



Agricultural Concentration

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Concentration In Agriculture

- **Not A New Phenomenon**
- **In U.S. Dates To Late 18th & Early 19th Century**
- **At Beginning of 19th Century 90% of U.S. Population Employed In Agriculture**
- **Today Less Than 3% of U.S. Population Employed In Agriculture**

Concentration In Agriculture

- **Productivity Improvements Made Possible Great Strides In**
 - **Nutrition**
 - **Life Expectancy**
 - **Income**

Concentration In Agriculture

When Agriculture Was Dominant Economic Activity

- Quality of Life Was Low**
- Food Production Absorbed Most Labor**
- Little Labor Left For Production of Other Goods & Services**
- Leisure Time Very Limited**

Concentration In Agriculture

- **Historically, Limiting Factor In Ag. Production Was Labor**
- **Technology Changed This**
 - **From 1800 to 1900 Labor Required To Grow 1 Ton of Wheat Declined 70%**
 - **Today's Labor Requirements Per Ton Are About 1% of 1800 Level**

Concentration In Agriculture

- **Productivity Improvements In Agriculture Made Possible Industrial Revolution**
- **Labor “Freed Up” From Agriculture Moved To New Industrial Sector**
- **Result Was Rapid Progress**
 - **Incomes Grew**
 - **Nutrition Improved**
 - **Life Expectancy Increased**

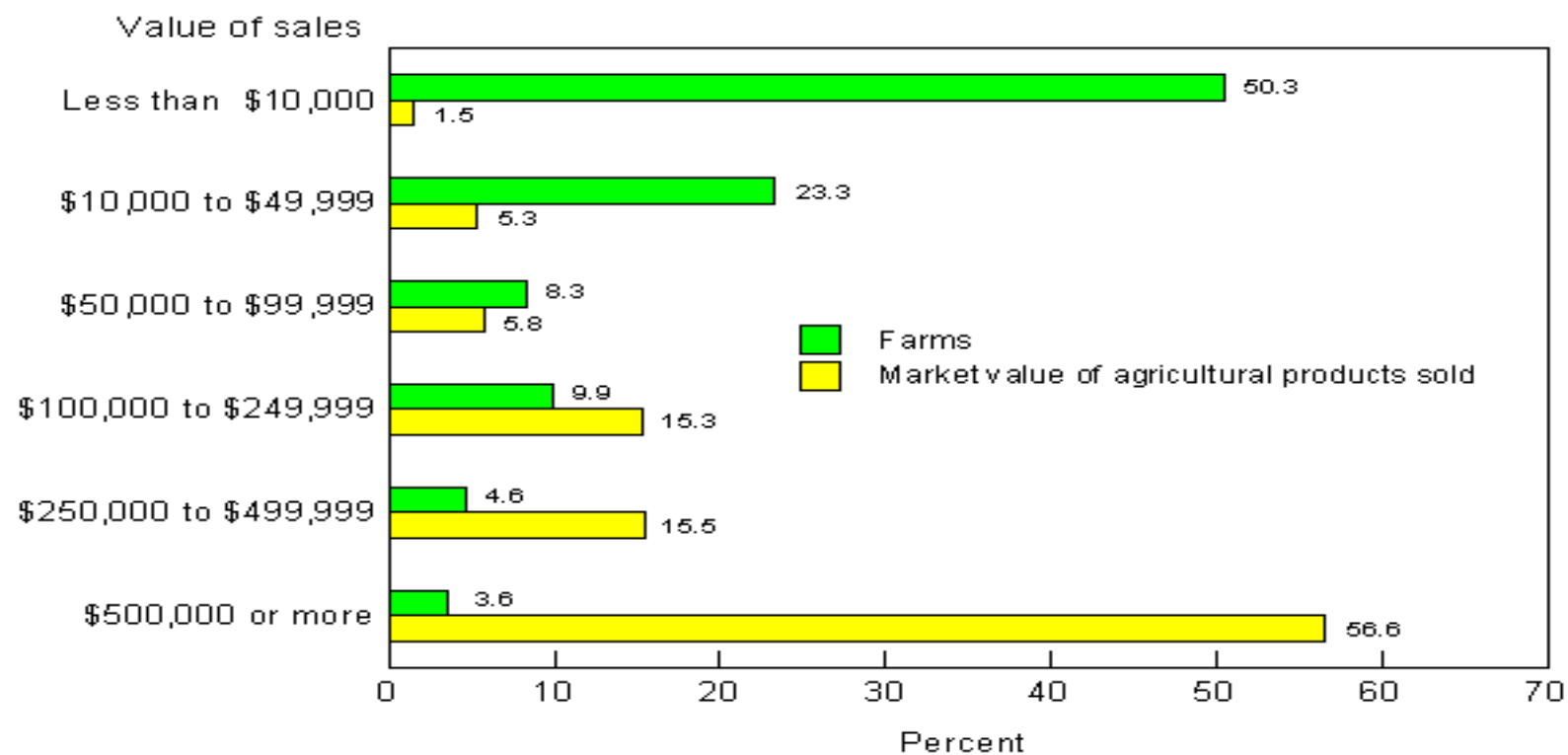
Concentration In Agriculture

Historical Summary

- **Concentration In Ag. Has Provided Innumerable Benefits To Society**
- **In Other Words, Concentration In Production Agriculture Has Been “A Good Thing”**
- **& It Will Continue**

Concentration Is Ongoing

Figure 2. **Percent of Farms and of Market Value of Agricultural Products Sold: 1997**



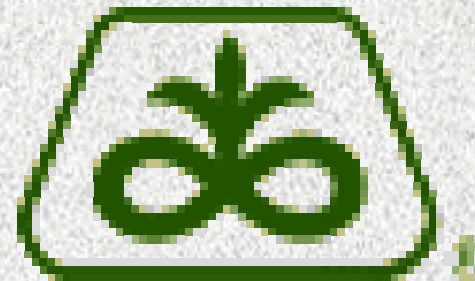
1997 CENSUS OF AGRICULTURE

UNITED STATES

Industrialization Of Agriculture

- **Not New, But It Is Accelerating**
- **Characterized By**
 - **Division Of Labor Through Specialization**
 - **Growing % of Production Under Contract or Via Vertical Supply Chains**
 - **Used To Coordinate Fragmented Prod., Reduce Transaction Costs & Market Risk**

Agricultural Merger Mania



Concentration in Agriculture

1. Horizontal Mergers:

PSF - Continental Grain

Ford/New Holland - Case IH

Cenex Harvest States - Farmland

2. Vertical Mergers:

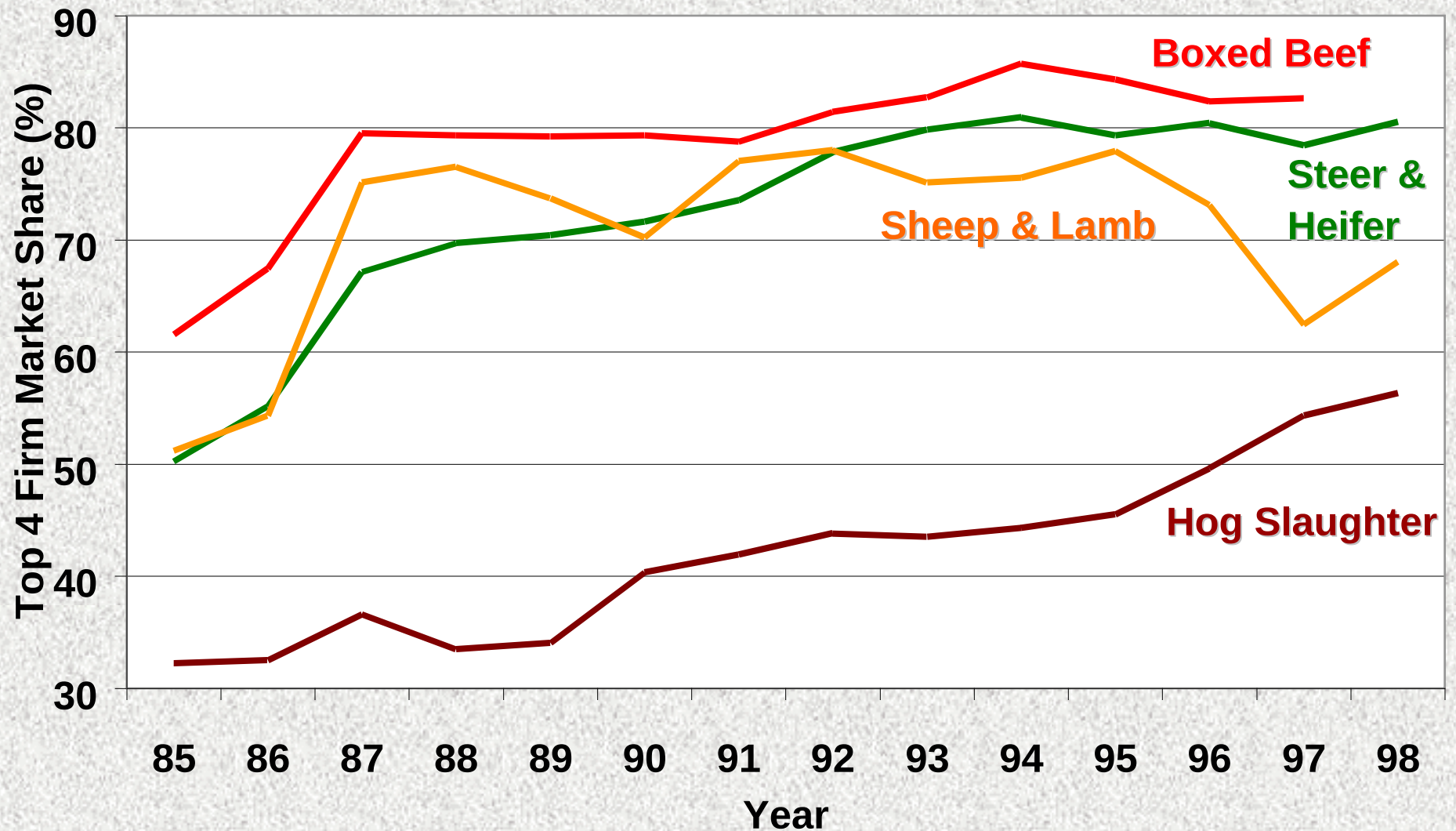
Smithfield - Murphy Family Farms

IBP - Thorn Apple Valley

3. Conglomerate Mergers:

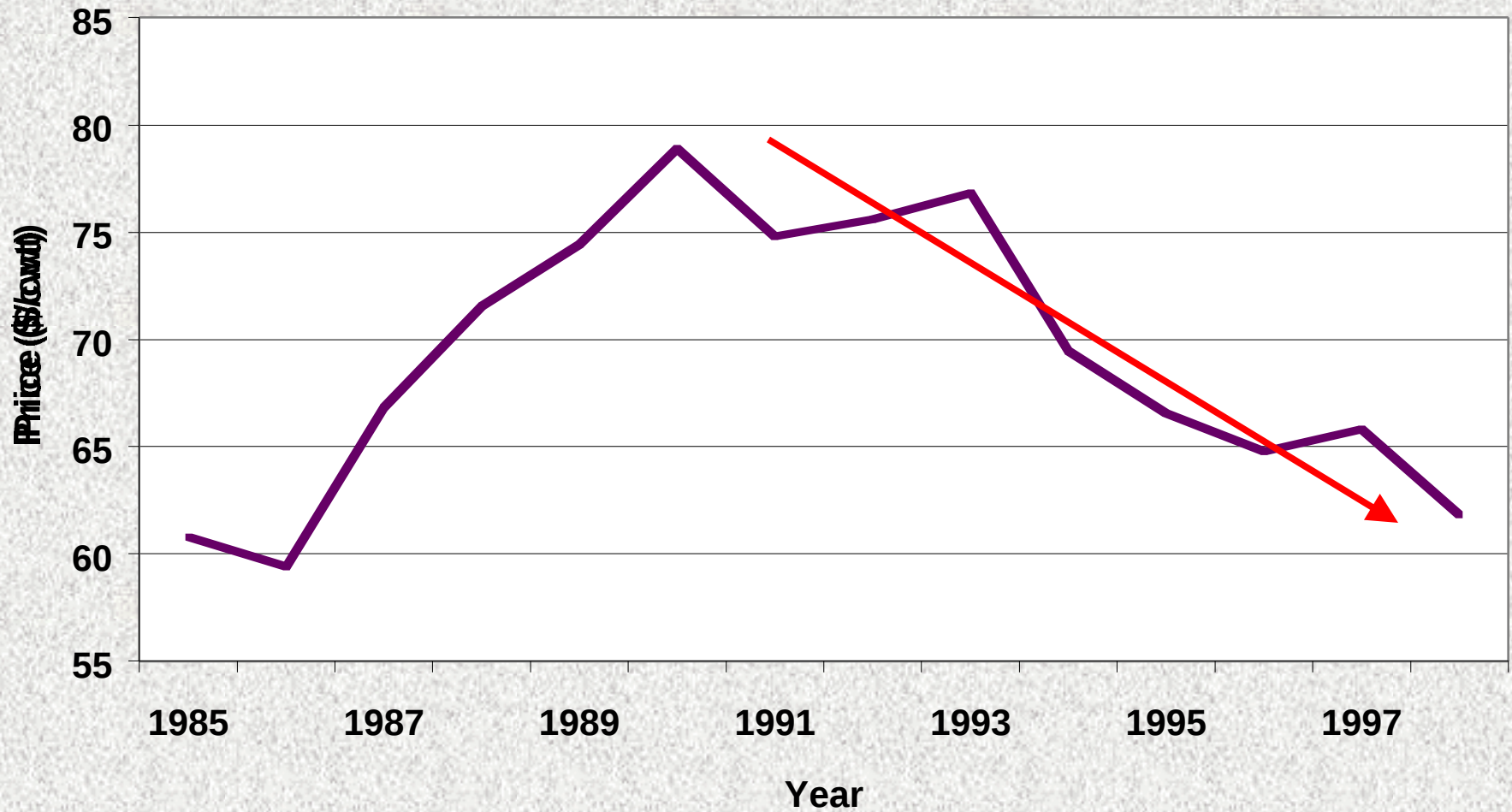
DuPont - Pioneer

Four-Firm Concentration Levels, 1985-98



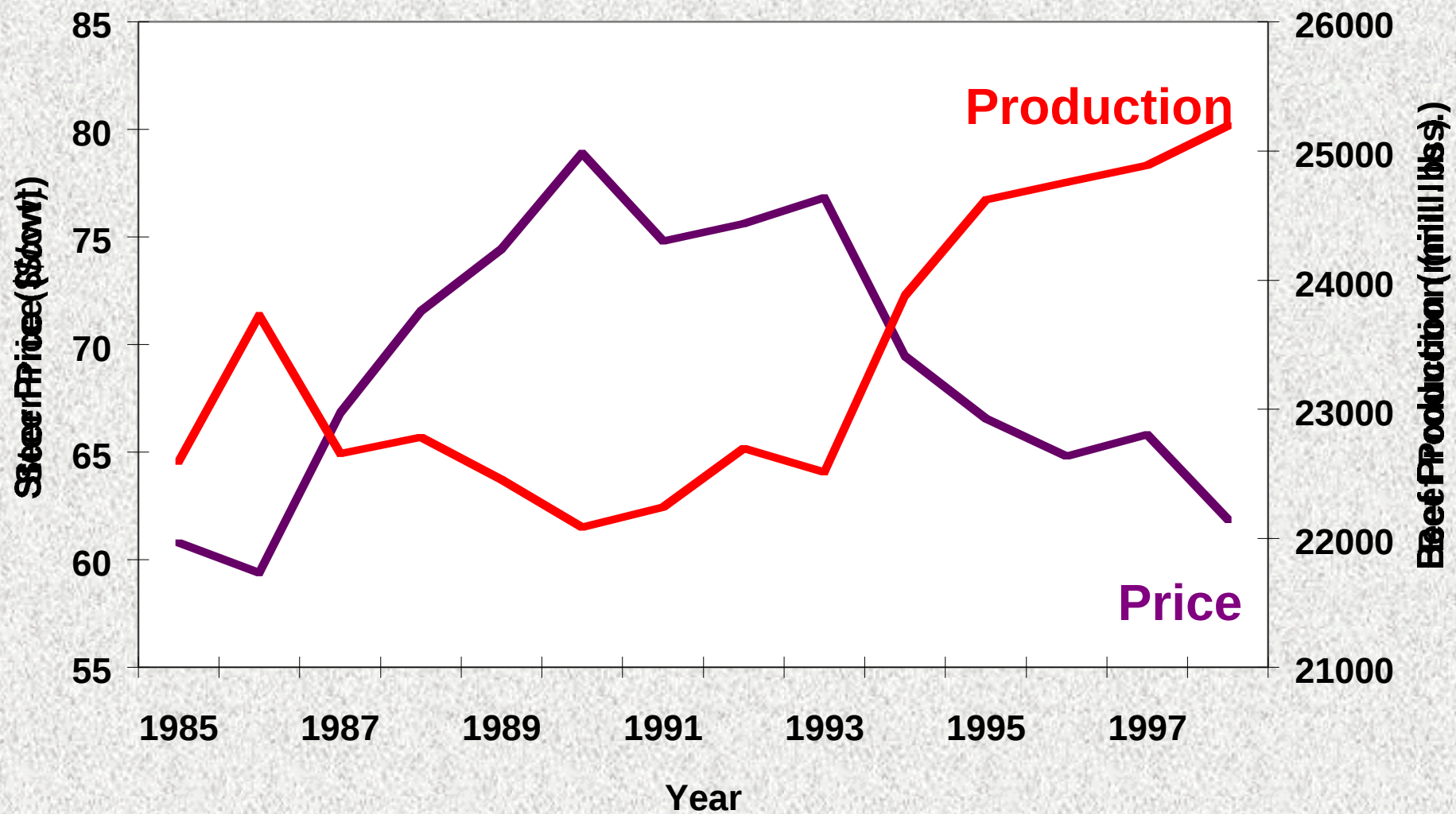
Source: USDA

Western Kansas Fed Steer Price, 1985-98

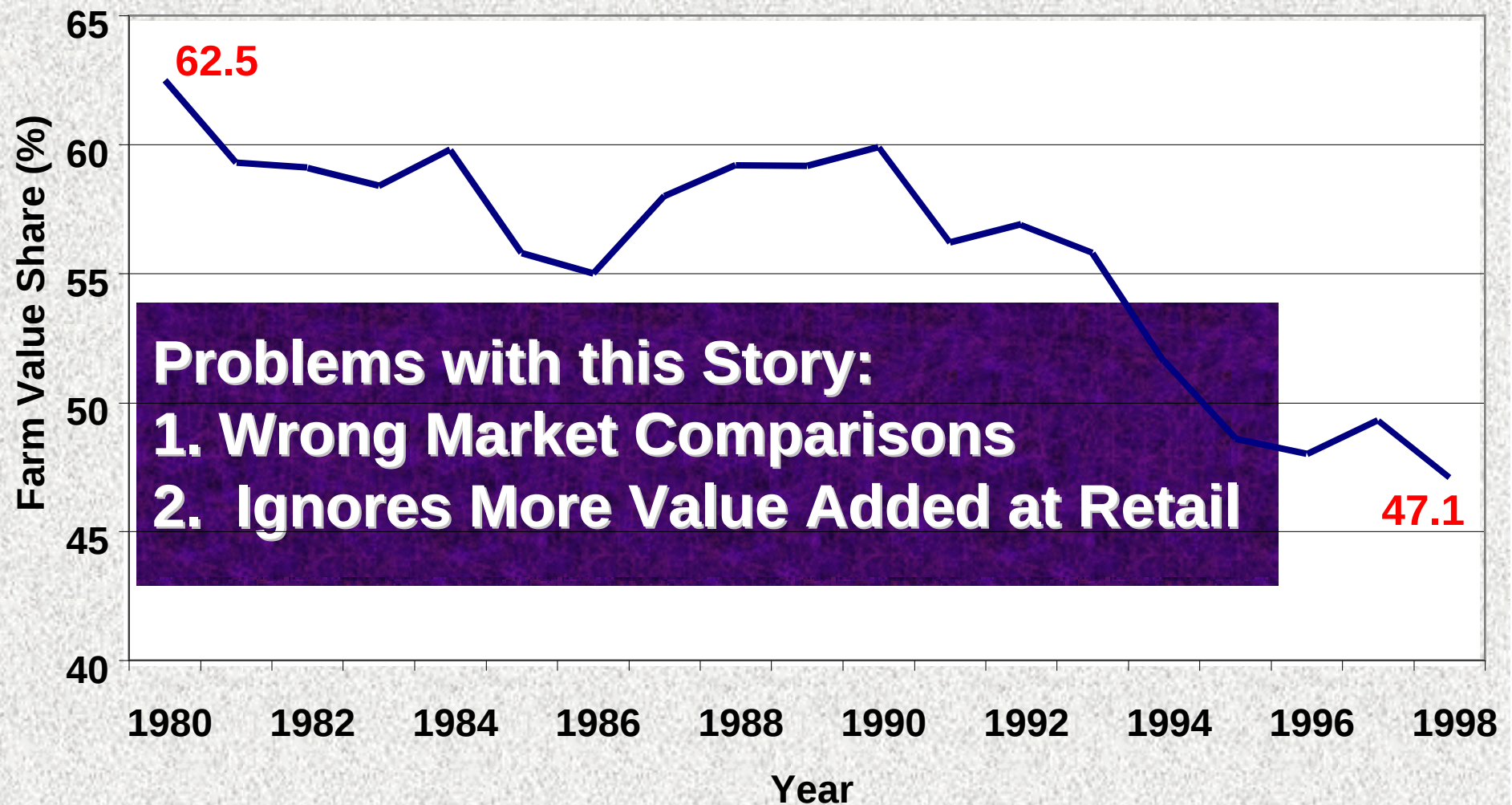


Source: USDA

Fed Steer Price vs. Beef Production, 1985-98

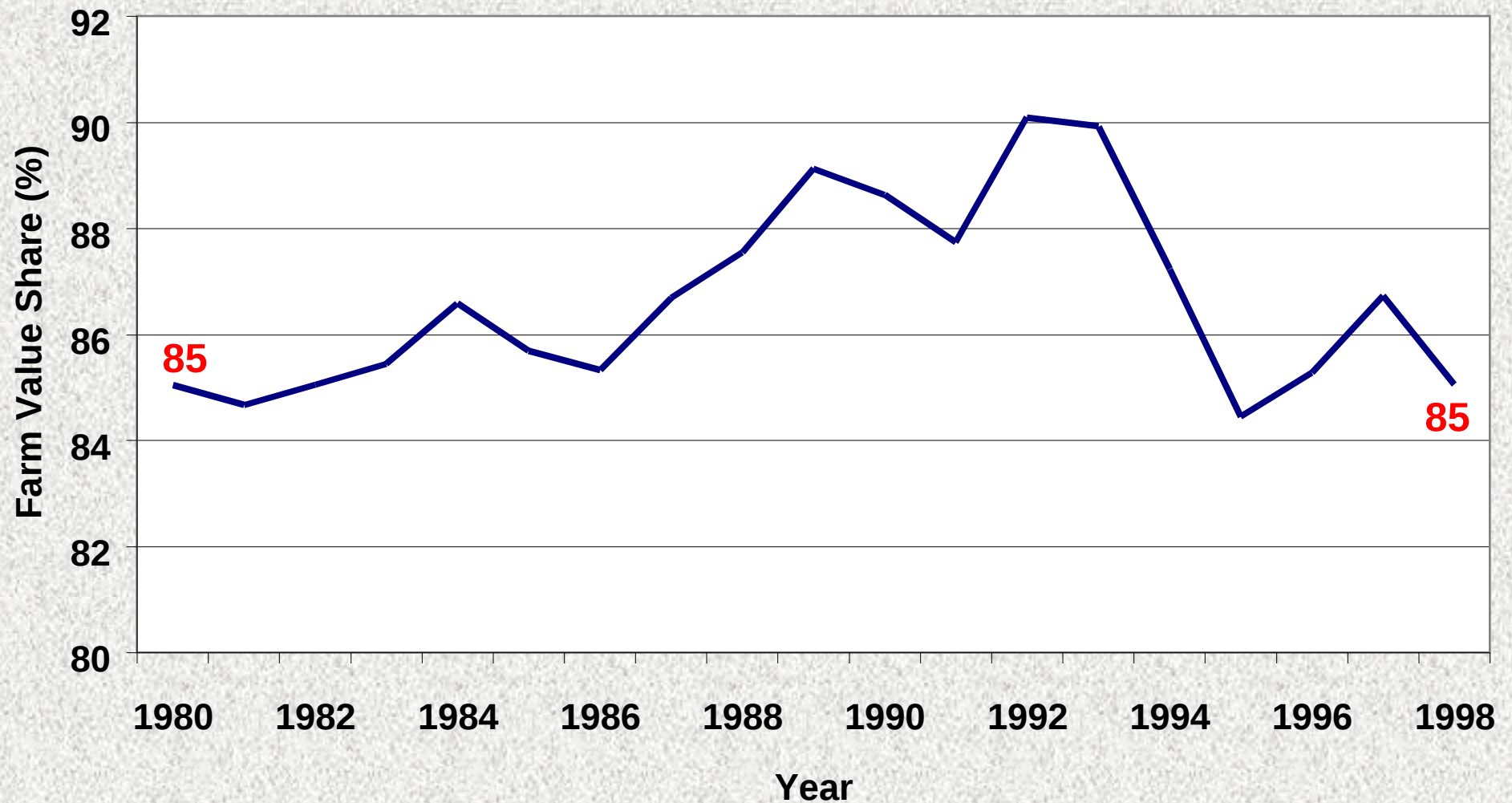


Farmer's Share of Retail Beef Dollar, 1980-98



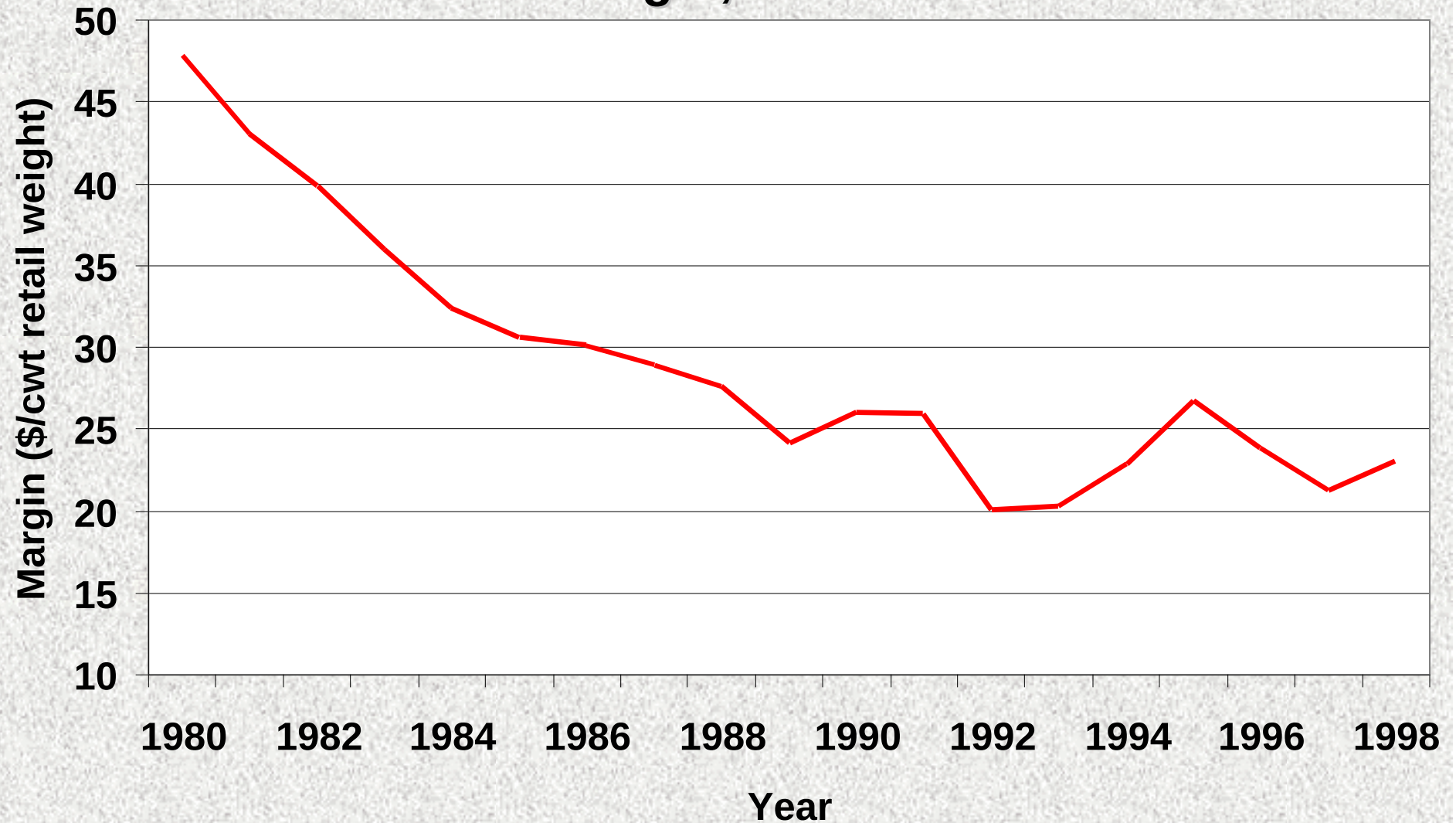
Source: USDA

Farmer's Share of Beef Wholesale Dollar, 1980-98



Source: USDA

Inflation-Adjusted Farm-to-Wholesale Beef Price Margin, 1980-98.



Source: USDA

Motivations for Packer Concentration

1. Capture Economies of Scale

Reduce Costs

Enhance Regional Animal Flows

Differentiate & Brand Products

Target Products (e.g., Internationally)

2. Enhance Market Power

Producers and Consumers potentially both benefit from 1 and potentially both incur costs from 2.

Question is, Which is bigger?

Impact of Packer Concentration

Research indicates:

Anticompetitive effects of a

*50% increase in beef packing concentration
is at most 2.4%*

*BUT this is well below the cost savings of 4%
associated with 50% increase in size of representative
plant.*

Source: Azzam and Schroeter, *AJAE*, 1995

Packer Concentration - Bottom Line

Has Beef Packer Concentration Harmed Cattle Producers?

- cattle prices respond to beef production
- farm-to-wholesale margin steady to declining
- cost reductions exceed market power

The Real Problem Is How Do Producers Adapt To New Forms of Market Coordination

Smithfield's Integration in Pork

Top 5 Sow Owners

<u>Jan. 1, 1999</u>		<u>Oct. 4, 1999</u>	
1. Murphy	337,000	1. Smithfield	785,000
2. Carroll's	183,600	2. Contigroup	162,000
3. ContiGroup	162,000	3. Seaboard	125,500
4. Smithfield	152,000	4. Prestage	125,000
5. Seaboard	125,000	5. Cargill	120,000

Smithfield acquired or set to acquire
Carroll's, Murhpy's, and Tyson's sows

Source: R. Smith, *Feedstuffs*

Motivations for Packer Integration

Improve Market Coordination

1. Supply Assurance
2. Quality Control
3. Consistency
4. Production Process Control

“Giving consumers what they want: - high quality, consistent, safe, nutritious, convenient food products for a low price”

Concentration In Agriculture

- **Concentration Has Been Increasing For Over Two Centuries**
- **Concentration Has Provided Society With Tremendous Benefits**
 - **Better Nutrition**
 - **Longer Life Expectancy**
 - **Higher Incomes**

Concentration In Agriculture

Public Policy Considerations

- **Concerns Associated With Concentration Can Be Dealt With Directly**
 - regulate pollution
 - & monitor market power
- **Facilitate Transition Via Education & Training Programs**

Concentration In Agriculture

Producer Considerations

- **Where Do I Fit In?**
 - **Short Run**
 - **Long Run**

Visit The K-State Livestock & Meat Marketing Web Site

www.agecon.ksu.edu/livestock