
*The Future of
the Missouri Cattle Industry*

2013 Breimyer Seminar

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Reynolds Alumni Center
University of Missouri-Columbia

Beef Demand: Clarifying Concepts, Summarizing Status, and Discussing Future Opportunities

Sponsored by



UNIVERSITY OF MISSOURI
College of Agriculture, Food & Natural Resources
Department of Ag. & Applied Economics
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The Breimyer Fund
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KANSAS STATE UNIVERSITY



Beef Demand Kickoff Points

- *Critically Important, Yet Often Confused*
 - *Demand strength*
 - *reflects consumer valuation of beef*
 - *underlies total \$ available for the industry*
 - » *drives prices and profitability for all*
 - *“To Fix It You Have to Understand It”*
 - *Wayne Purcell, 1998 (<http://www.naiber.org/Publications/RILP/primer1.pdf>)*



Example to Ponder

- When shopping for blue jeans and you observe a buy-one-get-one free sale, do you ever buy more than just one pair?
 - The money in your wallet, the physical characteristics of the jeans, etc. did not change
 - Yet, your “per capita consumption” of jeans increased if you bought 2 rather than 1 pair...

–EXAMPLE OF DEMAND NOT CHANGING

» *You bought more solely because of lower prices...*



Per Capita Consumption is NOT Demand

- Per capita consumption =
 - (Domestic Production + Imports – Exports + Cold Storage Adjustments) / Population
 - All quantity values; no prices in derivation...



So What is Beef Demand?

- *Beef Demand*
 - Schedule of beef quantities consumers would purchase over a range of prices
 - Refers to the “demand curve” economists speak of
- *Quantity of Beef Demanded*
 - Quantity of beef consumers will purchase at a given price
 - Refers to a point on the demand curve

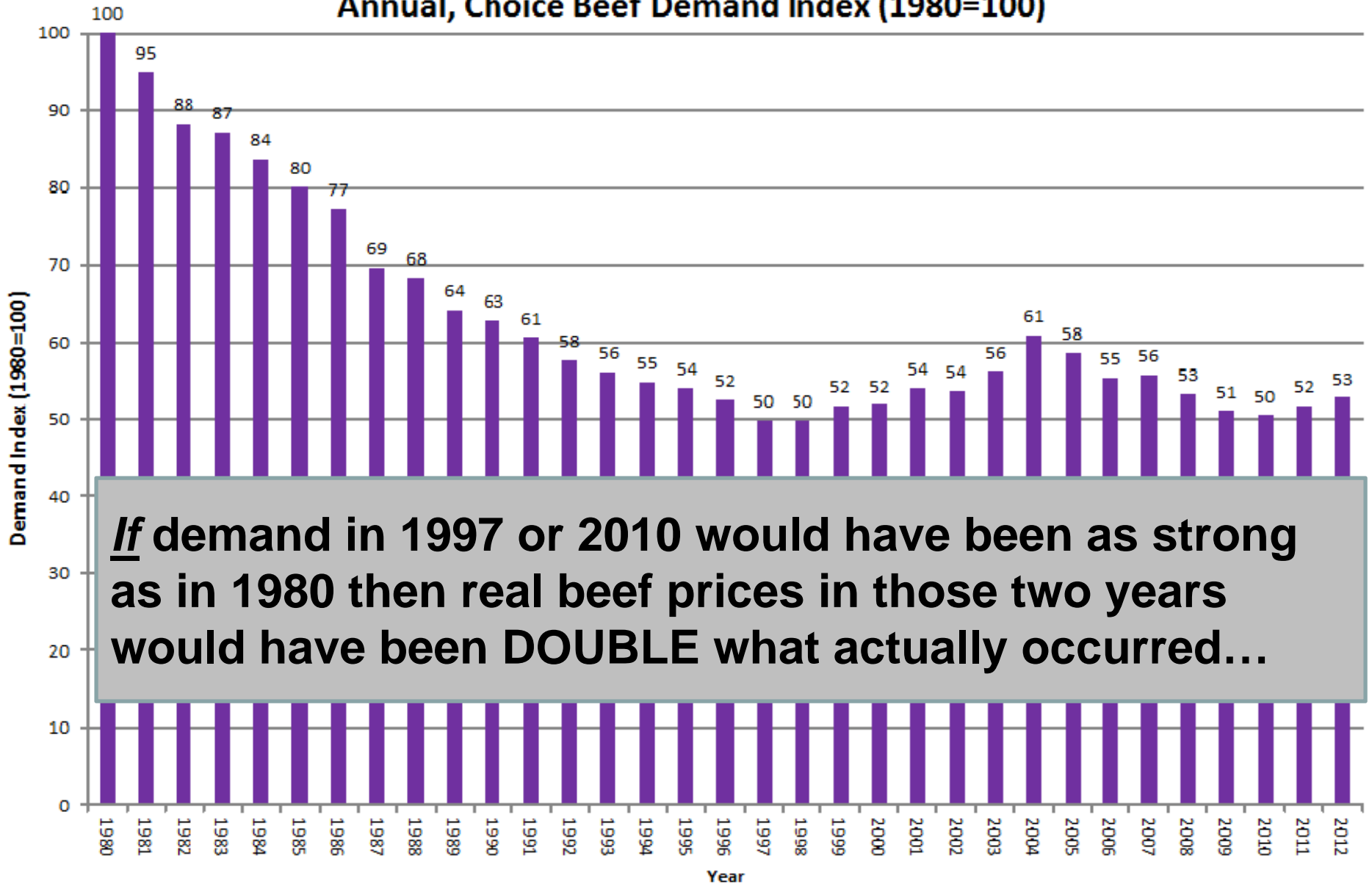


What is History, Status, and Future of Beef Demand?

- Past: Multiple decades of decline
- Current: Recent strength has been surprising
- Future: Optimism rational if industry engages



Annual, Choice Beef Demand Index (1980=100)



***If* demand in 1997 or 2010 would have been as strong as in 1980 then real beef prices in those two years would have been **DOUBLE** what actually occurred...**

Source: Glynn T. Tonsor, Kansas State University, Jan. 2013

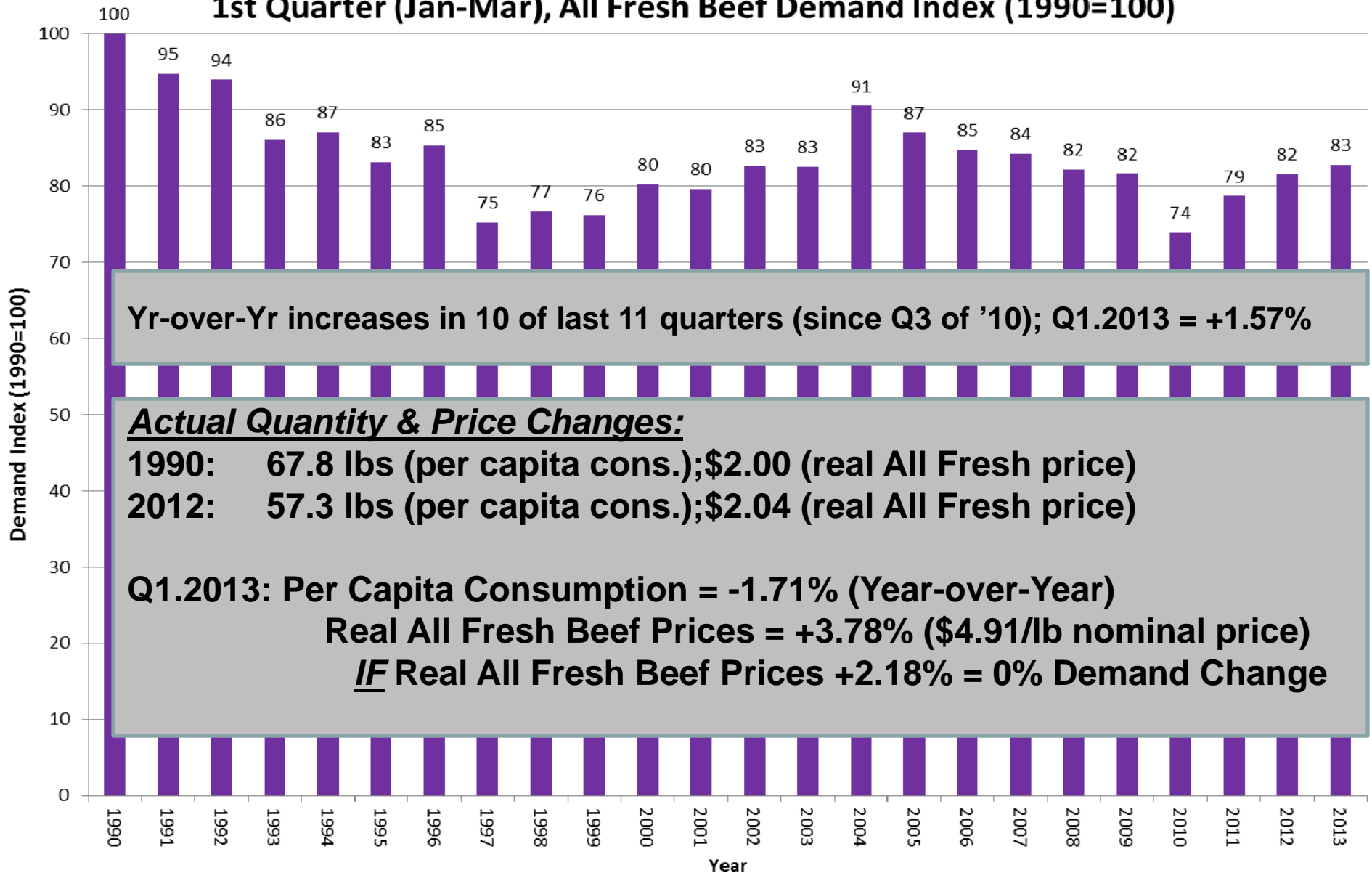
<http://www.agmanager.info/livestock/marketing/Beef%20Demand/default.asp>

What Drivers Led Multi-Decade Decline in Beef Demand?

- 2009 Demand Study, Cattlemen's Beef Board
 - Income/expenditures (+ in most years)
 - Health and Nutrition
 - Atkins was + in 98'-03' ; Zinc, Iron, Protein +; otherwise -
 - Convenience (-)
 - FSIS recalls (-)
 - Relative protein prices (-)



1st Quarter (Jan-Mar), All Fresh Beef Demand Index (1990=100)



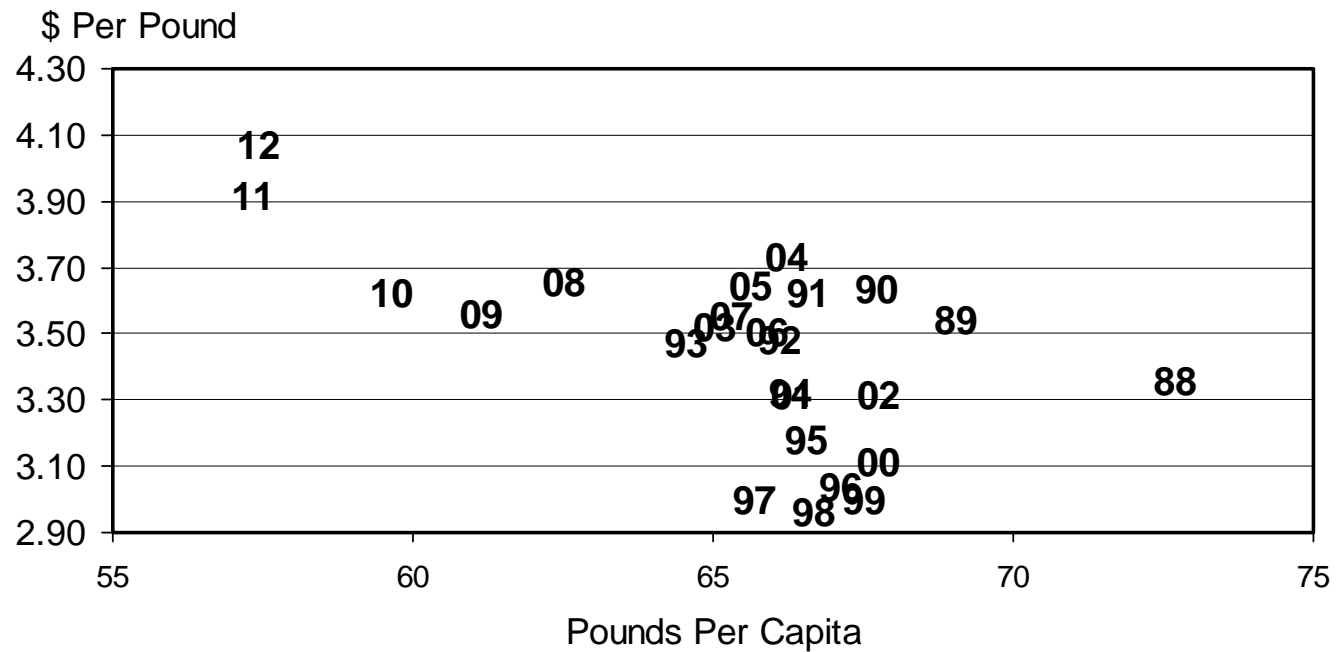
Source: Glynn T. Tonsor, Kansas State University, Apr. 2013

<http://www.agmanager.info/livestock/marketing/Beef%20Demand/default.asp>

2013, 54.8 lbs/capita, 0% Demand Change Case =
\$4.89/lb (+4.28% vs. 12')

BEEF PRICE-QUANTITY RELATIONSHIP

Annual, Retail Weight, Deflated All Fresh Retail Price



Livestock Marketing Information Center

Data Source: Bureau of Economic Analysis & USDA-ERS, Compiled & Analysis by LMIC

C-P-65A
02/08/13



2013 Beef Demand Study

- Cattlemen's Beef Board, Checkoff funded
- Who: Schroeder, Tonsor, and Mintert
- Goal: Identify demand drivers to focus effort on
 - Forward-looking, 10-year assessment
 - Combo of impact and ability of industry to influence
- How: Lit review; surveyed consumers & experts
- Available at:
<http://www.beefboard.org/evaluation/130612demanddeterminantstudy.asp>



2013 Beef Demand Study

- Evaluated 7 Broad Demand Determinants
 - Food Safety (E.coli, Salmonella, BSE, etc.)
 - Product Quality (Freshness, Tenderness, Convenience, etc.)
 - Price (\$ per pound)
 - Nutrition (Protein, Iron, Zinc, etc.)
 - Health (Amount & type of Fat, Cholesterol, Sodium, etc.)
 - Sustainability (Environment, Labor, Community dimensions)
 - Social Aspects (Animal Welfare, Country of Origin, Organic, etc.)



2013 Beef Demand Study

- **Prioritizing Broad Demand Determinants**
 - Most important to focus on:
 - Food Safety (impactful & feasible to be influenced)
 - Product Quality (impactful & feasible to be influenced)
 - Price (impactful yet less feasible to be influenced)
 - Secondary importance to focus on:
 - Nutrition (middle ranking in impact and feasibility)
 - Health (middle ranking in impact and feasibility)
 - Less important to focus on:
 - Sustainability (lower ranking on both impact and feasibility)
 - Social Aspects (lower ranking on both impact and feasibility)



2013 Beef Demand Study

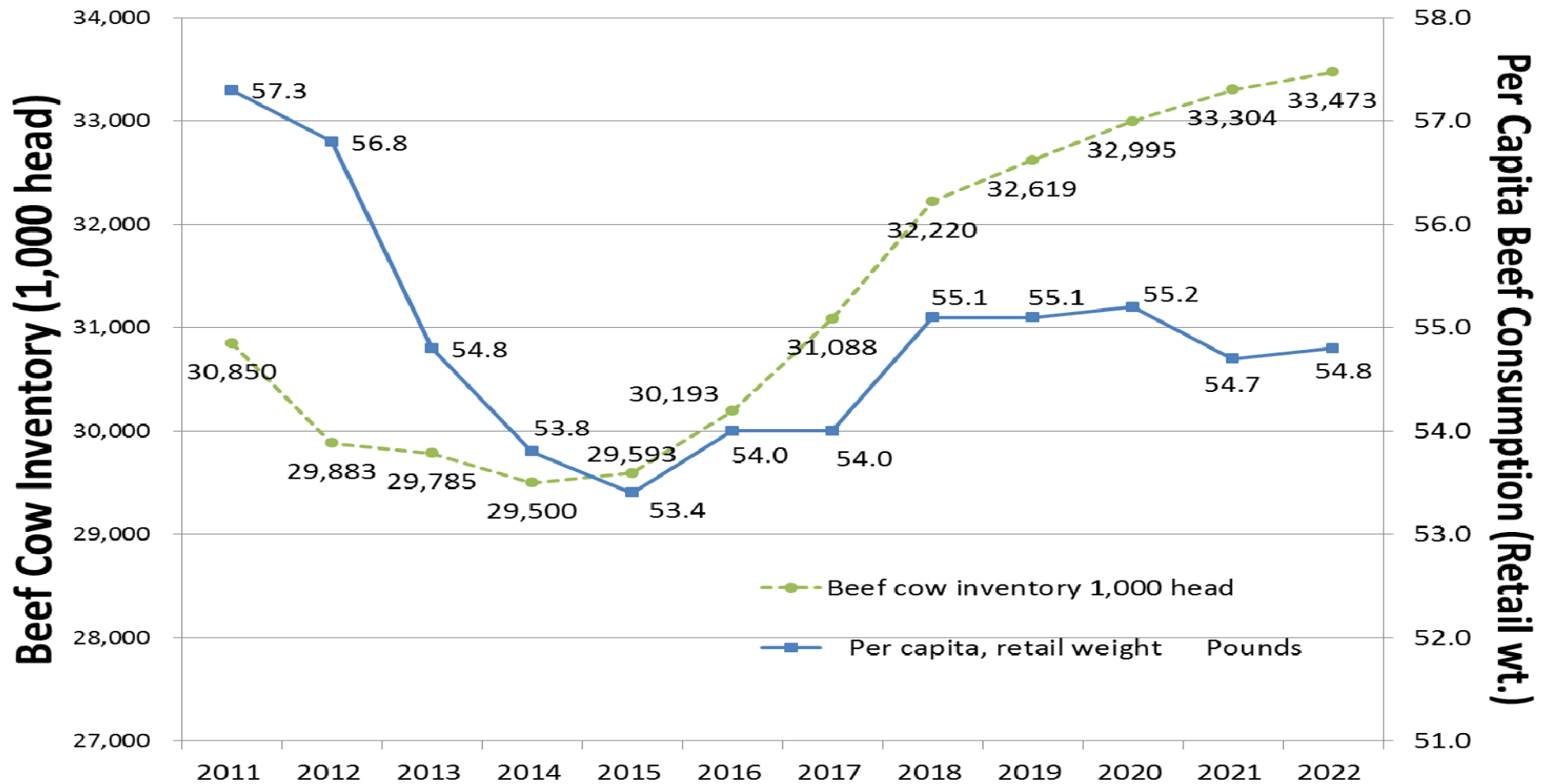
- Domestic Focus & Industry Aggregate Based
 - Investments need to note food safety and product quality implications
 - Heterogeneity in consumer preferences, private industry endeavors, etc. must be noted
 - “Tale of Two Consumers” – Power of Meat Report
 - Younger Shoppers (Tomorrow’s High Earners) have specific nutritional and health requests
 - Export Demand Critically Important Also



Longer-term projections (as of Feb. 2013)

<http://www.usda.gov/oce/commodity/projections/index.htm>

2021 Projection 1.1 million less than Feb. 12'



IF 2013 per capita consumption falls from 56.8 lbs to 54.8 lbs (-3.52%)

AND IF 2013 All Fresh Beef price increases by +4.28% (\$4.89/lb) = 0% Demand Change...



USDA's longer-term projections (as of Feb. 2013) ...

<http://www.ers.usda.gov/Publications/OCE121/>

- **U.S. beef cow inventory:**
 - 29.9 million in 2012
 - 33.5 million in 2022 (+/- 1993 levels)
- **U.S. domestic per capita red meat & poultry consumption:**
 - 221 lbs in 2004-2007 (Beef=65.7 lbs; Pork=50.4 lbs; Poultry=103.8 lbs)
 - 197 lbs in 2013 (Beef=54.8 lbs; Pork=45.0 lbs; Poultry=96.4 lbs)
 - 209 lbs in 2022 (Beef=54.8 lbs; Pork=48.1 lbs; Poultry=104.6 lbs)
- **U.S. beef exports:**
 - 2.47 billion lbs in 2012
 - 3.27 billion lbs in 2022
 - 32% increase from 2012 levels; would be 11% of forecasted production



USDA's longer-term projections ...

<http://www.ers.usda.gov/Publications/OCE121/>

- **“Developed World” Changes**
 - Declining global economic prevalence, populations, & per capita meat consumption
 - US/Canada (2.5% GDP/yr)
 - Different dependence on domestic consumption...
 - Japan (1.0% GDP/yr):
 - Major meat importer currently but will exporters care less going forward?
 - Europe (1.9% GDP/yr):
 - Will influential role as “food thought leader” persist?



USDA's longer-term projections ...

<http://www.ers.usda.gov/Publications/OCE121/>

- **“Developing World” Changes**
 - **Increasing global \$, pop., & per capita meat cons.**
 - **Africa & Middle East (4.4% GDP/yr)**
 - **Arguably the least understood growth market...**
 - **Latin America (4.2% GDP/yr)**
 - **Growing producer & consumer...**
 - **China (8.0% GDP/yr)**
 - **Canada has access but US does not ...**
 - **South Korea (3.7% GDP/yr – but 10x per capita inc. of China)**
 - **US has access but Canada does not...**



What To Do?

- Persistently work to understand what beef demand is and its role for the industry and you
- Know your comparative advantage
 - Also note role of production costs vs. sales price
- I encourage you to:
 - Recognize this “isn’t your father’s world” anymore and manage accordingly...
 - “Think globally, manage locally, and stay informed”



Questions, thoughts, and reactions are welcome...

This presentation is available in PDF format at:

<http://www.agmanager.info/about/contributors/individual/tonsor.asp>

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