter in 2006 by Size Category

1988 – 320,000 Producers

Firm Size (thousand head marketed annually)	**Number of Operations**		**Market Share**	
Less than 1	48,434		1%	
1 - 3	4,025	**97.1%**	5%	**15%**
3 - 5	1,150		3%	
5 - 10	1,100		6%	
10 - 50	1,450	**2.6%**	**21%**	**21%**
50 - 500	**164**		**21%**	
500+	**191** **27**	**.3%**	**43%**	**64%**
Total	56,350		100%	

10

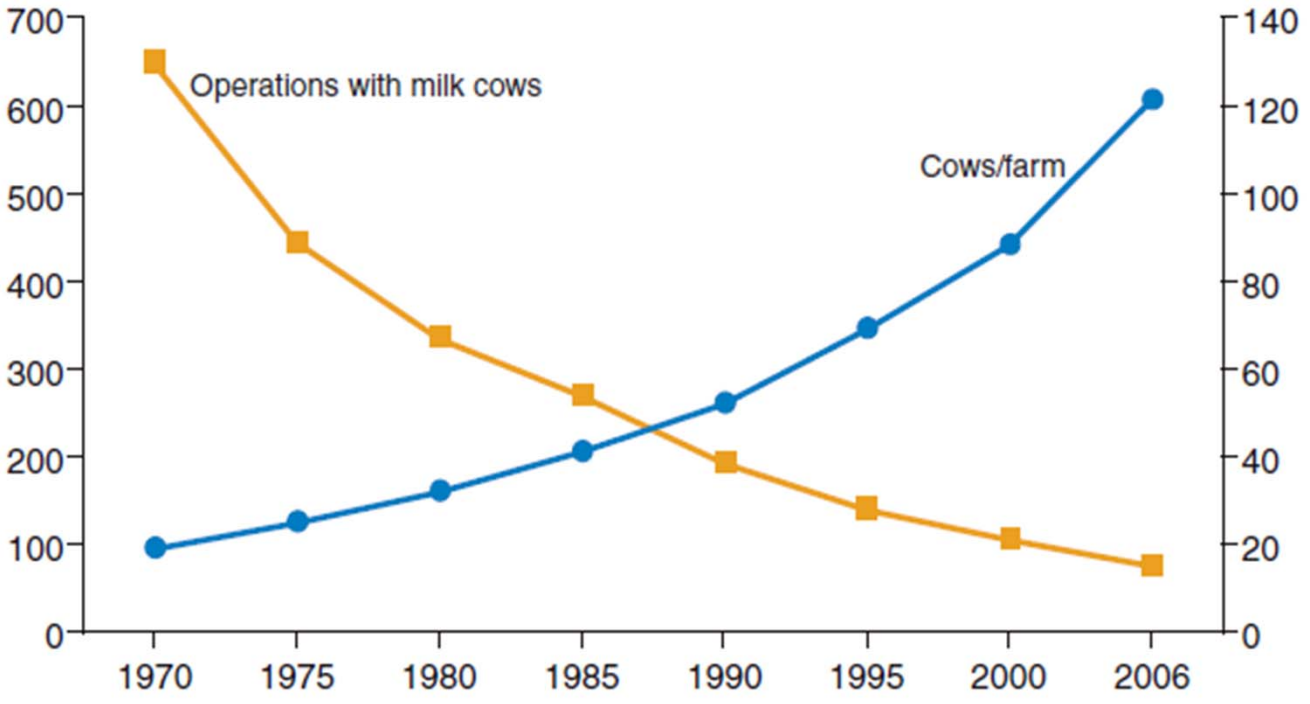
University of Missouri, Iowa State University, Pork magazine, Pig Improvement Company, National Pork Board

FamilyFarms

Dairy Cow Consolidation

Figure 1

The number of dairy farms is declining, while average size is growing



Source: USDA, NASS.

FamilyFarms

Dairy Consolidation

- Number of Dairies fell by 1/3 from 2001 – 2009
- Overall Milk Production increased 15%
- Owners with 2,000+ cows increased 228%, from 325 to 740
- Those 2000+ dairies produced 31% of the U.S. milk production in 2009, up from 13% in 2001
- Production-per-cow increased 6.6 lbs per day (+13%) to 56.4 lbs per day

FamilyFarms

The same rapid consolidation is in process for Crop Agriculture

FamilyFarms

Key Factors

- Aging Population and Changing Demographics
- Rapid Integration of Technology / Biotechnology
- Economic Advantage of Large Crop Operations
- Capital Access
- Staffing and Organization Structure
- Volatility
- Agriculture Distribution Challenges

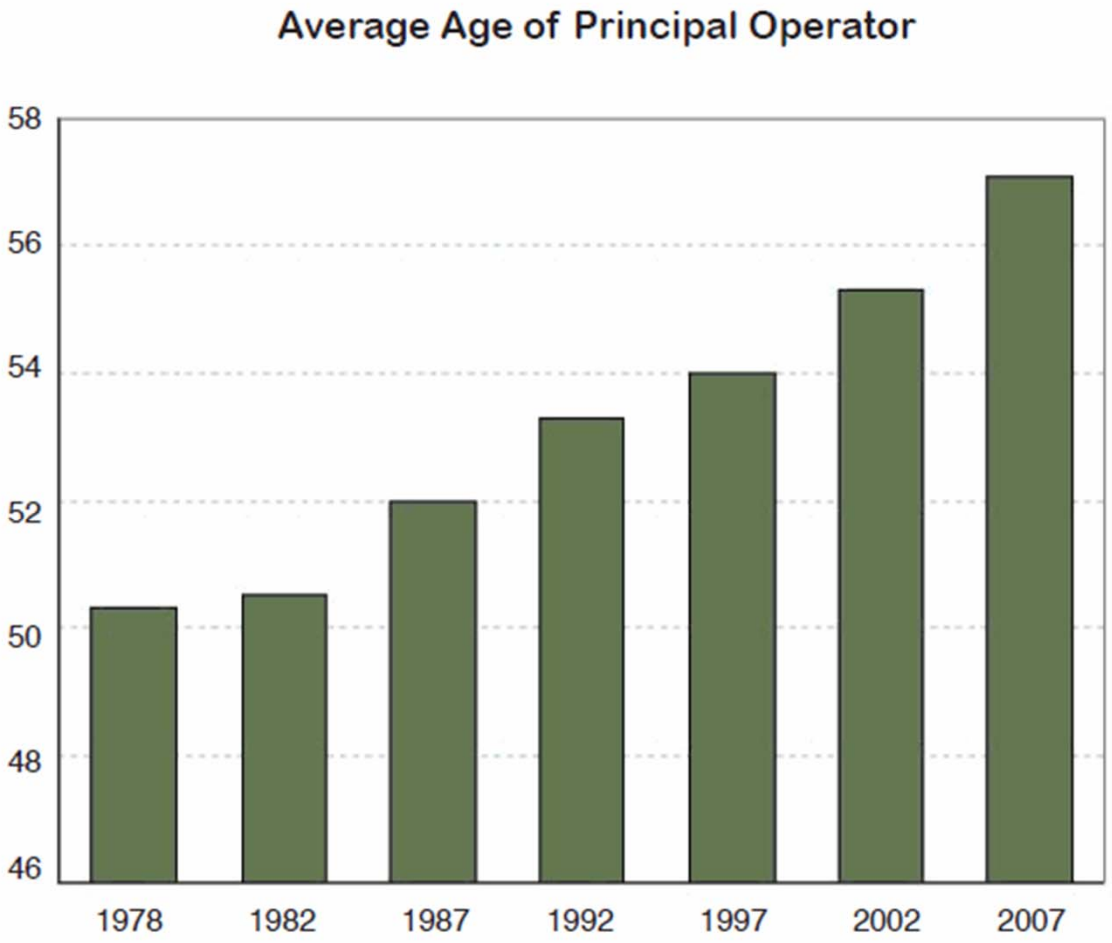
FamilyFarms

Aging Population

FamilyFarms

Age

The average age of U.S. farm operators increased from 55.3 in 2002 to 57.1 in 2007. The number of operators 75 years and older grew by 20 percent from 2002, while the number of operators under 25 years of age decreased 30 percent.



From the 2007 Census of Agriculture

Cornell University – April 2003

"We are heading toward a bimodal structure with a few very large producers and a larger number of small, local niche marketers. ***Medium sized farms will become fewer and will be a transitional group of small farms becoming large."***

FamilyFarms

Technology and Biotechnology

FamilyFarms

Key Technological and Institutional Change Factors

- Biotechnology
- AutoTrac/Steer Mechanization
  - Next Driverless Equipment
- Use of more GPS/GIS data
- Computerization
- Bio-engineered hybrid seeds
- Use of ever-changing chemicals
- Regulatory Issues

FamilyFarms

Formula for Large Scale Successful Crop Production

+	Roundup	1986
+	Yield Monitors/GPS & GIS	1992
+	Roundup Ready	1997
+	AutoTrac Steering	2002
+	Enhanced Producer **Business** Skills	2008
+	Capital Access	2010-12
+	New Traits (Drought Tolerant, etc.)	2012
+	Driverless Equipment	2013-15

= The New Crop Consolidation Paradigm

FamilyFarms

Projected US Corn Yields

Corn Yields

Yield Increase Forecasts

from Select Seed Genetic Companies

2009 - National Average - 165.2 bushels per acre

Year	2%	2.50%	3%
2010	168.5	169.3	170.2
2015	186.0	191.6	197.3
2020	*205.4*	*216.8*	*228.7*
2025	226.8	245.2	265.1
2030	250.4	277.5	307.3
2035	276.5	313.9	356.3
2040	305.2	355.2	413.0
2045	337.0	401.9	478.8
2050	***372***	***455***	***555***

FamilyFarms

Crop Economic Issues

FamilyFarms

Projected US Corn Yields

Corn Yields

Total Bushels Produced (Billions)

2009 - National Average - 165.2 bushels per acre			
Year	Total Produced (Bil)	Total Produced (Bil)	Total Produced (Bil)
2010	13.4	13.5	13.5
2015	14.7	15.1	15.6
2020	16.1	17.0	18.0
2025	17.7	19.1	20.7
2030	19.4	21.5	23.8
2035	21.3	24.2	27.4
2040	23.4	27.2	31.6
2045	25.6	30.5	36.4
2050	***28***	***34.3***	***41.9***

FamilyFarms

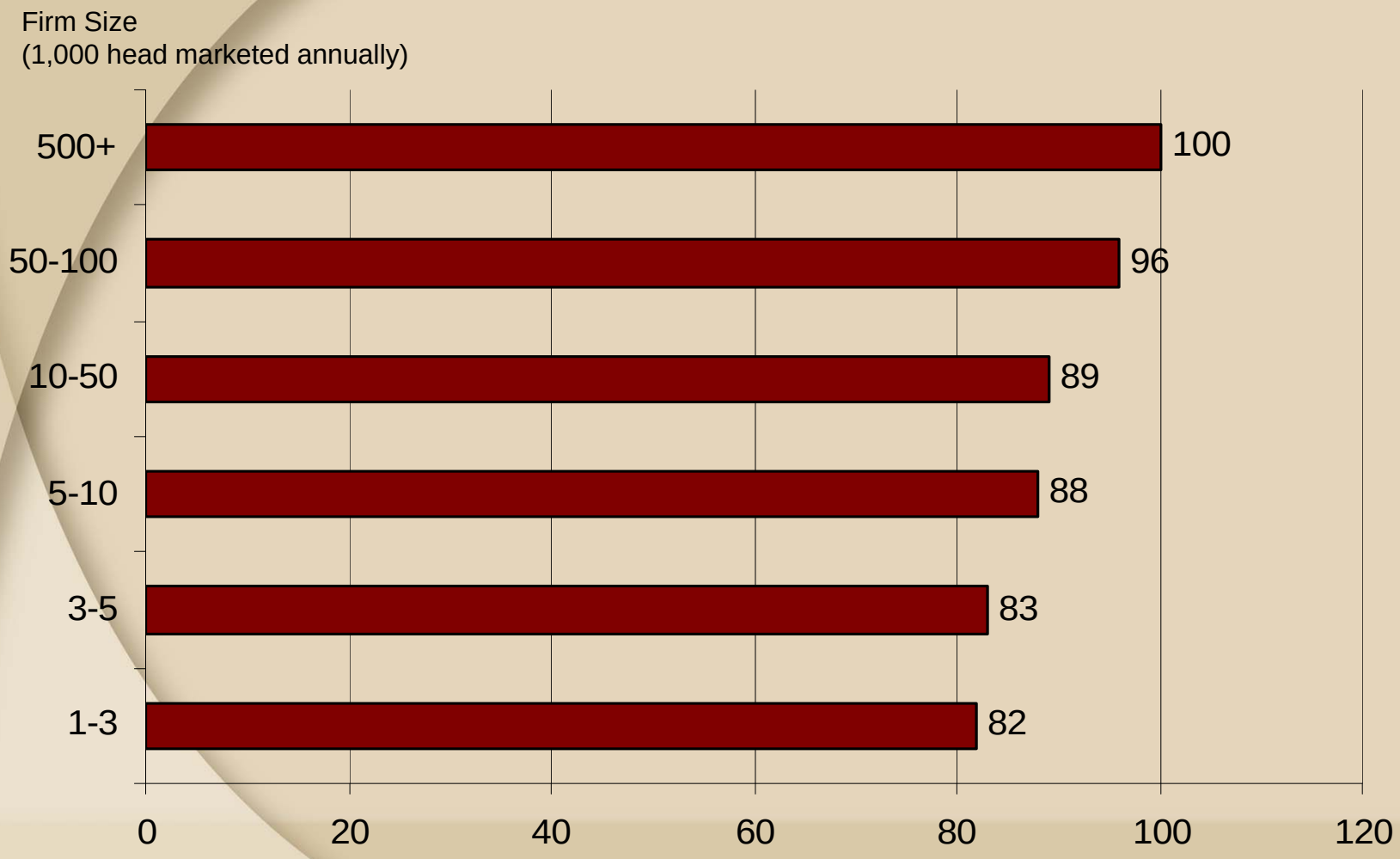
Margin
Large Operations can:

- Because of revenue advantages and reduced risk, have greater revenue assurances
- Can better fix most costs
- Have more potential for assured margins and less risk

FamilyFarms

U.S Pork Industry Structure Study, 2006

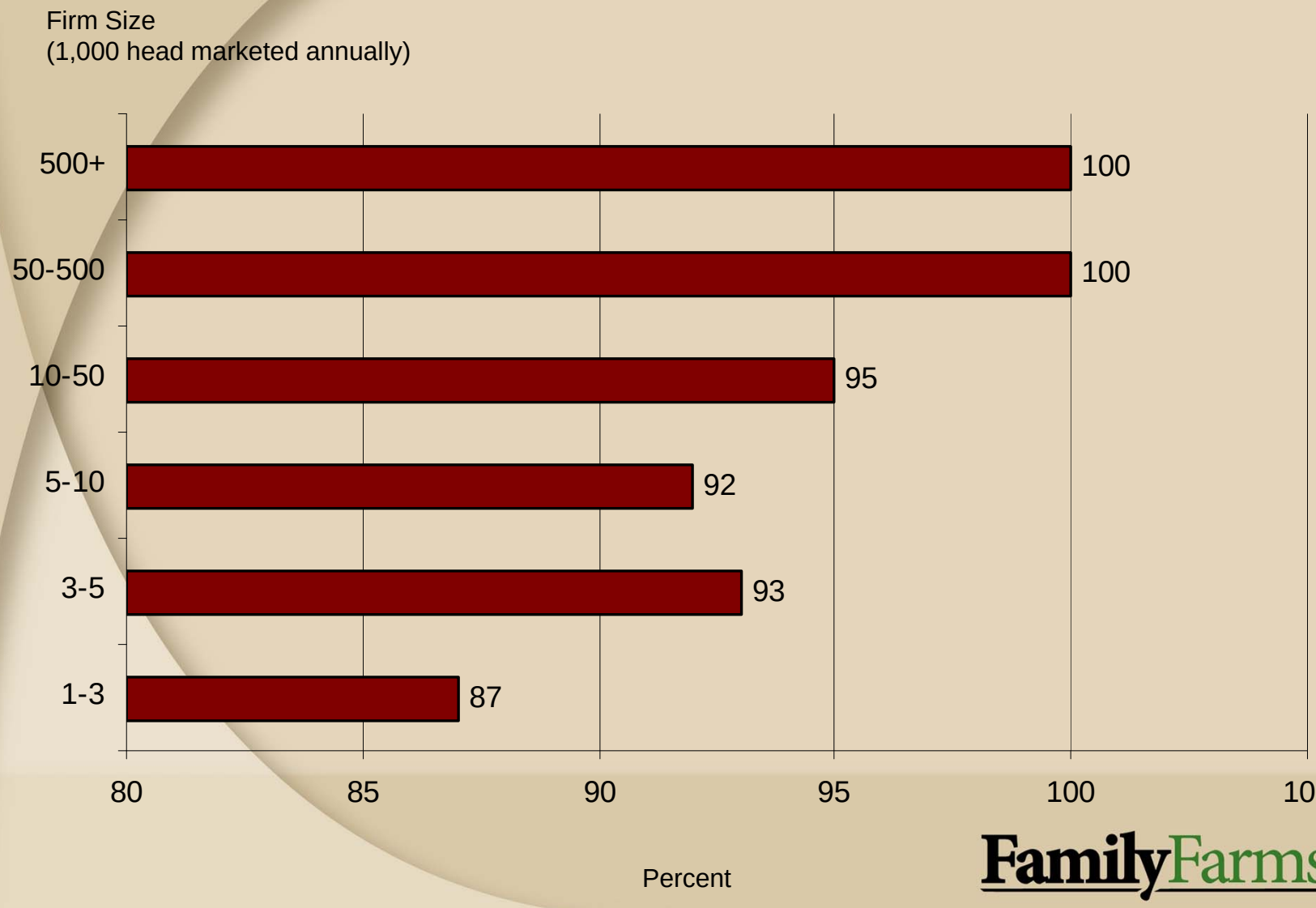
Percent of Pork Firms That Made a Profit in 2006



FamilyFarms

U.S Pork Industry Structure Study, 2006

Percent of Pork Firms That Made a Profit in 2005



FamilyFarms

Formula for Large Scale Successful Pork Operations

+	Outside Dirt Lots to Climate Controlled Buildings	1970-1973
+	Contract Production, especially of finisher pigs	Mid 1970's
+	Movement to Three Stage Production	Late 1970's
+	Segregated Early Weaning	Early 1980's
+	Specialization versus farrow to finish production	Mid 1980's
+	All In/All Out Management	Late 1980's
+	Packer Contracts	Mid 1990's

= Pork Consolidation Paradigm

FamilyFarms

“Unless an organization is changing on the inside as fast as the industry is changing on the outside, the end is in sight.”

Jack Welch, former CEO of General Electric

FamilyFarms

Capital Access

FamilyFarms

“Capital has no loyalty;

It always seeks the individual or organization that can provide the highest reward.”

-George Dunn

FamilyFarms

Capital has financial rules:

- Audited statements (GAAP)
  (Accrual accounting/cost basis)
- Accounting Standards
- Accounting Professionals

Typical Crop Producer Financials

- Cash Basis (Tax returns)
- Market Basis Statements

FamilyFarms

Capital Access

- GAAP Financials required but so are:
  - Scale (size)
  - Formal Organization Structure
  - Professional Staff
  - Formal Business Plan and Model
  - Competitive Advantages

FamilyFarms

Staffing and Structure

FamilyFarms

Today's Ag Crop Producer

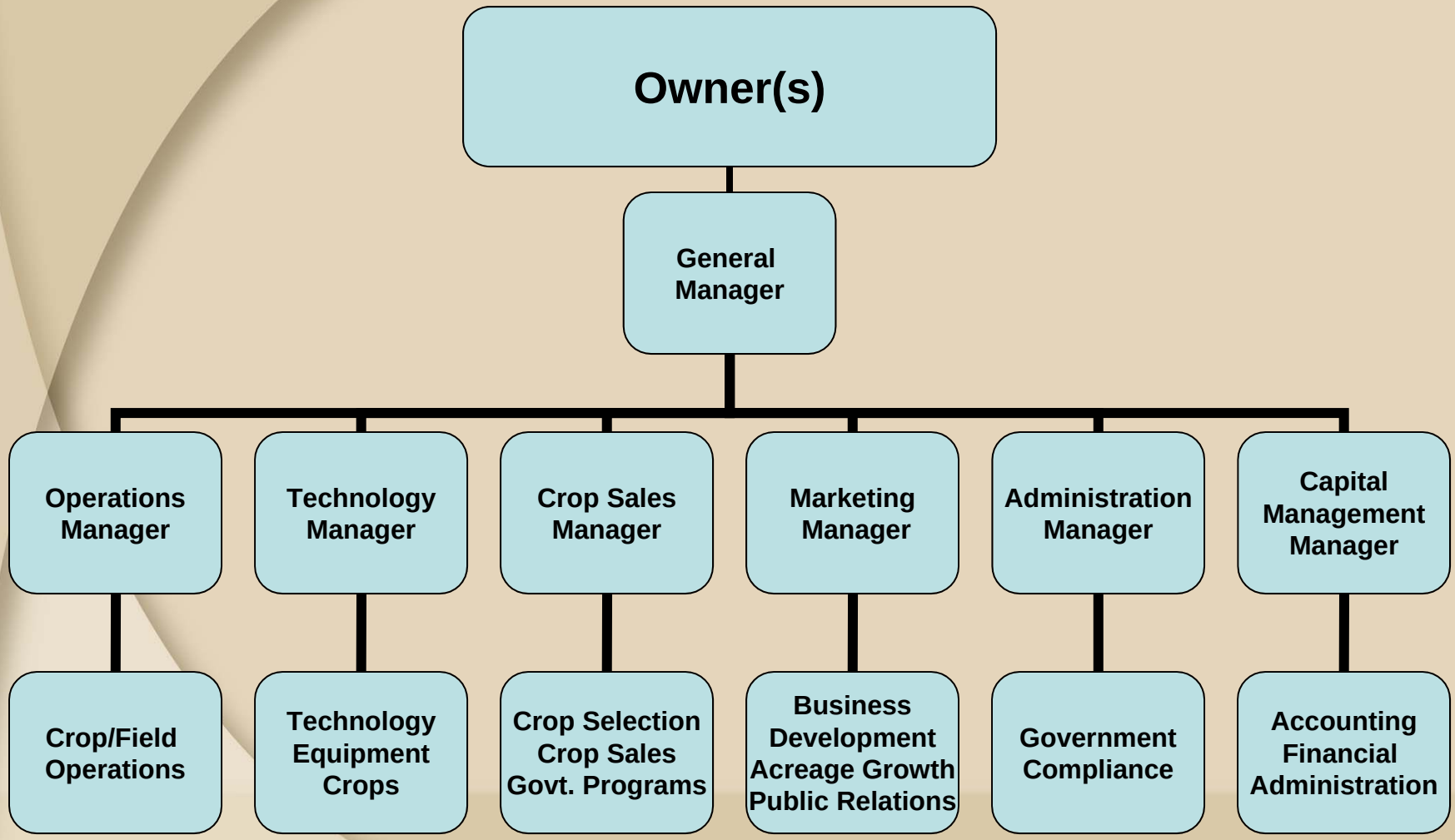
WORKER

OR

Manager of Workers

FamilyFarms

Future (FamilyFarms) Staffing Requirement



FamilyFarms

Volatility

FamilyFarms

Volatility Issues

It appears we will continue to see extreme market volatility

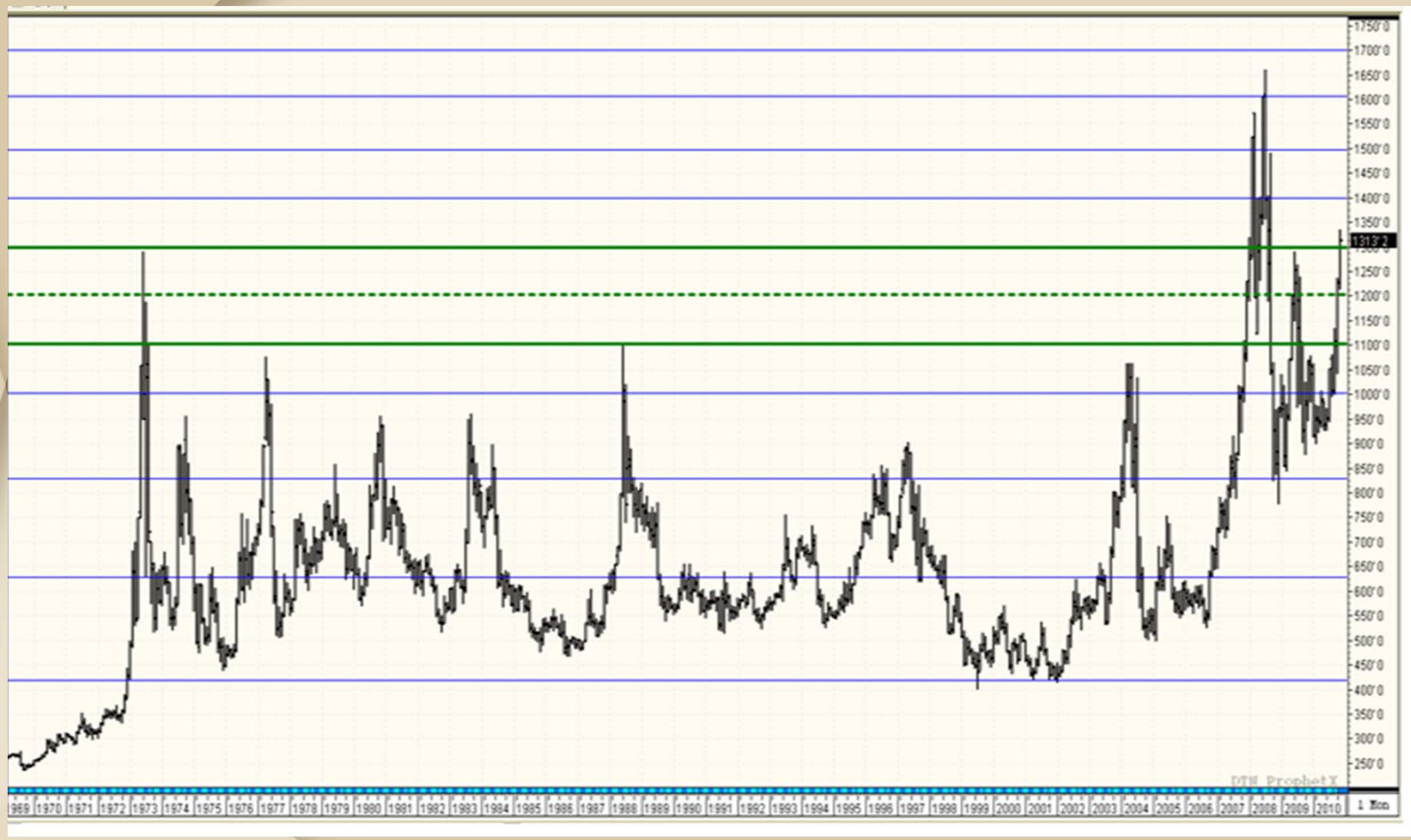
- **Grain futures at historically high and then low levels**
- **Uncertainty over future acreage and yields**
- **Less predictable weather**

FamilyFarms

Continuous Corn Futures

FamilyFarms

Continuous Bean Futures



FamilyFarms

Revenue Side

Producers must be able to price portions of multi- year crops.

- **To ensure profitability on a portion of future production**
- ***Problem:*** **Funds to cover margin calls to protect prices**
- **Assure lender of profitability**

FamilyFarms

Cost Side

Producers must have the ability to lock in input costs to:

- **Price or hedge future input cost at profitable levels**
- **One, two, even three years ahead**
- **Assure lenders of farm profitability**

FamilyFarms

Agriculture Distribution Challenges

FamilyFarms

Agriculture Distribution Challenges:

1. Crop Agriculture's distribution system and costs were and still are built to service the 500 to 3,000-acre farms.
2. The system is not necessary and the costs are not appropriate for large crop operations.
3. The larger rapidly growing producers' needs are significantly different.

FamilyFarms

Questions?

FamilyFarms