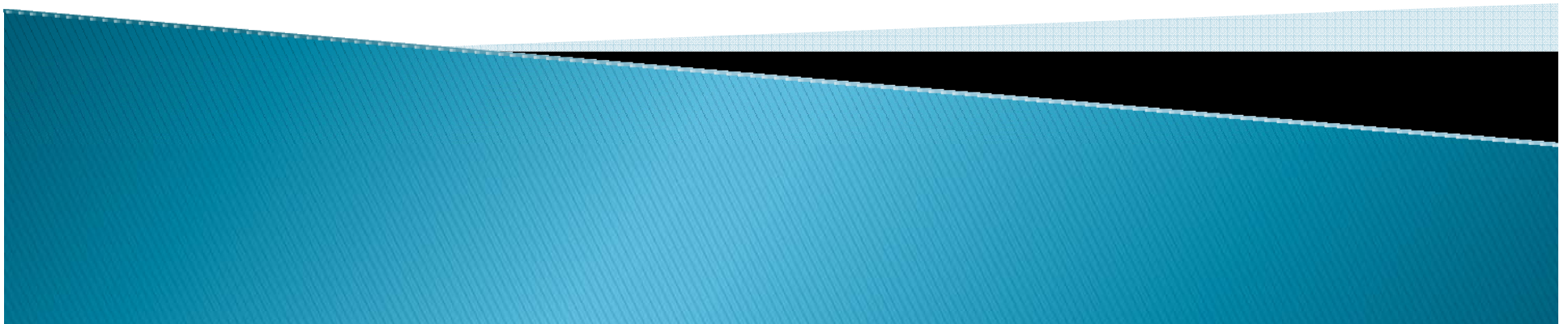


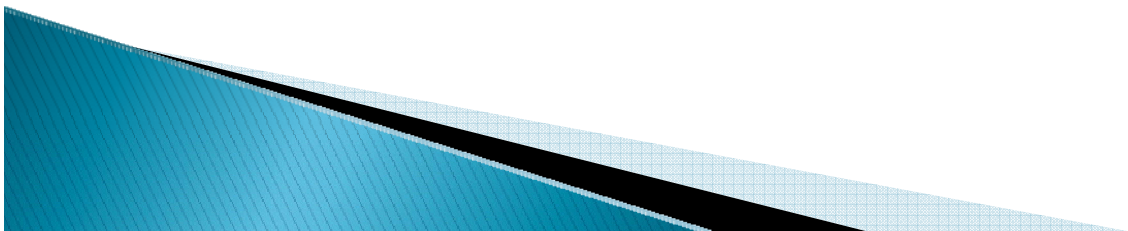
Economics of Competition in the U.S. Cattle Industry

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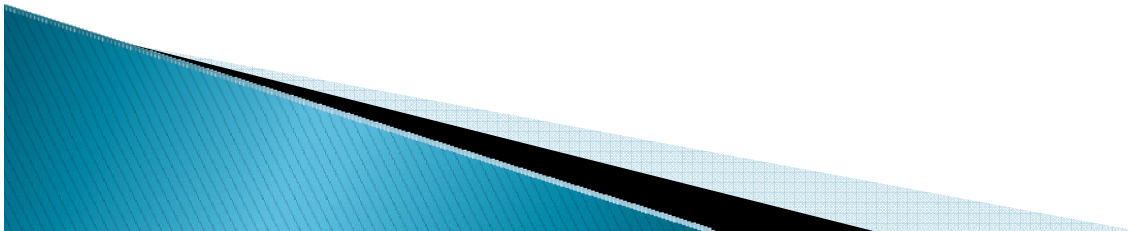
Objectives

- ▶ Put beefpacking concentration and competition issues in historical perspective
- ▶ Highlight major market structure changes in beefpacking
- ▶ Note key lawsuits and court rulings
- ▶ Summarize (briefly) the body of research related to market structure, pricing, and competition issues



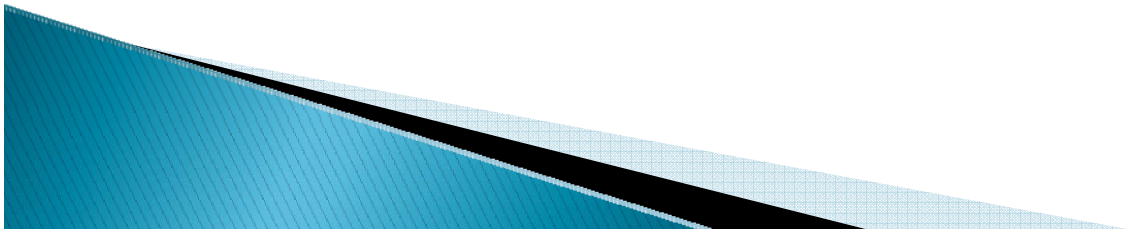
A century ago quote

- ▶ Senator John B. Kendrick, Wyoming, 1919
“This squall between the packers and the producers of this country ought to have blown over forty years ago, but we still have it on our hands...”



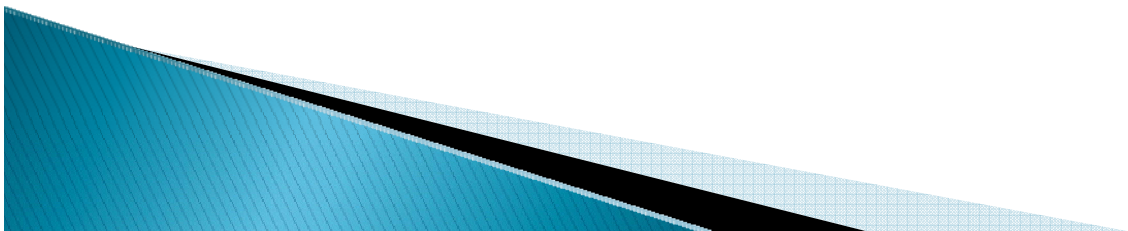
A regulatory landmark

- ▶ Passage of the Packers and Stockyards Act in 1921
- ▶ Creation the Packers and Stockyards Administration within the U.S. Department of Agriculture



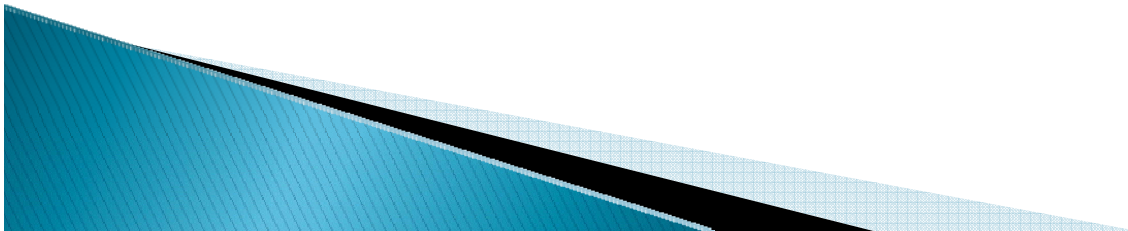
But controversy arose again

- ▶ William H. Nicholls, *J. Political Economy*, 1940
“Only after considerable further investigation will we know whether or not reform in the packing industry is necessary. It is conceivable that such monopoly elements as exist yield desirable results. *A less extreme possibility is that results are undesirable but not sufficiently bad to bother about.* (emphasis added)”



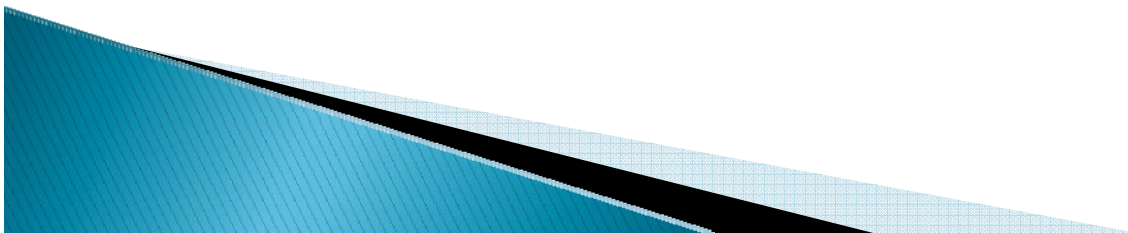
“Modern era” controversy

- ▶ Producers in 1975 filed the Meat Price Investigators Association and Bray lawsuits against the four largest retailers, four largest packers, and the leading meat price reporting firm
- ▶ After several years of litigation, all producer complaints were rejected by the courts



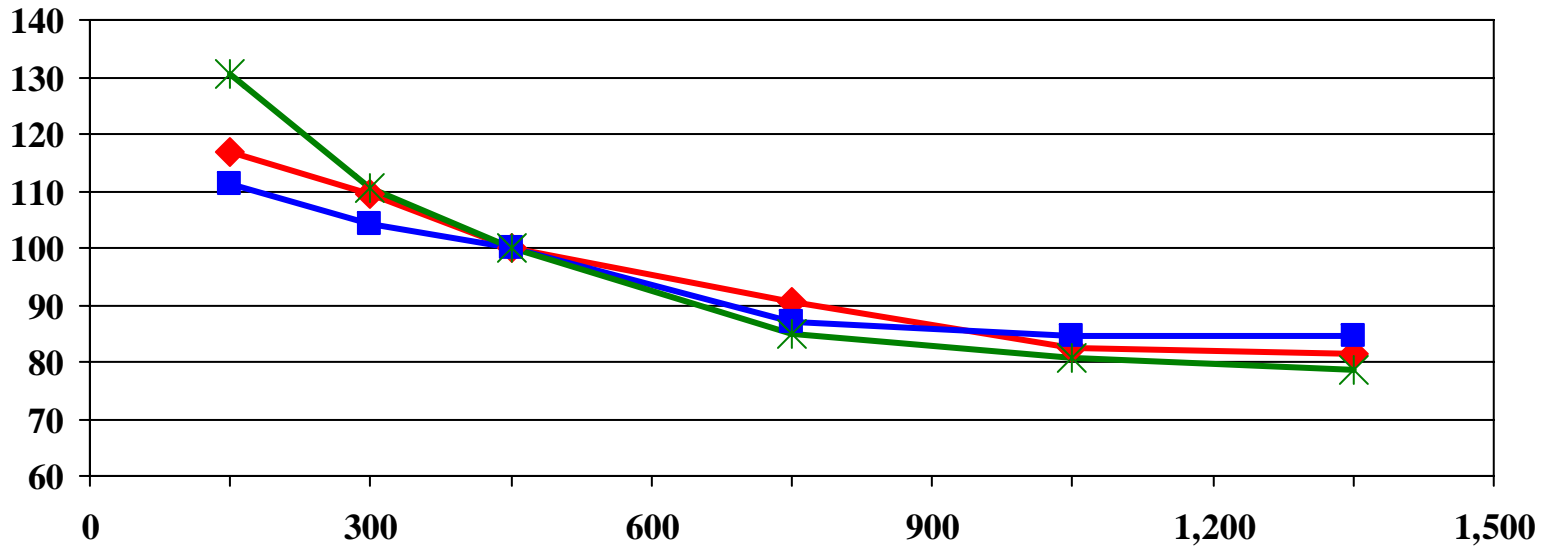
Period of rapid structural changes

- ▶ Late-1970s and 1980s saw rapid growth in larger plants in response to economies of size
- ▶ Was also a tumultuous period in terms of consolidation (plant closings, acquisitions, restructuring of labor agreements, plant expansions, and reopenings)
- ▶ Note, economies of size pertain to *plant* size (in terms of minimum efficient size) not *firm* size (i.e., number of plants per firm)



Economies of size in steer and heifer slaughtering

Dollars per head

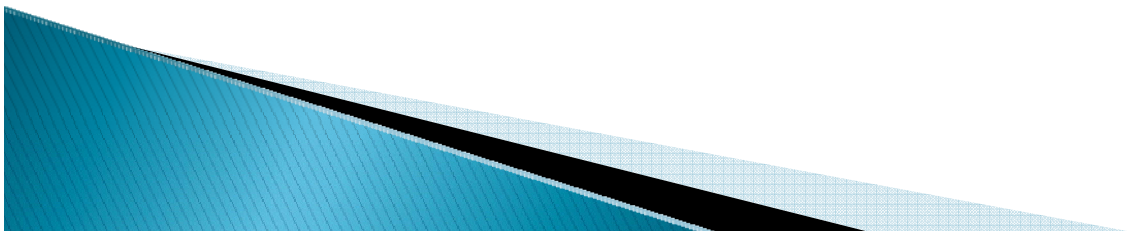


Thousand head annual slaughter

◆ OSU, Industry data 1985

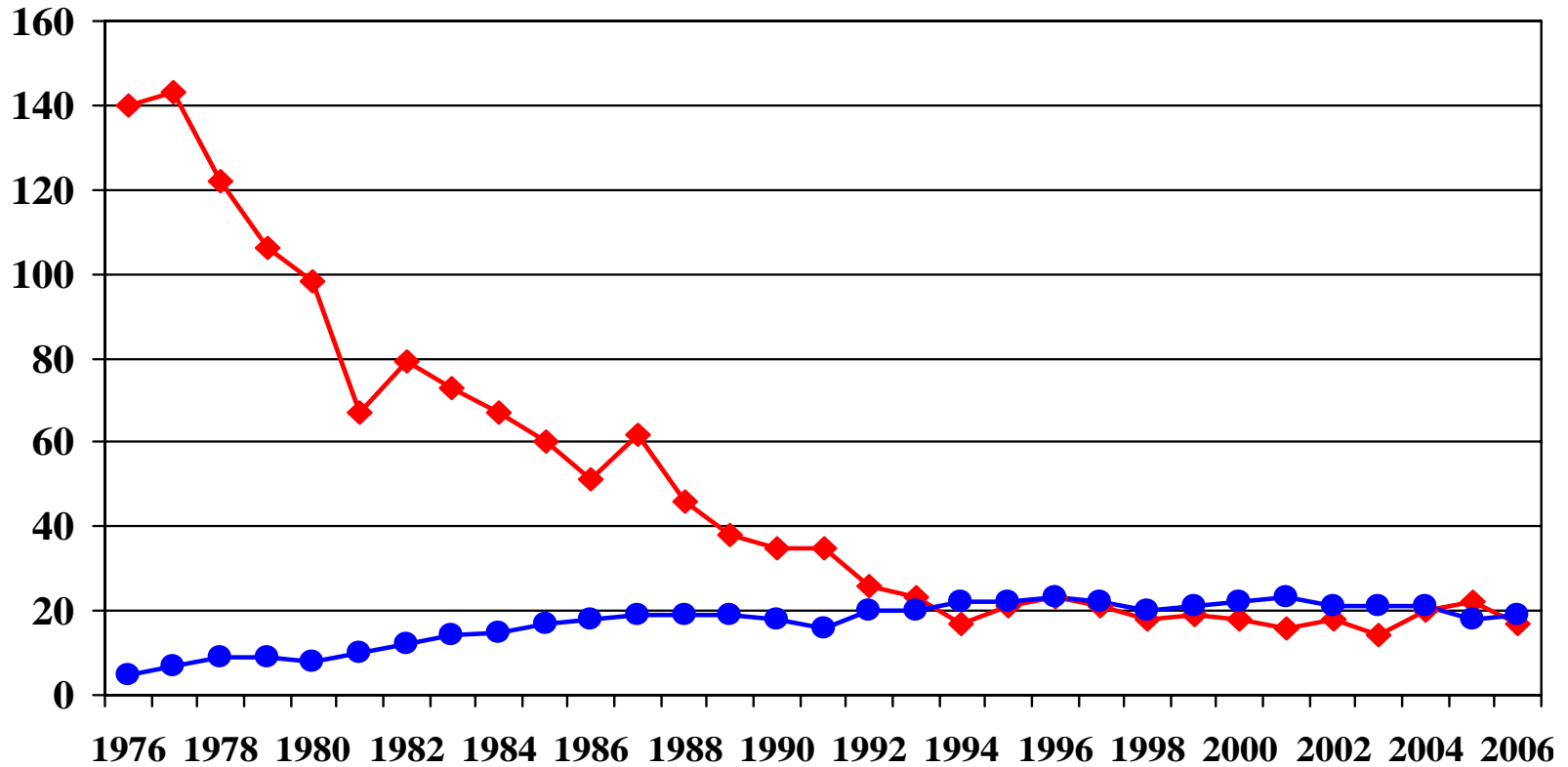
■ USDA, Simulated data 1988

* USDA, Census data 1992



Rapid structural change in steer and heifer slaughter plant numbers

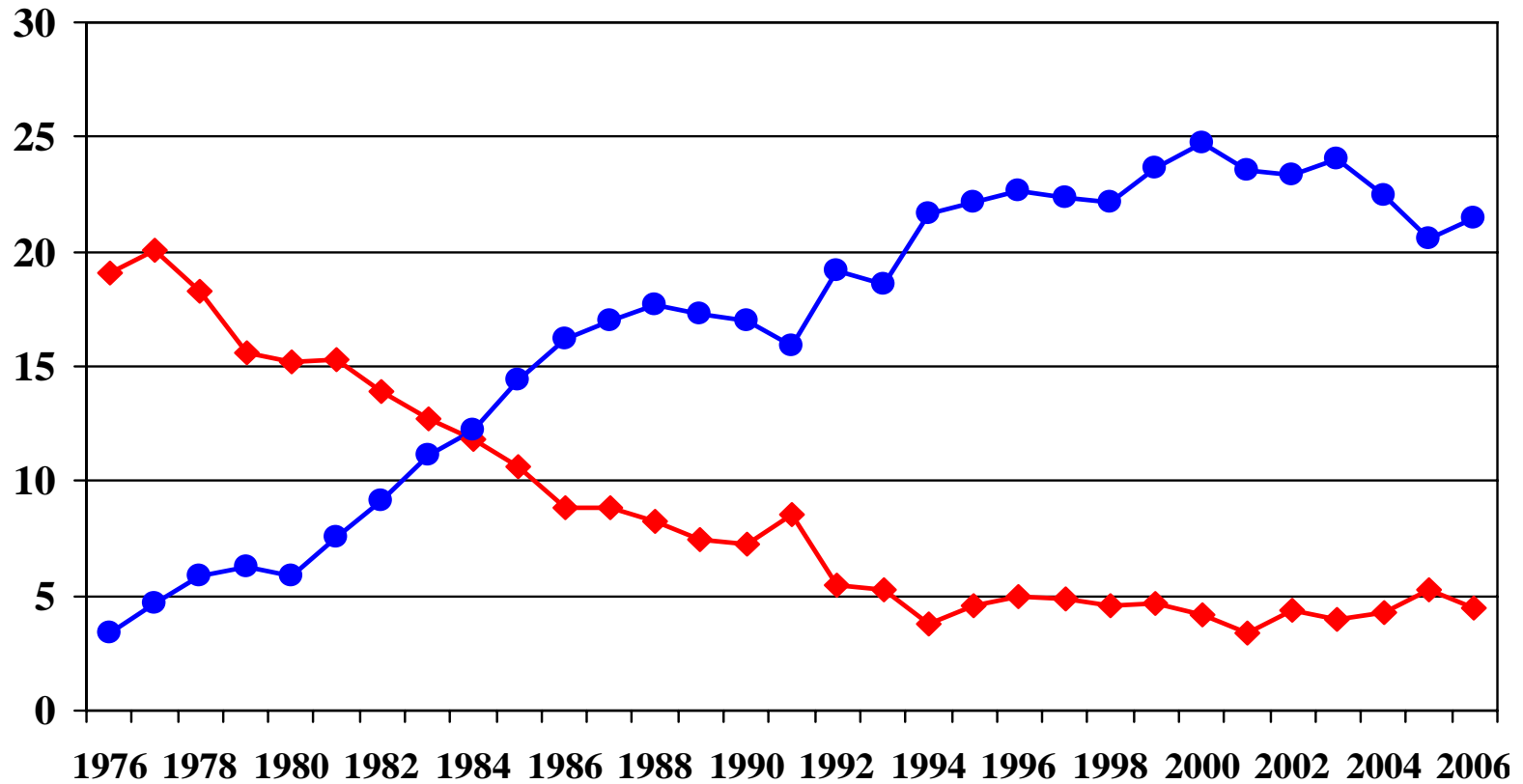
Number of plants



◆ 50,000-499,000 ● 500,000 +

Likewise – rapid shift in importance of larger plants

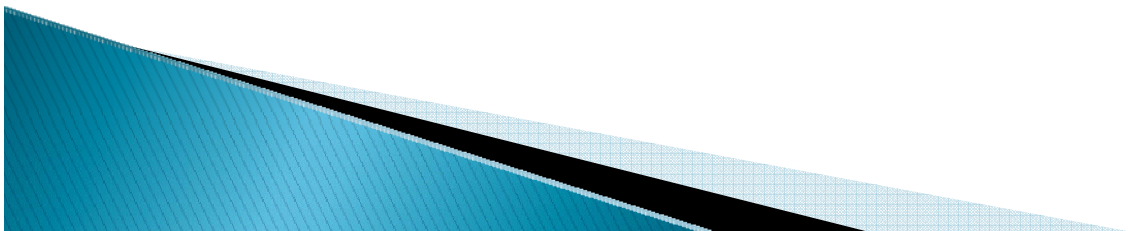
Million head annual slaughter



◆ 50,000-499,000 ● 500,000 +

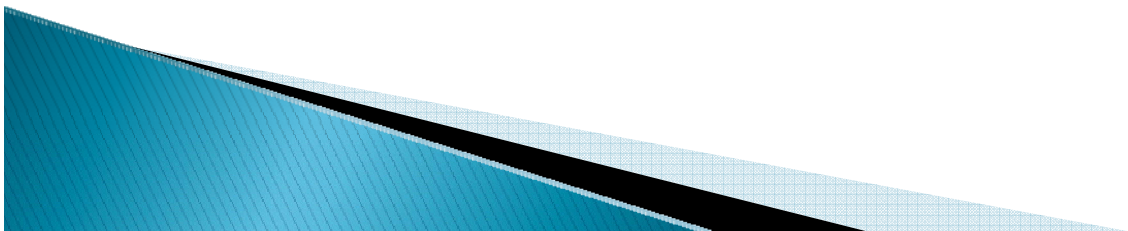
Another significant lawsuit

- ▶ Monfort of Colorado in 1985 attempted to block an acquisition of a competitor (Spencer Beef) by another competitor (Cargill) which was believed would be harmful both to Monfort and the beef industry
- ▶ Courts allowed the merger to proceed
- ▶ Opened the door to a series of mergers in 1987, creating the “big 3” packers (IBP, Excel, and ConAgra)
- ▶ Caused a sharp increase in the national four-firm concentration ratio

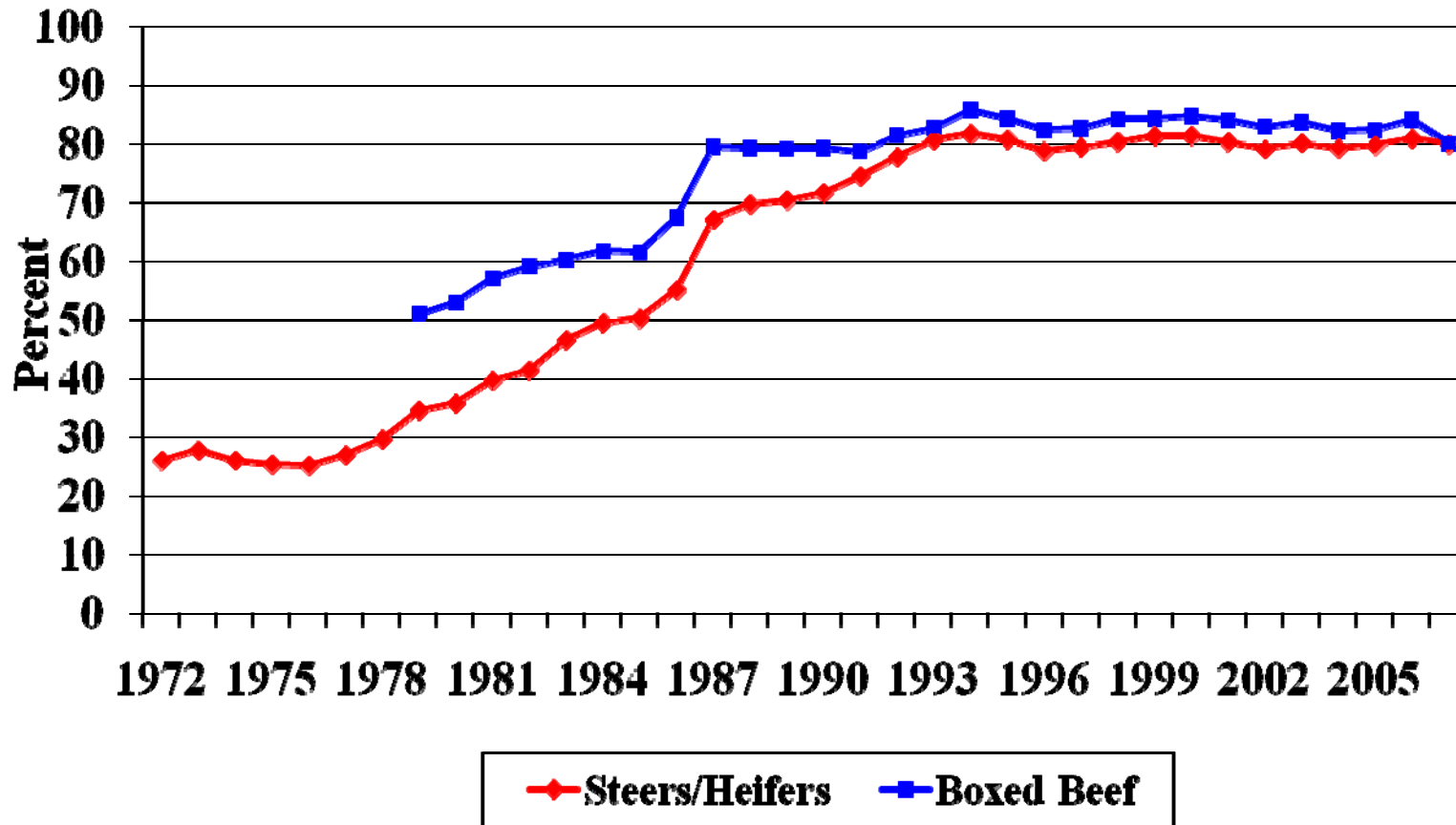


Another producer lawsuit

- ▶ Producers filed suit in 1996, initially known as Pickett v IBP, and later known as Pickett v Tyson Fresh Meats after Tyson purchased IBP in 2001
- ▶ Jury in Federal Court ruled in favor of plaintiffs in 2004 and assessed damages of \$1.28 billion
- ▶ But the trial judge set aside the jury ruling and entered a summary judgment for Tyson, which was upheld in 2006 by an Appellate Court

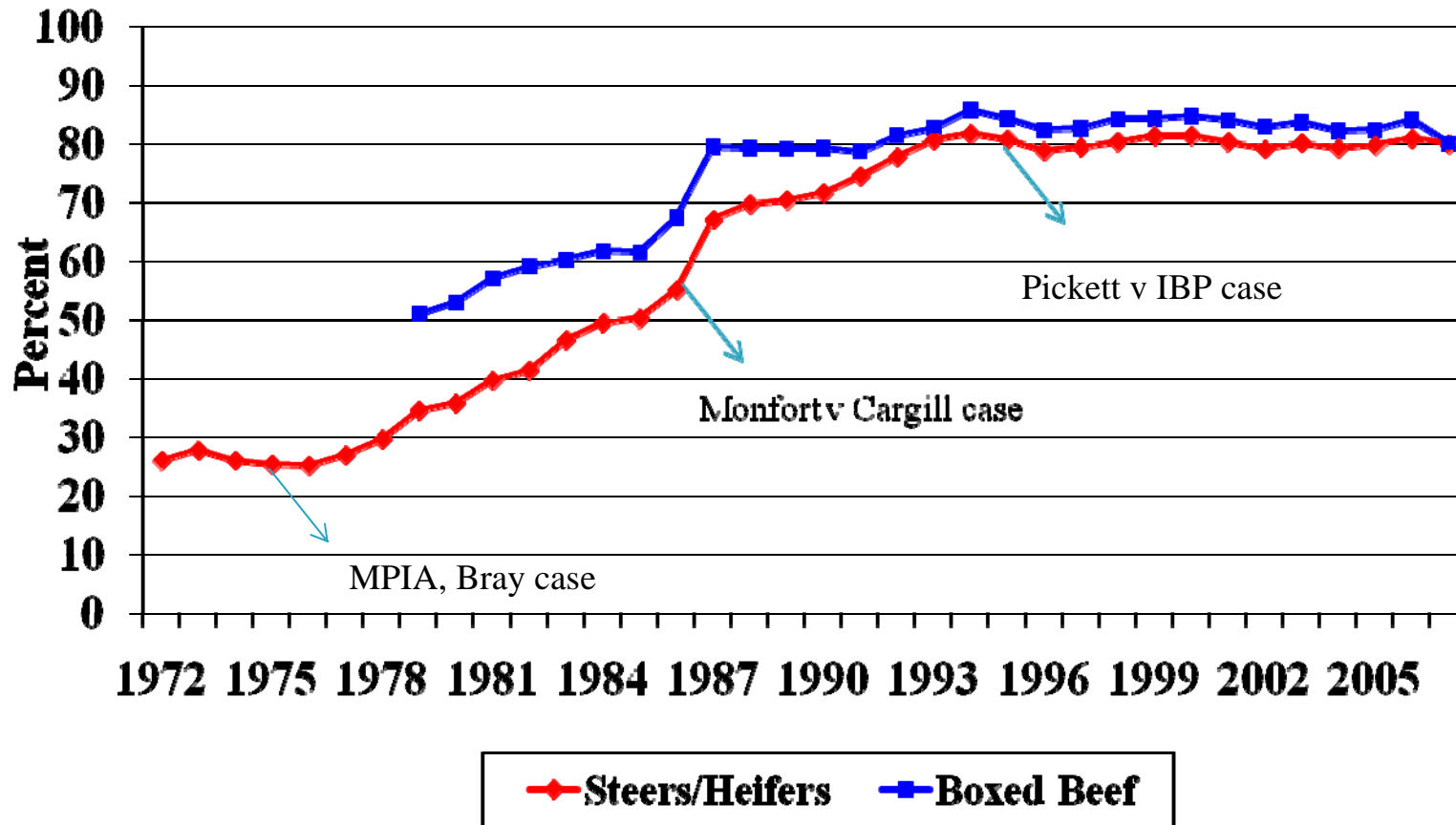


Rapid growth to apparent plateau in national four-firm concentration



Source: GIPSA, USDA

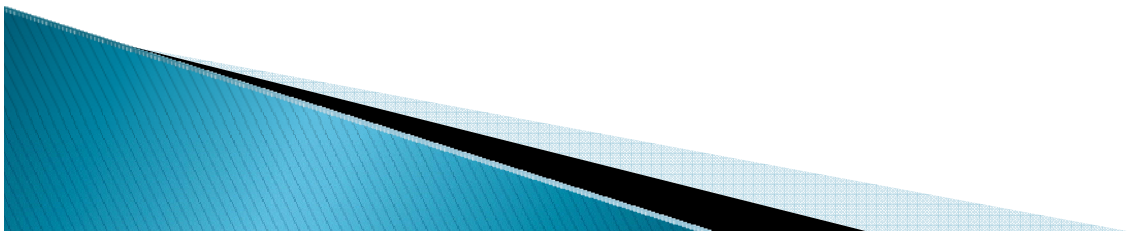
Rapid growth to apparent plateau in national four-firm concentration



Source: GIPSA, USDA

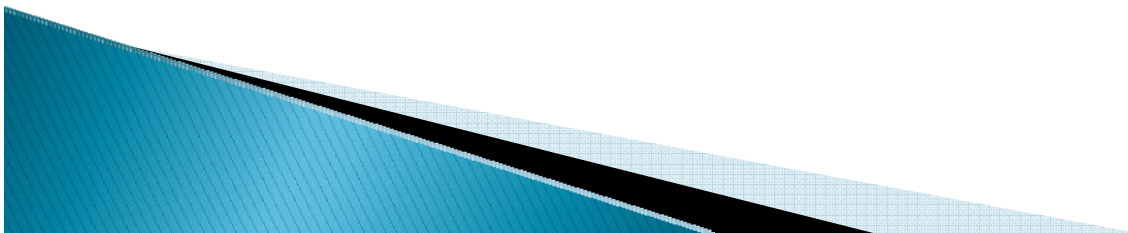
Important notes

- ▶ Competition issues have persisted through time while the largest firms have changed
- ▶ Big 3 today are Cargill Meat Solutions, Tyson Foods, and JBS USA
- ▶ Both mergers/acquisitions and internal growth have significantly affected concentration



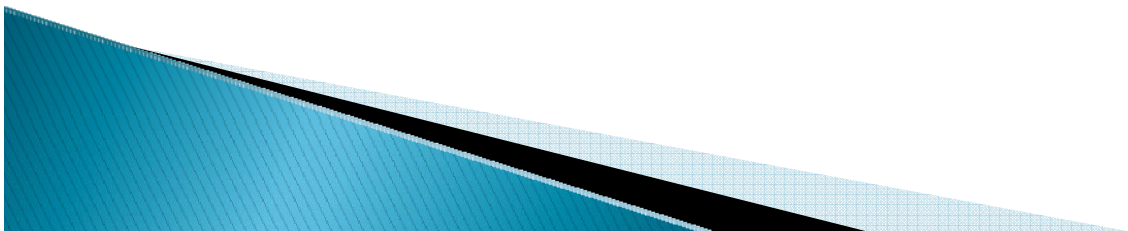
Another source of controversy

- ▶ Price discovery and use of alternative pricing methods
- ▶ Initially called captive supplies but more recently termed alternative marketing arrangements (AMAs)

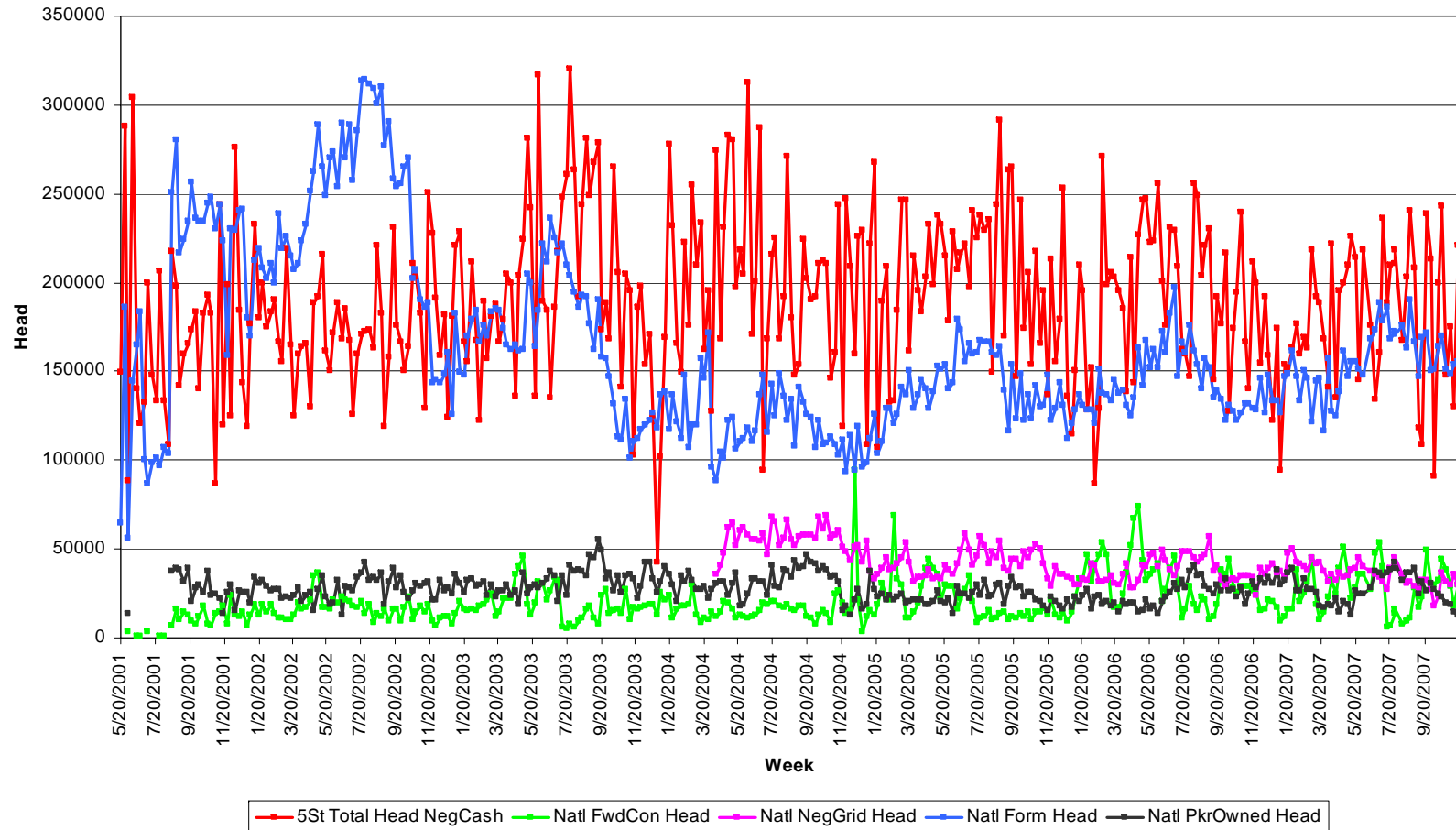


Captive supplies or alternative marketing arrangements

- ▶ Negotiated cash market purchases
- ▶ Formula price arrangements (typically tied to the cash market)
- ▶ Forward contracts (tied to the futures market)
- ▶ Packer ownership of fed cattle

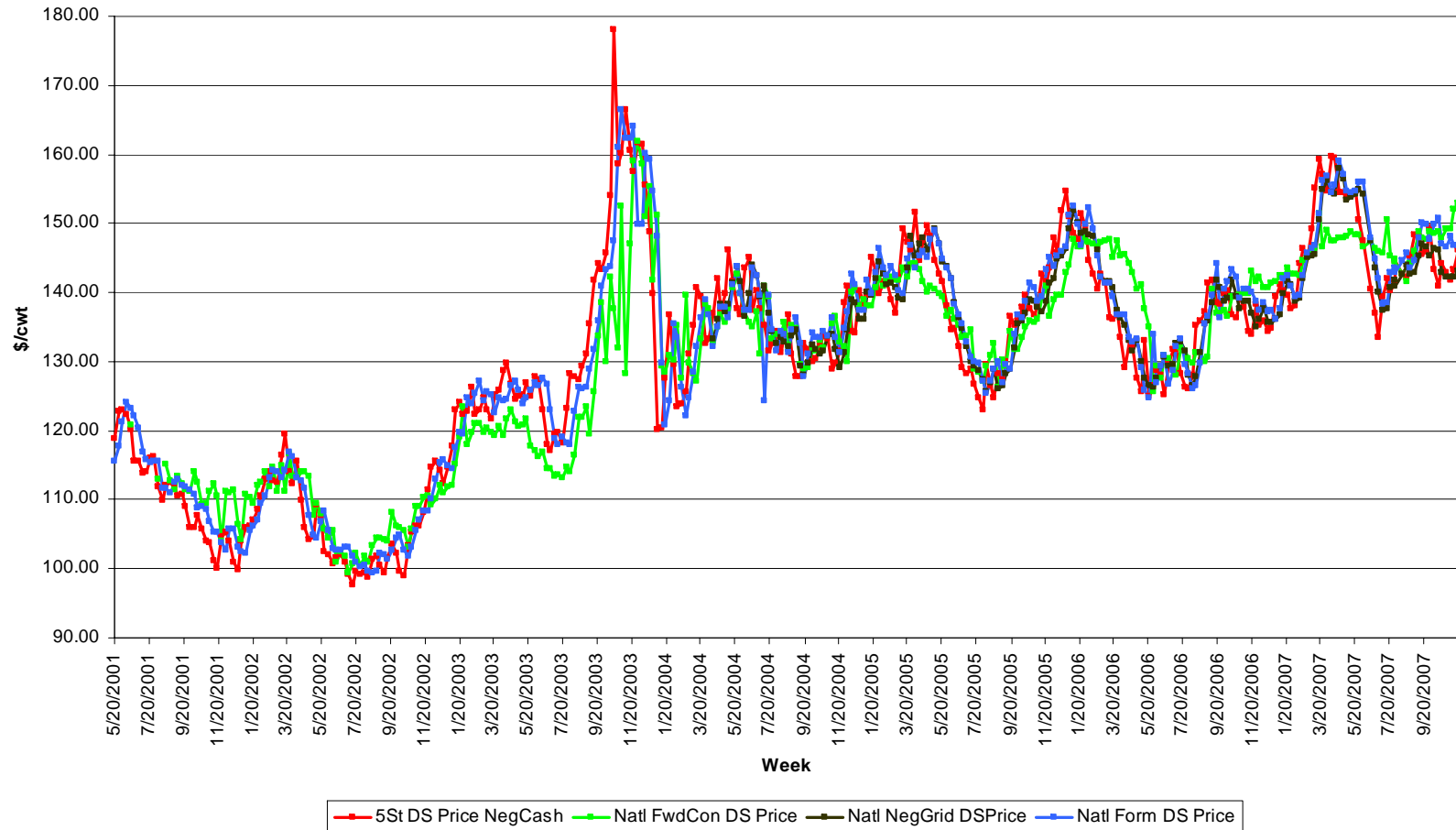


Weekly fed cattle pricing methods by packers since mandatory price reporting, 2001-2008



Source: AMS, USDA

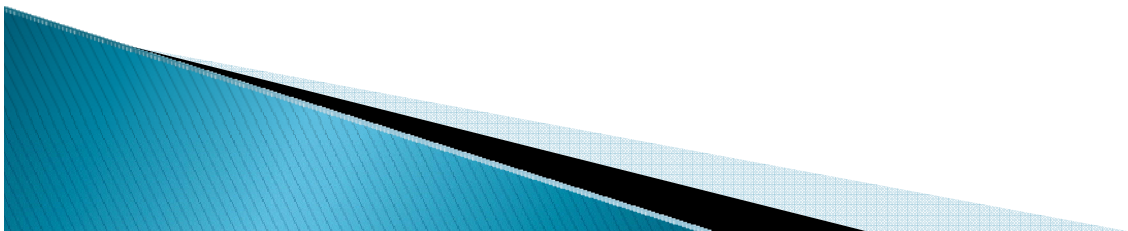
Comparison of prices by alternative methods since mandatory price reporting, 2001-2008



Source: AMS, USDA

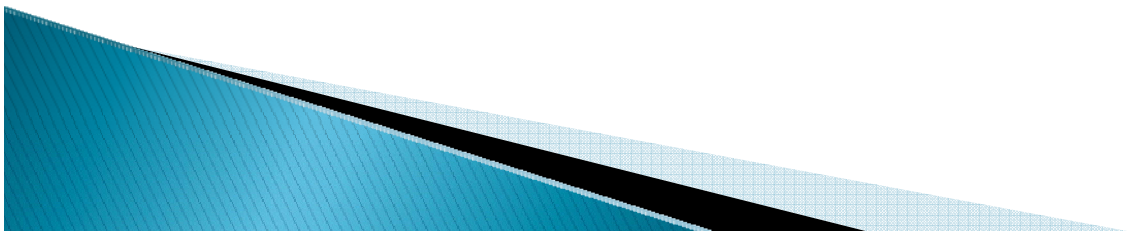
Considerable economic research

- ▶ Market structure, behavior, and performance
- ▶ Economies of size in slaughtering and fabricating
- ▶ Relative geographic market for fed cattle procurement
- ▶ Pricing methods and impacts, especially for captive supply or alternative marketing methods
- ▶ Oligopolistic and oligopsonistic market power in meatpacking



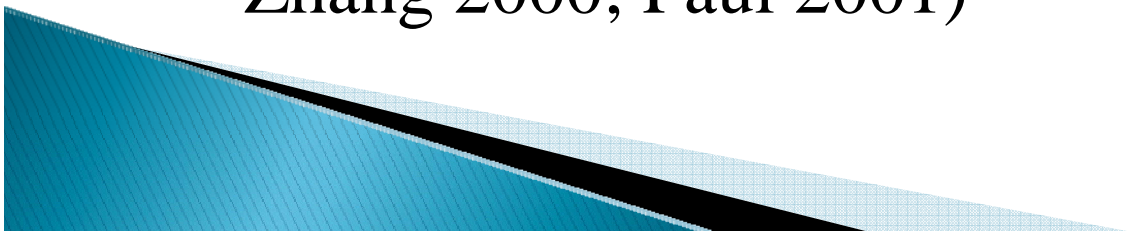
Price-structure or price-concentration studies in the 1980s and 1990s

- ▶ Most found a positive relationship between fed cattle prices and number of buyers (Ward 1981; Ward 1992; Schroeder et al. 1993)
- ▶ And a negative relationship between fed cattle prices and concentration (Menkhaus, St. Clair, Ahmaddaud 1981; Ward 1992; Marion and Geithman 1995)



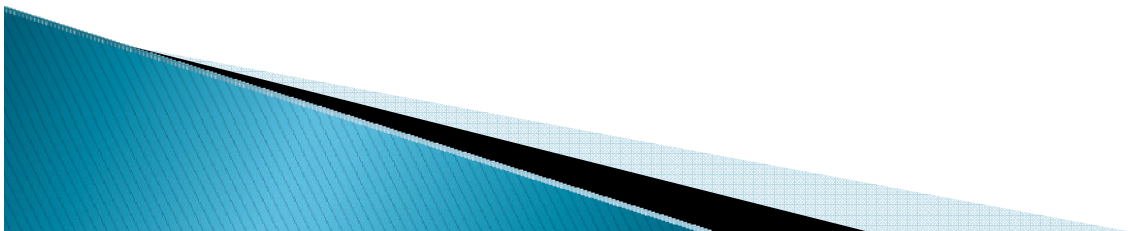
Price-market power and margin-market power studies since 1990 are mixed

- ▶ Several found modest evidence of oligopsony behavior (Schroeter 1988; Schroeter and Azzam 1990; Azzam and Pagoulatos 1990; Azzam and Schroeter 1991; Koontz, Garcia, Hudson 1993; Weliwita and Azzam 1996; Koontz and Garcia 1997)
- ▶ Others found little or no evidence of oligopsony, oligopoly behavior (Driscoll, Kambhampaty, Purcell 1997; Muth and Wohlgenant 1999; Matthews, Jr. et al. 1999; Ward and Stevens 2000; Schroeter, Azzam, Zhang 2000; Paul 2001)



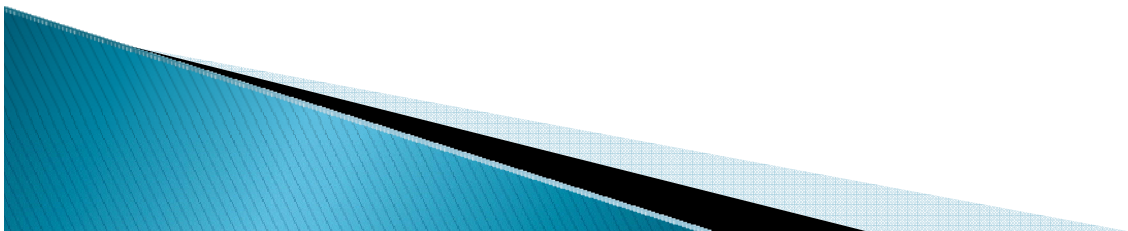
Consistent evidence of economies of plant size

- ▶ Economies of size found by alternative methods, data, and time periods (Sersland 1985; Duewer and Nelson 1991; MacDonald et al. 2000; Paul 2001)
- ▶ Related research shows the importance of plant utilization (Sersland 1985; Duewer and Nelson 1991; Ward 1990; Barkley and Schroeder 1996; Paul 2001)



Efficiency gains versus market power losses?

- ▶ When compared, economies of size have been found to more than offset oligopsony price distortions (Azzam and Schroeter 1995; Paul 2001)



Pricing method or captive supply impacts

- ▶ Studies have consistently found small negative price impacts associated with use of alternative marketing arrangements (Elam 1992; Schroeder et al. 1993; Ward, Koontz, Schroeder 1998; Schroeter and Azzam 2003, 2004; Muth et al. 2008)
- ▶ Studies also suggest problems with formula pricing to the cash market (Crespi and Sexton 2004, 2005; Xia and Sexton 2004)
- ▶ But feeder-packer relationships help explain their persistence (Hunnicuttt , Bailey, and Crook 2004)



Concluding comments

- ▶ Economic factors (though not in isolation) have led to increased concentration in beefpacking
- ▶ This industry trend parallels a similar trend in the U.S. economy
- ▶ Economic research has estimated both the gains and losses associated with changes in concentration and pricing in beefpacking
- ▶ Identifying correct regulatory intervention at specific points in the past is difficult – a point not very satisfying both to many agricultural producers and policymakers

