

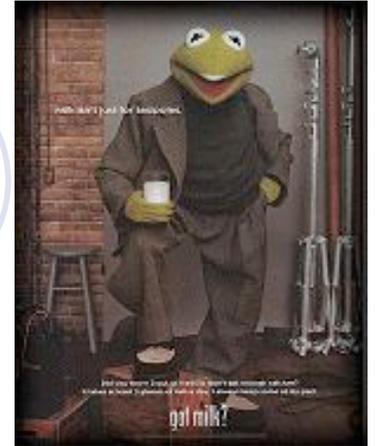
Got Milk?
Elizabeth, Stephen, and Yodit

Milk Marketing Order Winners and Losers (2005)

- Hayley H. Chouinard
- Jeffrey T. La France
- David E. Davis
- Jeffrey M. Perloff



Marketing Orders

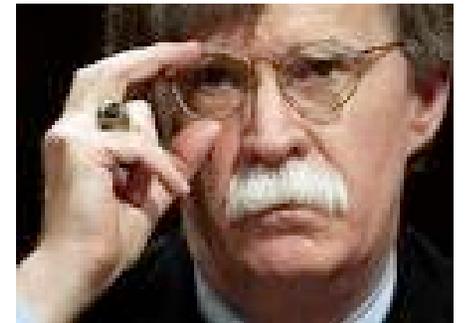


- Agreement between agricultural producers
- Sanctioned and enforced by government
- Producers vote to form
- Membership mandatory
- Objective: stabilized prices and coordinate marketing

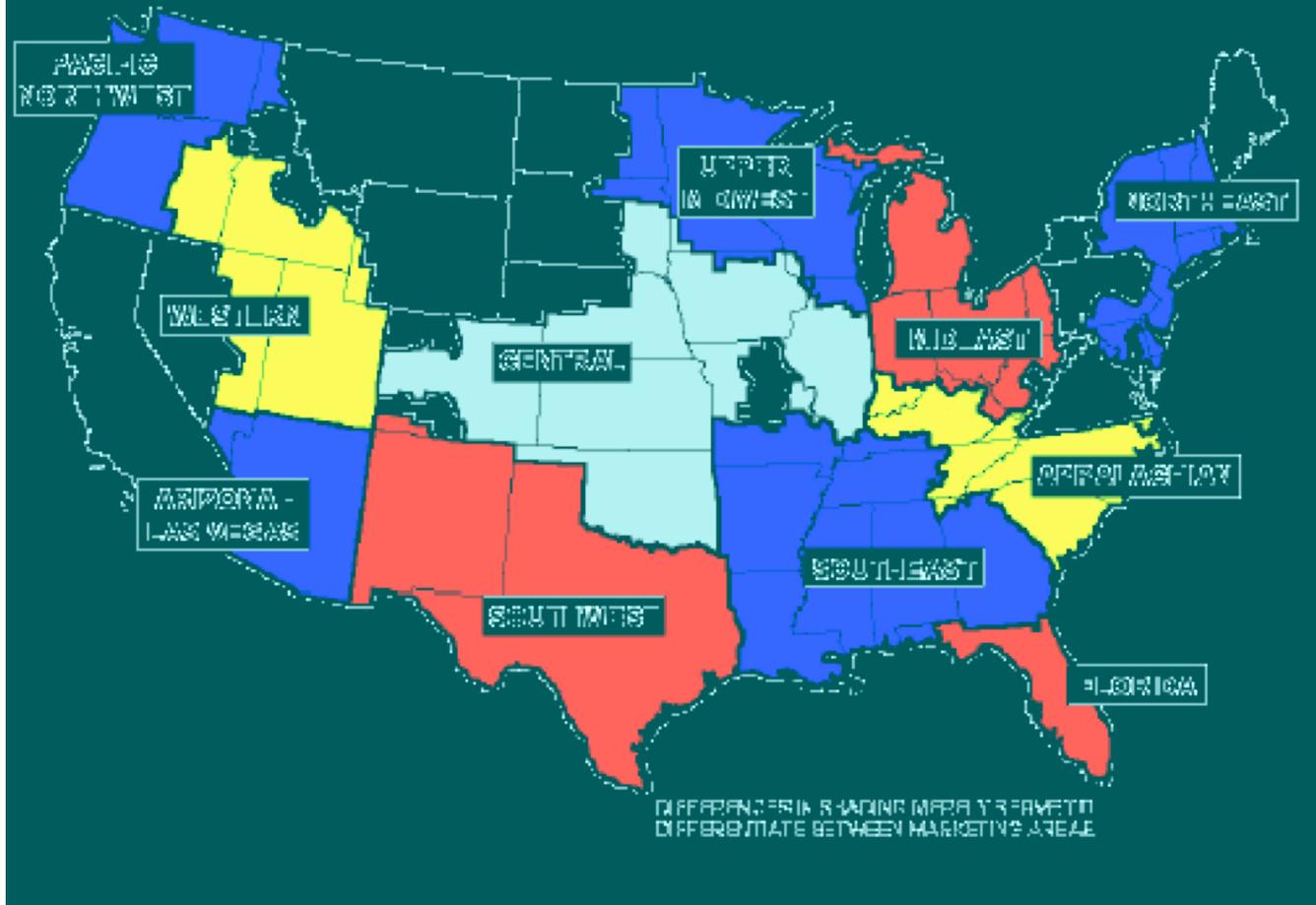
Dairy Industry

- w/o order - many small producers, no market power
- w/ order - set minimum prices that processors must pay farmers
 - Class I
 - Class II
 - Class III
 - Class III-A

Distribute revenue across producers

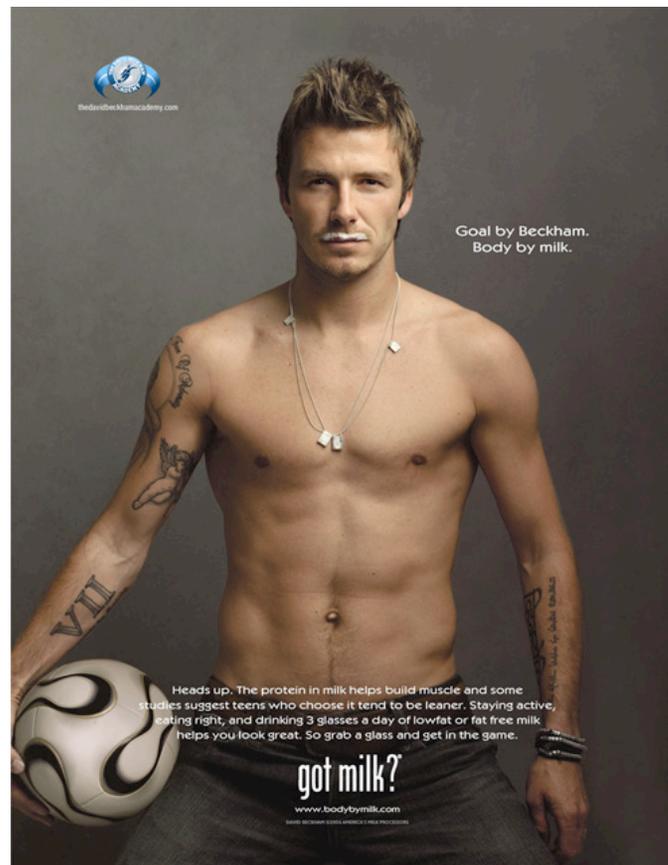


FEDERAL MILK MARKETING ORDER AREAS
January 1, 2000



Paper Thesis

How do milk marketing orders affect various demographic groups?



Products Tracked

- 1% Milk
- 2% Milk
- Nonfat Milk
- Whole Milk
- Cream
- Coffee Creamers
- Natural Cheese
- Processed Cheese
- Shredded Cheese
- Cream Cheese
- Butter
- Ice Cream
- Plain/Vanilla Yogurt
- Flavored Yogurt



Demographics Tracked

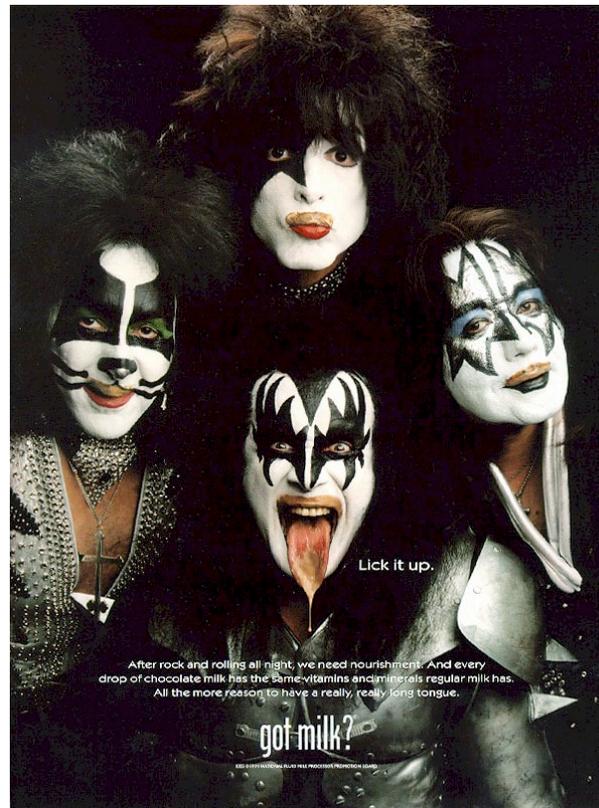
- Income Bracket
- Female/Male Head of Household
- Age of Head of Household
- Share Unemployed, Part and Full Time
- Professional/Non-Professional Jobs
- Ethnicity: White, Black, Hispanic, Asian
- # and Age of Kids in the Household



Example of Theoretical Model

Demand model that is linear and quadratic in prices and linear in income with all kinds of fussy manipulations

[insert formula for pg 5]



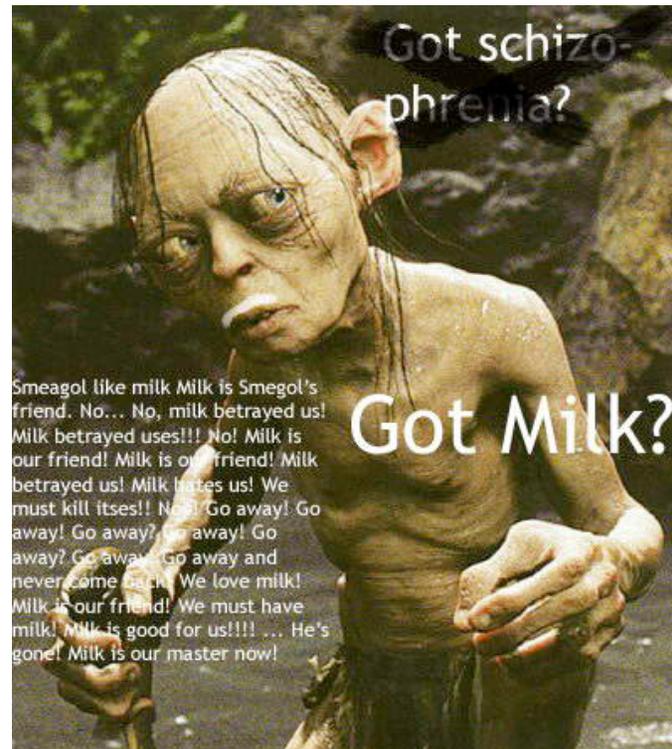
Evaluations Conducted

- Price elasticities of each of the 14 dairy products
- Cross-price elasticities between each of the 14 dairy products
- Income elasticities for each product
- Marketing order welfare effects among
- different demographic groups



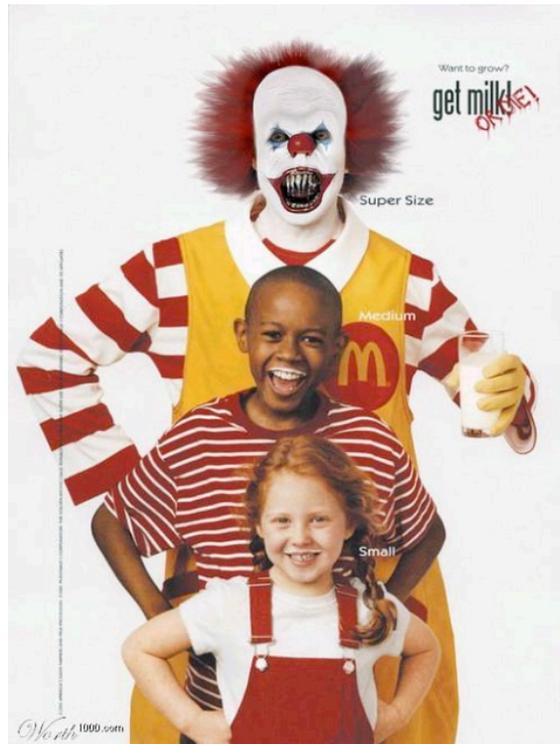
Data Source

- Grocery Store Scanner Data
- 23 U.S. cities
- 3 years of data, Jan 1997 - Dec 1999
- Empirical study - New England Dairy Compact, ended 2001
- Theoretical model



Findings

- Very little variation in price elasticities across demographic groups
- Eliminating the market orders had noticeable welfare difference across demographic groups



(1) Welfare Differences in the Empirical Study

New England Dairy Compact ended 2001

- Price of milk dropped 20%
- Price of processed milk was stable

All consumers benefited

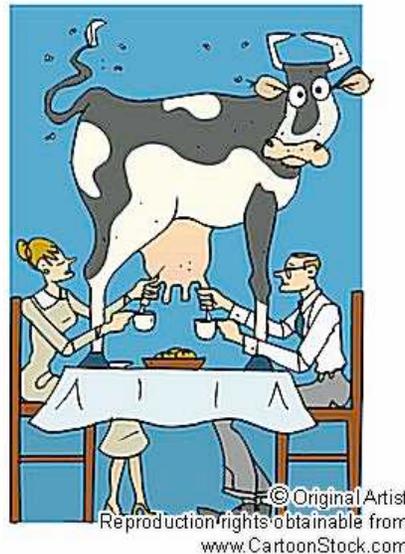
Degree of benefit varied - some were
bigger winners than others



(1) Welfare Differences in the Empirical Study

Biggest Winners:

- lower income families
- less educated families
- families with young children



(2) Theoretical Model

Modeled: price of fresh milk drops and the price of processed milk increases half as much

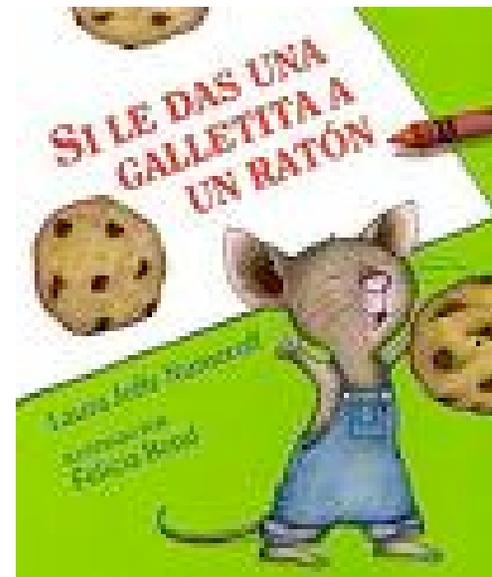
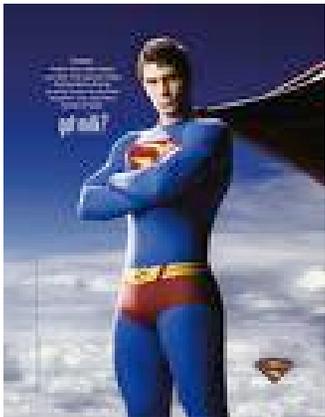
Winners and losers



(2) Theoretical Model: Winners

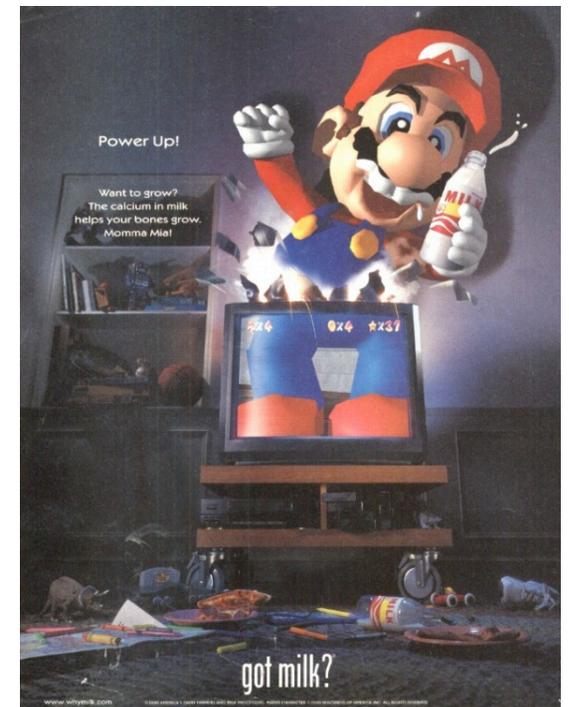
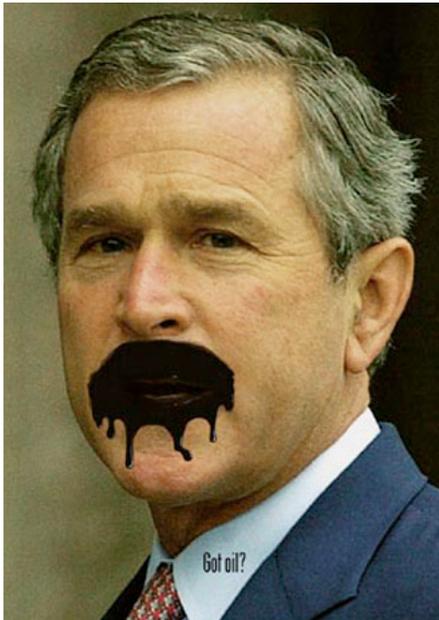
Households that consume relatively more fresh milk

- families with children
- Asians
- Hispanics



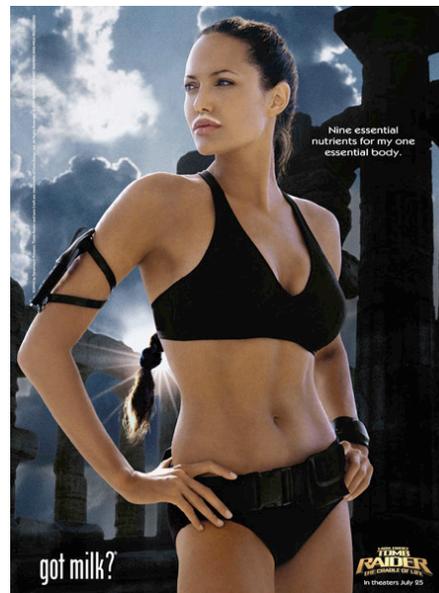
(2) Theoretical Model: Losers

Households that consumer relatively more processed milk
- older, childless couples



(3) Marketing Orders are Regressive

Lower income households pay a larger share of their income towards marketing order prices than households with higher incomes



Marketing Orders are Regressive

Income share distributed differently among different demographic groups



Conclusion

