## Impacts of Animal Well-Being & Welfare Media Coverage on Meat Demand

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## Background & Objective

• Animal welfare (AKA care, handling, well-being) is a rapidly growing issue in the U.S.

- Yet, no known analysis of aggregate meat demand impacts exist...
  - Objective of this study (collaborated w/ Dr. Nicole Olynk, Purdue University)



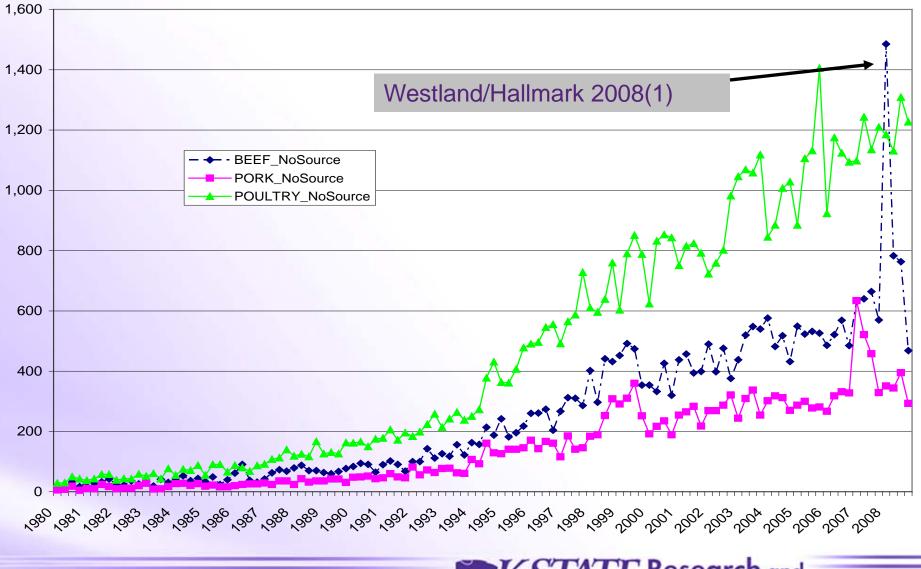
## Methods: Media Indices

 Lexis-Nexis searches (1980-2008) of major U.S. newspaper and magazine articles with key words:

"(animal welfare) or (animal friendly) or (animal care) or (animal handling) or (animal transportation) or humane or (humanely raised) or cage or crate or stall."



#### **Species-Specific Indices**





## Methods: Model

- Estimated aggregate demand model
  - Beef, pork, poultry, non-meat food
  - Allow for "cross-meat" and "out of meat" substitution impacts

 Control for time trends, quarterly seasonality, prices, total meat expenditures, and AW media impacts



#### **Results Summary**

- *Reject* null hypotheses of:
  - No AW media effects
  - AW media effects being contemporaneous only
  - AW media effects extending beyond 6 months
    - SO: AW media effects are significant in the quarter of article release & one subsequent quarter...
- Fail to reject null hypotheses of:
  Cross-species spillover effects = 0
  - SO: AW impacts lead to expenditure reallocation to non-meat food rather than to increases in competing meats...



#### **Results Summary**

- AW media elasticities are notably smaller than price & expenditure effects
- Increases in AW media have:
  - Not directly impacted beef demand
  - Reduced pork demand (both in short- and long-run)
  - Reduced poultry demand (in long-run)
- 1999(1)-2008(4) pork & poultry AW media indices increased by 181% & 253%
  - = 2.65% pork & 5.01% poultry demand reductions...



# Implications for Industry

- Aggregate meat demand impacts exist. Do they cover avg. adjustment costs?
  - Highlights the resident voting vs. consumption decision dilemma that needs further research...
  - Also consistent with limited "free market" disadoption observed to-date by livestock industry...
- Budget reallocation effects:
  - Supports notion of a broader meat industry response rather than species-specific responses
  - All species lose as expenditures leave meat complex...



# **Future Work Opportunities**

- Reassessment & replication needed
- Net Information vs. Separating out "positive," "negative," and "neutral" articles...
- No delineation by source considered...

 Broader global "comparative advantage" consideration needed (pork exports: 20-25%)



### Mandatory Labeling of Animal Welfare Attributes: Public Support and Considerations for Policy Makers



## **Background Information**

- Increasing consumer interest in animal welfare (AKA care and handling) in the U.S.
- State-by-state changes have triggered:
  - Comparative advantage differences
  - Calls for "leveling the playing field"
  - July 7<sup>th</sup> UEP & HSUS agreement; call for national standards regarding laying hen housing & mandatory labeling of eggs



#### Objectives of this Study (collaboration w/ Dr. Chris Wolf – Michigan State Univ.)

- 1. Examine U.S. resident support for mandatory labeling of AW information on pork and eggs
- 2. Outline considerations for assessment *prior* to implementing any mandatory labeling policies



## Methods

- Oct/Nov 2008 national survey of 2,001
  - Purposely around CA's Proposition 2 vote...

- Assess awareness and perceptions w/r/t AW
- Estimate demand for mandatory labeling of AW on pork and egg products



# Results

- 62% in favor of mandatory labeling of pork (gestation crate/stall use) and eggs (laying hen cage use)
  - 44% reversed support with price considered
- WTP about 20% higher prices
  - Likely an upper bound
- Perceived accuracy of AW info. from livestock industries *relative* to consumer groups is critical demand driver



# <u>**Pre-Mandatory Labeling</u>** Implementation Considerations</u>

- Through benefit-cost assessment is needed
- Delineations needed:
  - Frequent consumer vs. advocates for change/bans
  - Producer impacts likely vary within industries
- Alternative voluntary labeling consideration
- Consumer choice may not be enhanced
- Information overload possibility
- Composite AW index needed AW isn't univariate



#### Summary Points:

- Meat demand impacts do exist and warrant industry consideration in strategy development
- National housing standards & mandatory labeling discussions picking up...
- Much more work is needed
  - Industry changes and policy consideration discussions are WAY ahead of current research based knowledge...



#### More information at: AgManager (http://www.agmanager.info/)



#### http://www.agmanager.info/about/contributors/

http://www.agmanager.info/livestock/marketing/AnimalWelfare/default.asp

-- includes related Factsheets, YouTube videos, and Journal Articles

