

Major Forces Shaping Competition in U.S. Food Markets

Richard J. Sexton

*Department of Agricultural and Resource
Economics*

University of California, Davis

[Overview of the presentation]

- Describe the major economic forces shaping food markets in the U.S.
- Argue that these forces in combination render the perfect competition model inappropriate as a tool to analyze most agricultural markets
- Demonstrate that most of the changes that characterize modern agricultural markets work to the detriment of farmers
- Emphasize the implications for competition policy and antitrust enforcement

[Major forces affecting world agricultural markets]

- Increasing market domination by major retailers and food manufacturers
- Increasing vertical control exercised by manufacturers and retailers over their upstream trading partners
- Increasing emphasis on product and firm differentiation and quality

[Increasing market domination]

- Through mergers and acquisitions, both food manufacturing and food retailing sectors have become increasingly concentrated worldwide
- Large, international supermarket chains have replaced traditional specialized food retailers, almost worldwide

Market power implications

- Both buyer (oligopsony) and seller (oligopoly) power are important factors regarding food manufacturer and retailer behavior
- Farm product markets are natural oligopsonies
 - Many farm products are bulky and perishable
 - Procurement markets are often local or regional in geographic scope
- Retail markets are natural oligopolies
 - Spatial dimension of consumers' shopping behavior
 - Product differentiation among retailers
- Market power exercised anywhere in the food chain is detrimental to the welfare of both farmers and consumers

Increasing vertical control exercised by manufacturers and retailers

- Market chains are becoming increasingly compact
 - “Middlemen” are being eliminated in a drive to reduce cost
- Decreasing reliance upon open markets
- Increasing use of contracts which differ widely in their provisions and the degree of control exercised
 - Contracts can solve information problems and improve product quality
 - But do they exacerbate competitive imbalances?
 - How are prices “discovered” in these settings?
 - How does the contract revolution affect small farmers’ access to markets?
- Upstream vertical integration by processors, though not increasing, is highly controversial

Emphasis on product and firm differentiation and quality

- As food becomes a smaller share of consumers' budgets, willingness to pay for specific quality attributes of foods increases
 - Empirical studies document consumers' willingness to pay premiums for the quality attributes they desire
 - Range of valued quality attributes in food has expanded greatly

Emphasis on product differentiation and quality (cont.)

- Traditional physical attributes of the product, such as taste, appearance, and healthfulness, remain important
- But increasingly quality also refers to factors that characterize a good's production and marketing
 - Environmental sustainability of practices
 - Its location ("local" or country of origin)
 - Nature of inputs—organic, natural, GMO free, etc.
 - Treatment of animals
 - "Fairness" of trade
- This creation of specialized markets on the demand side is a counterbalance to the economies of mass production on the supply side

[The concept of firm or seller “quality”]

- Buyers seek suppliers who can provide a variety of services in addition to providing a commodity:
 - category management
 - third-party product-safety certification
 - Electronic data interchange
 - Ability to supply products across a category
- It is unlikely that small firms can meet this standard.

[What are the implications of the structural revolution for. . .]

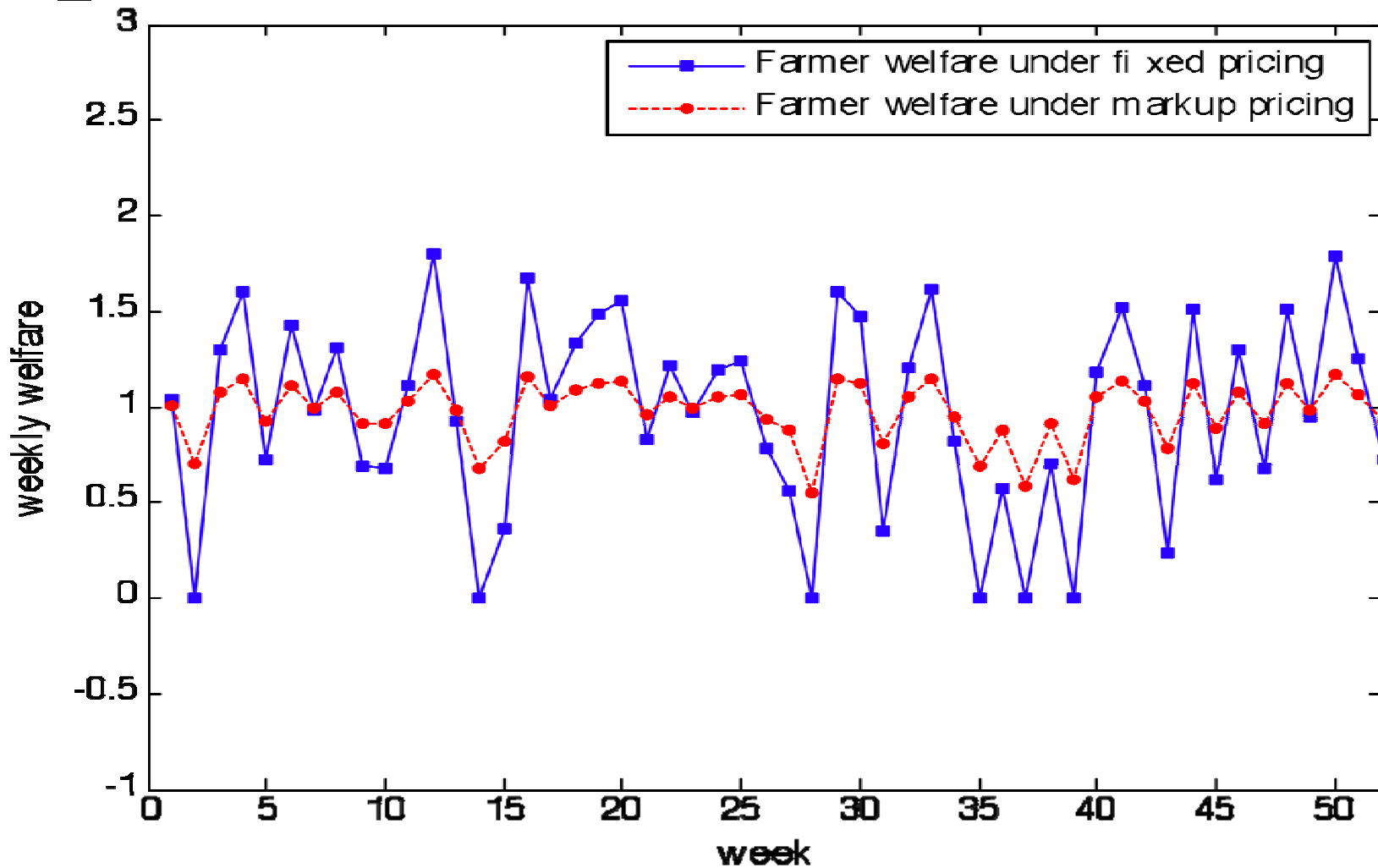
- farmers?
- consumers?
- Market performance?
- agricultural market analysts?
- policy makers and competition authorities?

[Implications for farmers]

- Oligopoly or oligopsony power exercised *anywhere* in the market chain reduces farmer welfare
- Retailers' pricing strategies in general reduce farm prices and increase their volatility
 - Delayed, incomplete, and asymmetric price transmission

Fixed retail pricing increases farm income volatility

12



[Implications for farmers (cont.)]

- Reductions in marketing-sector costs that would benefit farmers in a competitive market may not provide much benefit in an oligopoly-oligopsony setting
- Downstream buyers' demands for quality, food safety, consistency of supply, provision of ancillary services, etc. are difficult for small farmers and marketers to meet
- But increasing diversity in what consumers seek in food creates profitable market niches

Implications for consumers

- Higher prices due to market power exercised anywhere in the market chain
- Lower prices because consolidation, technological advances, and vertical coordination have produced cost-efficiencies
 - Walmart prices are 14% lower than competing supermarkets in U.S.
 - Competition with Walmart causes competing supermarkets to reduce prices by 3-7%
- Consumers also benefit from increased variety and product choice

[Implications for market performance]

- Small departures from competition in a single stage have little impact on the efficiency of a market
 - Deadweight losses are small (Harberger)
- Large departures from competition or market power exercised at multiple stages can have extreme market-efficiency implications

Implications for market performance (cont.)

- Small departures from competition have large consequences for distribution of benefits from a market or a policy
 - Market intermediaries may capture a large share of the economic surplus from a market or a policy at the expense of consumers and farmers
 - Taxpayers costs to provide a given amount of farm support may be much higher, and intermediaries capture much of the policy benefit
 - Example from trade liberalization

Implications for agricultural market analysts

- *None* of the axioms of perfect competition apply in many modern food markets
 - Few instead of many buyers and/or sellers and large market shares
 - Products are not homogeneous; product quality and differentiation are integral components of most markets
 - Information is not perfect; information failures diminish product quality and induce vertical control
 - Emerging differentiating attributes are credence attributes

Implications for agricultural market analysts (cont.)

- Well established results for competitive markets may not hold in imperfectly competitive markets
 - “Decoupling” farm support policies may not increase economic welfare
 - Price floors imposed through commodity purchase programs or deficiency payments prevent or mitigate the exercise of oligopsony power
- Traditional market power models do not apply in industries characterized by contracts and significant vertical control, e.g., hogs and broilers

[Suppose that we can measure market power on a scale from zero to one]

0

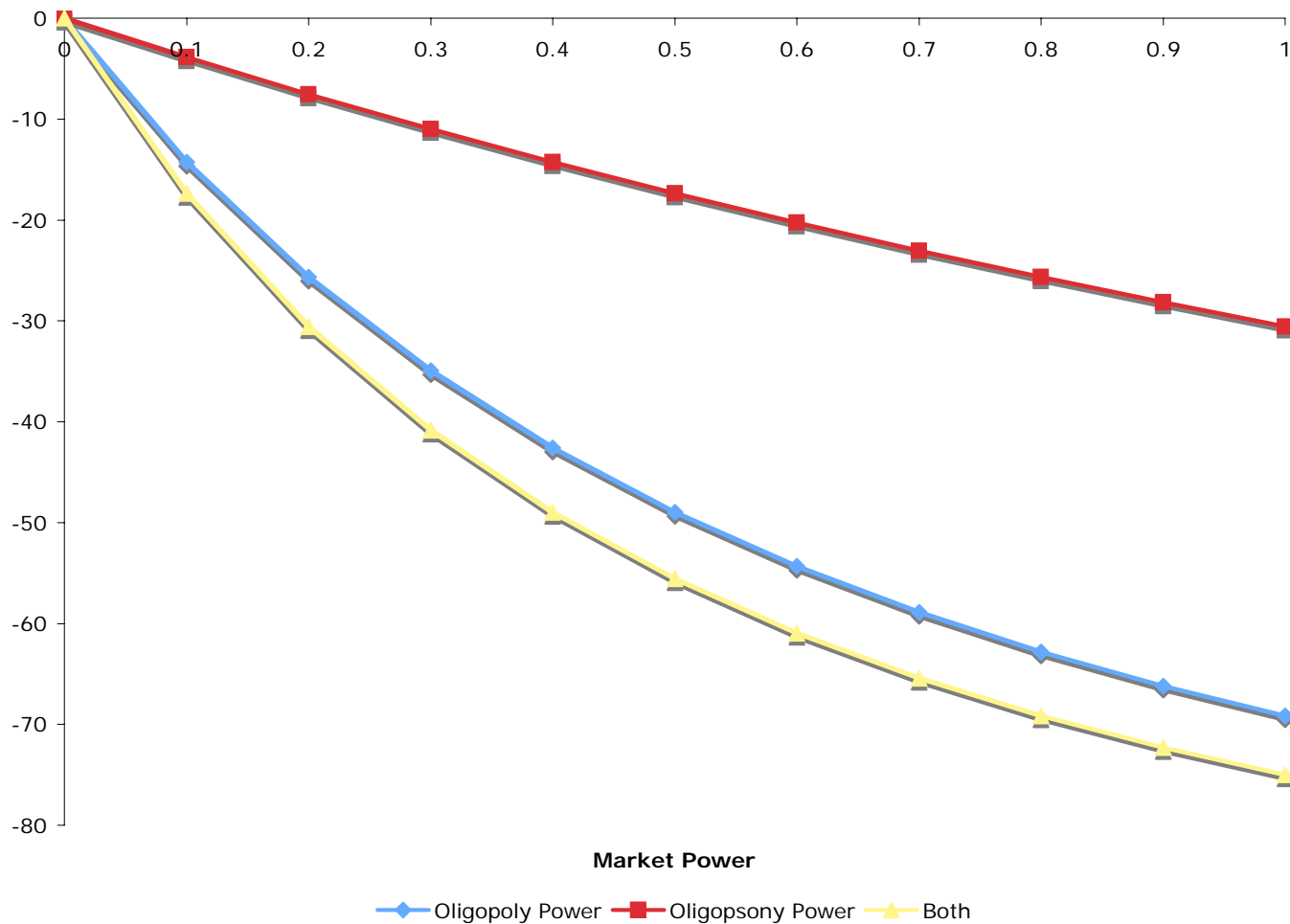
Perfect
competition

Oligopoly
and/or
oligopsony

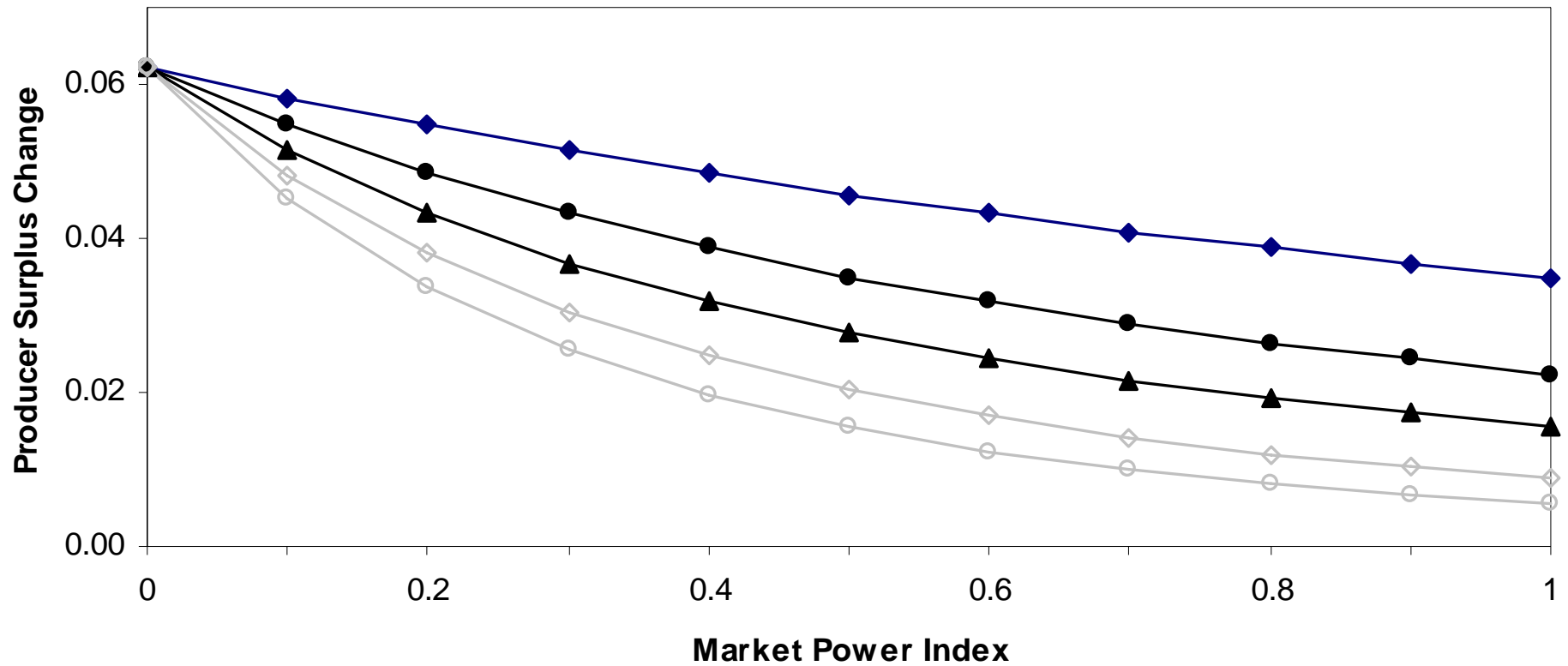
1

Monopoly
and/or
monopsony

Implications of intermediary market power for consumer and farmer welfare

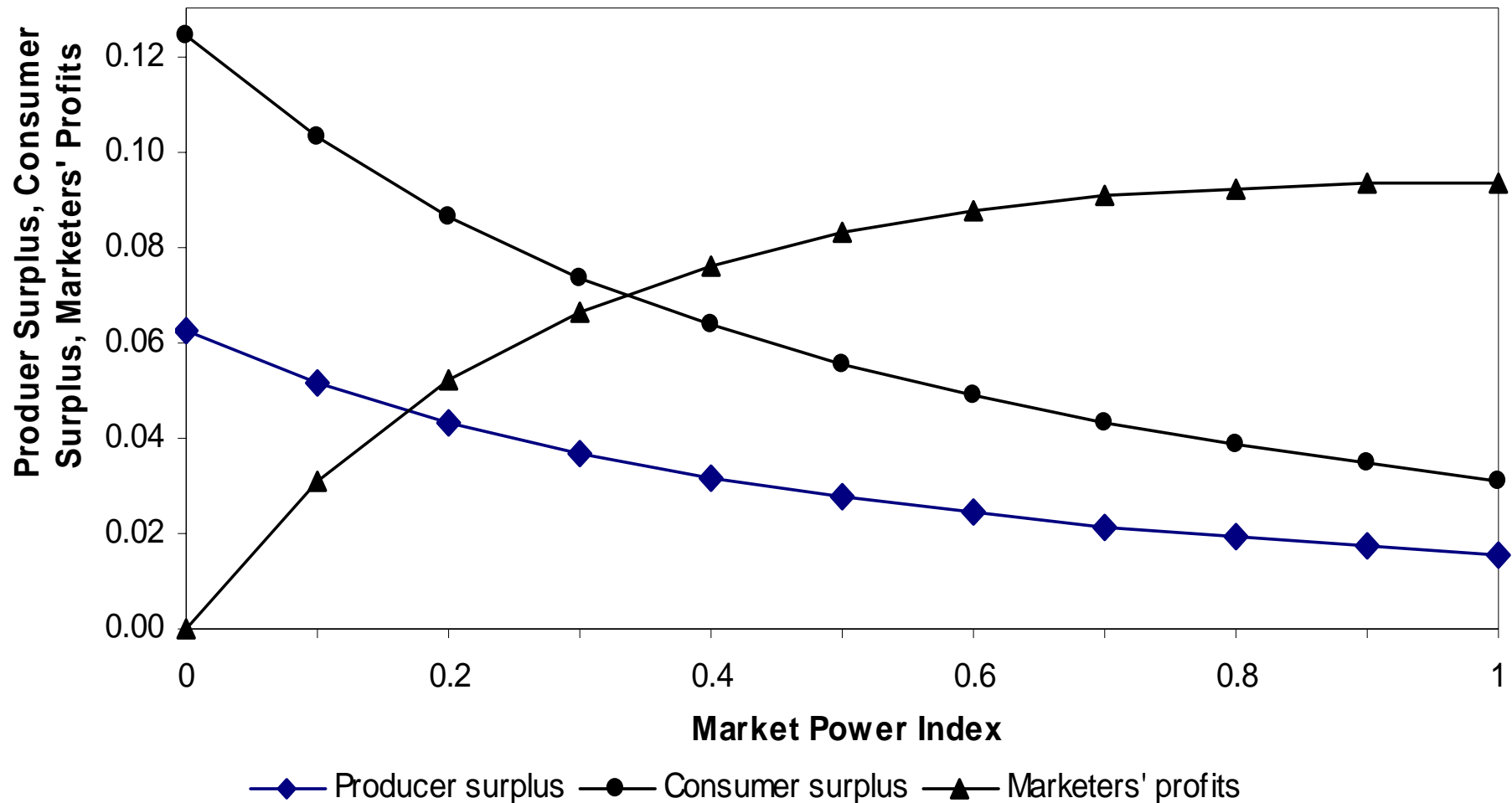


Change in Producer Surplus from Trade Liberalization

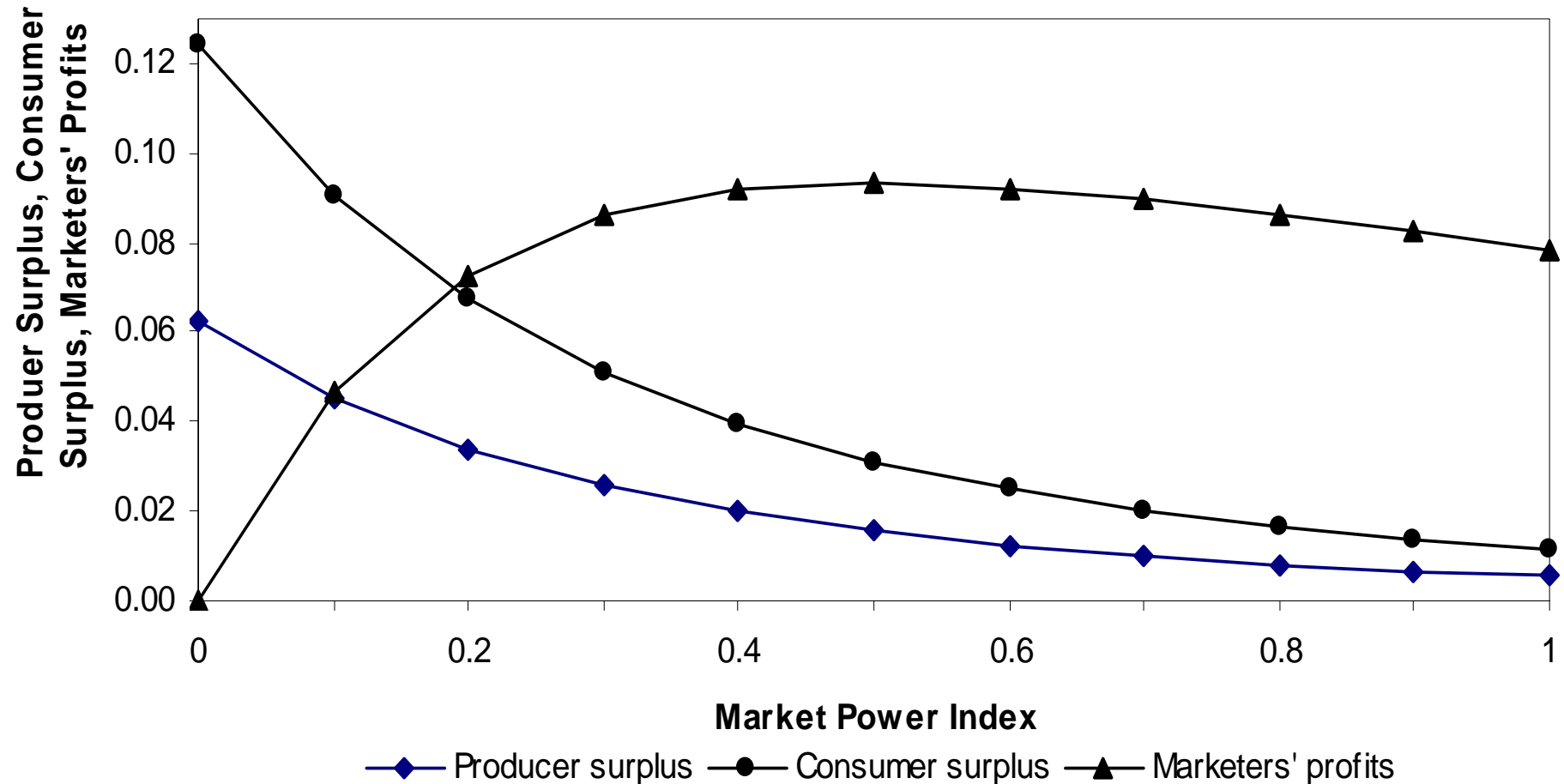


- ◆ Oligopsony
- Oligopoly
- ▲ Oligopsony & Oligopoly
- ◇ Successive Oligopsony with Oligopoly
- Successive Oligopoly with Oligopsony

Change in Producer Surplus, Consumer Surplus and Marketers' Profits from Trade Liberalization for the Case of Processor Oligopsony and Retail Oligopoly



Change in Producer Surplus, Consumer Surplus and Marketers' Profits from Trade Liberalization for the case of Successive Oligopoly with Processor Oligopsony



Implications for competition policy and antitrust

- Empirical research to date finds on balance significant but quantitatively small departures from competition in agricultural markets
 - Disconnect between empirical results and structural conditions
 - Cattle market example

Implications for competition policy and antitrust (cont.)

- Much of the NEIO research suffers significant flaws
 - Failure to define relevant markets
 - Failure to account adequately for structural changes over time
 - Focus on competition at one stage and failure to account for likely imperfect competition at other stages
- How to appropriately measure grocery retailer market power?

Implications for competition policy and antitrust (cont.)

- Pure efficiency gains from horizontal and vertical consolidation of food markets probably exceed the deadweight costs from the market power that is created.
- The narrow efficiency calculus misses
 - Important redistributive effects
 - Distortions of incentives
 - Impacts on rural communities

Implications for competition policy and antitrust (cont.)

- Retailers and powerful food manufacturers are probably able to countervail each other's market power
- Farmers, consumers, and small food marketers likely would benefit from greater competition in the system
 - Competition policy needs to emphasize both buyer and seller power

Implications for competition policy: role of industry self governance

- Farmers have opportunities for self governance and countervailing power not available to other industries
 - Cooperatives have antitrust protections under the Capper-Volstead Act
 - Marketing orders are authorized under the Ag Marketing Agreement Act or state-level equivalent
- Farmers demonstrate an increasing reluctance to use these tools and in some cases a hostility towards them
- Tangible evidence on success of these tools in countervailing market power is limited
- With the exception of dairy markets, there is no evidence that farmers have used these tools to exercise market power

[Conclusions]

- Agricultural markets have undergone a profound structural revolution worldwide
 - Fewer and more powerful market intermediaries
 - Streamlined market channels
 - Vertical control and contracts link production stages
 - Emphasis on product differentiation and quality
- Grocery retail chains are the dominant players in the food system, but we know little about their price and market strategies and how their actions influence upstream markets

[Conclusions (cont.)]

- Most of the changes are harmful to farmers, especially small ones
- Model of competitive markets is incapable of describing most modern agricultural markets
 - Serious errors in analysis can be made by misapplying the competitive model in these cases
 - But traditional market-power models are increasingly inappropriate in the most highly vertically coordinated industries

[Conclusions (cont.)]

- Competition policy needs to and increasingly does emphasize buyer power, both for retailers and food manufacturers
- Producer tools of collective action and countervailing power have not been utilized to their potential
 - Neither, however, have these tools been used to exercise market power in the vast majority of cases