Effects of more Transparency in the US Fed Cattle Market

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US Beef Industry in Transition

Beef Packing and Cattle Industry

1945 to 1975: Packing industry abandons Terminal Markets. Beef Production increases


Livestock Mandatory Reporting Act of 1999 (MPR)

Contract Markets Beyond 2001

The Market for Fed Cattle

1945 to 1975: Decline in terminal markets and the rise in negotiated markets.


Livestock Mandatory Reporting Act of 1999 (MPR)

Contract Markets Beyond 2001
U.S. Per Capita Consumption of Beef, Beef Demand Index (1980=100), and Steer and Heifler CR4 Index.
Figure 1. National four-firm concentration in steer and heifer slaughtering, boxed beef production, and hog slaughtering, 1972-2007

Source: GIPSA, USDA
Fed Cattle Marketing Channel (AMA) Trends

Cash Vs. Contract Market Share

Market Share

Monthly: April 2004 to January 2018

- Negotiated
- Negotiated Grid
- Formula
- Forward Contract
Price Discovery, Transparency, and Volatility

Prefect Information

Incomplete Information
Industry Transition and Thin Markets: Empirical Studies and USDA Reports: Pre and Post MPR


Industry Transition and Thin Markets: Empirical Studies and USDA Reports


The Effect of MPR on the Fed Cattle Market


Cooperative Vs. Non-Cooperative Behavior in the U.S. Beef Packing Industry


1. CSK estimate a NEIO Markov regime switching model
2. Pre vs. Post MPR implementation, the duration of non-cooperative regimes (37 vs 15 wks). Duration of cooperative regimes (18.5 vs. 20.4 wks).
3. Pre vs. Post sample period of cooperative regime duration of: 33% vs. 57.7%.
4. Pre vs. Post Oligopolistic rents during cooperative periods $0.88 per head vs. $2.59 per head.


1. FDQA investigate the influence of carcass attributes on weekly value based price premium (VBP). Data: 598 head, years 2001-2008.
2. In addition, CSK regime switching bivariate variable denoted market power (MP) was included as an explanatory variable.
3. FDQA: During cooperative periods VBP declined by $0.50 cwt.
4. Cooperative period MP estimates (oligopolistic rents) for each individual carcass were regressed on carcass quality attributes.
5. Regression results indicate that rents were extracted primarily thru the grid discount structure.
U.S. Fed Cattle Market: Conclusions

- Empirical studies suggest the voluntary price reporting system (VPR) (pre-MPR) may have been biased (Perry: volatility; Fausti: transparency).
- MPR improved price transparency and price discovery.
- Empirical evidence suggest packer ability to exert oligopsony market power has increased under MPR.
- CSK argue that single regime industry models are biased.
- USDA PS&A 2012 (p.10-11) Annual Report acknowledges the relevance of regime switching model to monitor market power.
- Cash market slaughter cattle volume has decline under MPR. However, the cash market share of slaughter volume has stabilized in the 20 to 30 percent range.
U.S. Fed Cattle Market: Questions

• Is there a link between increased transparency and market power?
• Is there a link between the decline in cash market volume share of slaughter and passage of MPR?
• How thin is too thin for the cash market to provide efficient price discovery?
• AMA’s provide packers and producers a tool to reduce transactions cost and benefit from economies of scale.
• What happens to the small feedlot operator who is unable to reach a significant volume to participate in the contract market?
• Is the MAM (Modern Agriculture Market) hypothesis of a welfare enhancing symbiotic relationship valid for the U.S. fed cattle industry?

• Thank You  Questions?
References


