An Assessment of the Livestock Mandatory Reporting Act

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Publicly funded market reporting began nearly a century ago. One factor leading to public market reporting even at that time was concern regarding competitiveness, efficiency, and fairness in agricultural markets. A second factor was need for information by the Federal government related to agricultural price incentives during World War I. After World War II, Congress greatly expanded the voluntary price reporting system in cooperation with state departments of agriculture (Henderson, Schrader, and Rhodes).

Several market structure trends have led to issues related to market transparency, thin markets, noncompetitive markets, and asymmetry of information between buyers and sellers for price discovery during the past three decades. While mandatory price reporting was mentioned as an alternative as early as 1983, it received relatively little attention for the next two decades. Much of the thinking about public price reporting changed markedly in 1999. Unexpectedly strong populist support led to Congressional passage of the Livestock Mandatory Reporting Act. The Act mandated the Agricultural Marketing Service (AMS) of USDA to implement an entirely new, mandatory system of price reporting for most livestock and meat products, which was achieved in April 2001.

The objective of this fact sheet is to provide an assessment of the mandatory price reporting (MPR) system. Several issues are identified regarding passage of MPR, including two critical problems in the early implementation of the Act.

Initial Reactions to MPR and Problems

Several new or modified reports resulted from MPR. Readers can see available reports at the AMS website http://www.ams.usda.gov/lsmnpubs/ . While a few reports were modified or added at some time following initial implementation of MPR, most were available with advent of the new system.

Two reactions were immediate. First, it was difficult to find "comparable information" to voluntary price reporting (VPR). Some types of information and some data series were discontinued. Sometimes the information format was changed, but the data series remained reasonably comparable to that under VPR. Changes created minor or major disruptions in data and information series market participants may have used regularly. Some information was new, thus was not comparable with anything under VPR.

Second, many reports were not available due to confidentiality conflicts. Non-reportable reports was one of two serious problems created by MPR. Initially, AMS instituted a 3/60 rule regarding confidentiality. Data were reported only if at least three firms supplied the data and no single entity accounted for 60 percent or more of the data for each respective reporting period. With regional and national four-firm concentration ratios in steer and heifer slaughter more than 75 percent, many fed cattle price reports were unavailable. AMS was forced to revise its 3/60 rule and create a 3/70/20 rule. For the preceding 60 days, at least three firms must be reporting transactions 50 percent of the time. No single firm can have 70 percent or more of all trades in a reporting period. No single firm can be the sole reporting firm 20 percent of the time. This modification greatly reduced non-reporting problems created by the initial confidentiality rule. Grunewald, Schroeder, and Ward noted that 81 percent of regional and national, daily afternoon fed cattle reports from April 2 to August 17, 2001, were withheld. After the confidentiality rule change, all such reports were reported between August 20, 2001 and April 2, 2002.

Another problem surfaced shortly after moving to MPR; this one resulting in a lawsuit which went to trial in April 2006. For a six-week period, a software error at AMS underreported boxed beef prices. While the software error was ultimately corrected, USDA made no known attempt to determine the number and extent of those adversely affected, and conversely those experiencing unforeseen gains, nor to provide compensation or transfers associated with the errors. Losses to cattlemen were estimated at $42.8M and some producers alleged that packers knew of the errors and intentionally bid lower than market conditions warranted. A U.S. District Court ruled in favor of producers' allegations. Jurors recommended fines of $9.25 million were assessed on three of the largest packers. One packer was not found liable. The case is under appeal at this time.

Evaluation and Assessment

Research has addressed various aspects of mandatory price reporting.

Feedlot Managers' Reaction – First was a survey of cattle feeders located in Iowa, Nebraska, Kansas, and Texas in March 2002 (Grunewald, Schroeder, and Ward). Feeders were asked several questions pertaining to MPR and its reports. Feeder opinions varied widely. One key question was whether MPR benefited the industry. Among respondents, 49 percent expressed some level of disagreement on a nine-point scale while another 28 percent expressed some level of agreement that MPR did benefit the industry. Areas of large commercial cattle feeders (Kansas and Texas) were more apt to disagree compared with an area characterized by smaller farmer feeders (Iowa). Certainly, responses must be evalu-

ated relative to cattle feeders' expectations for the move to MPR. Given other responses in the survey to questions of packer concentration and captive supplies, and much debate over these issues in the beef industry over the past several years, it can be argued farmer feeders and cattle producers in the upper Midwest, Plains, and Mountain states were more concerned about VPR than feeders and producers in the more concentrated cattle feeding areas. Thus, regional differences regarding benefits from MPR could have been anticipated.

Feeders were asked if MPR increased information on fed cattle prices, base prices in grids, and boxed beef prices. Again, there was rather sharp disparity among respondents. Fifty-seven percent disagreed to some degree and 20 percent agreed. These reactions could have been affected by several factors; reduced reports for some regions, reduced timeliness of certain reports, and confidentiality problems immediately after implementing MPR.

A major reason for supporting MPR was to have increased information for price discovery. Feeders were asked whether MPR enhanced their ability to negotiate cash market prices, base prices for grids, formulas, or premiums/discounts with packers. Nearly 3/4 of responses (71 percent) disagreed to some extent while only 10 percent agreed. As before, there was more apt to be disagreement among feeders in Nebraska or Iowa than in Kansas and Texas. Here also, the response is likely influenced by expectations, some of which seemed unrealistic as the proposed legislation was being debated.

Captive Supply Information – Ward (2004a, 2004b) argued that MPR increased information in some areas, though his focus was on discussing captive supplies with the "new" data series and not on assessing MPR. In particular, he used data generated by MPR on prices and volumes of fed cattle purchases by packers using alternative procurement methods. He argued that MPR significantly improved the amount, type, and timeliness of data related to captive supplies compared with information available prior to implementing MPR. Post-MPR, data were available on prices and volumes of fed cattle purchases by negotiated trading, formula trading, forward contracting, and packer owned cattle (volume only). This enabled comparing prices paid by packers across procurement methods, something which had only been possible after special data collection efforts by the Grain Inspection, Packers, and Stockyards Administration (GIPSA). Thus, transparency was enhanced considerably in this area. Still, reaction to the increased information was critical by some producer groups; especially those who expected far more transparency than most analysts would have anticipated, given privacy and confidentiality concerns. These producers also expected large price differences between prices paid by procurement methods, reflecting expectations regarding "sweetheart deals" between large packers and feeders, which Ward did not find.

Economic Research Service (ERS) Assessment – Research by ERS considered MPR from several vantage points (Perry et al.). They extended the work by Ward (2004a, 2004b) with another year's data. Findings were generally similar. However, Perry et al. suggested that MPR may have contributed to a reduction in formula trading of fed cattle and an increase in negotiated trading. While they did not prove a causal relationship, circumstantial evidence lends support to their argument. However, other market factors not considered may have had a substantial influence. If MPR did in fact contribute to the reversal of a trend toward increased formula trading, subsequent surveys of cattle feeders should be much more positive about the benefits of MPR and the influence MPR has had on price discovery and transparency.

Perry et al. also examined price volatility before and after implementing MPR. They concluded prices were twice as volatile under MPR, which was unexpected to the research team. One explanation relates to the filtering role of market reporters under VPR relative to their reduced filtering role with MPR. Prior to MPR, market reporters would seek to report the bulk of trades, thus omitting extreme high and low prices. In effect, this reduced both the range of prices reported and the variance of reported prices. This effect should have been anticipated given AMS' experience a few years ago with hogs. There, AMS began reporting weighted average slaughter hog prices, thus including more of the extreme or full range of observations. The effect was a wider price range and increased variability of the reported prices.

Report for Congress – A Government Accountability Office (GAO) review focused on USDA's MPR procedures, especially on the role of market reporters and audits of the packers reporting prices and volumes. They found that the filtering role of market reporters continue, though it was much decreased compared with VPR. During a three-month sample period in 2005, market reporters omitted nearly 9 percent of cattle transactions which statistically altered the weighted average price during this period. For many users of the MPR data, this was a greater filtering role than was likely anticipated. USDA's response was to improve their instructions to market reporters regarding excluding transactions.

USDA audits of packers revealed that nearly 2/3 of the time, errors were found in packers' reporting of prices (Government Accountability Office). While these represented a small (but unstated) percentage of trades, GAO argued that USDA had not adequately addressed the misreporting by certain packers. USDA responded that steps have been taken to improve the audit process.

Lastly, the GAO report noted the lack of coordination between GIPSA and AMS regarding reported prices under MPR. The two agencies have long argued their legal authority prevents sharing of information. In particular, with MPR, much very useful price and volume data on livestock procurement are available daily to AMS which would be valuable to GIPSA in monitoring and investigating anticompetitive claims or questionable trades. This lack of coordination goes beyond the MPR legislation *per se*, but the GAO report may have raised this issue sufficiently to attract the attention of key members of Congress.

Retail Price Reporting – The MPR legislation directed USDA to develop a broader, more representative measure of retail meat prices. Lensing and Purcell compared retail meat prices reported by the Bureau of Labor Statistics (BLS) with scanner-based prices, which included price featuring by retailers, resulting from the MPR mandate. They found that quantity-weighted, monthly average retail prices for five of six beef items were lower than BLS prices. Quantity-weighted prices also had a higher variance for five of the six retail items. Lensing and Purcell found that simple averaging of weekly prices to generate monthly average prices overstated prices and increased empirical own-price elasticity estimates. They recommend continuing to use quantity weighted retail prices

calculated from scanner data. Further, they recommend continuing the procedures developed by the Economic Research Service of USDA to improve retail meat price reporting as directed by the Livestock Mandatory Reporting Act. Use of scanner data appears to be a step toward improving retail meat price reporting though a number of issues remain regarding its use on a continual basis.

Summary and Conclusions

Evidence to date suggests the following conclusions to this author.

- USDA was mandated to switch to mandatory price reporting (MPR) with relatively short lead time. As a result, at least two key problems arose shortly after implementation which likely negatively influenced survey reactions to MPR.
- After more experience with MPR, evidence suggests considerably more information is now available *in some areas* than was available with MPR, thus enabling certain kinds of analyses on a regular basis than was possible with VPR. However, the value of reported information depends in part of the uses for the information and the associated importance of accuracy and timeliness.
- MPR has increased transparency and price reporting accuracy based on available data but not necessarily to the point of being so transparent as to invite collusive behavior among buyers.
- USDA is continuing to improve the MPR system both in terms of modifying reports and in developing effective internal procedures to report prices and audit data reported to AMS.
- Retail scanner data should continue to be used to calculate and report retail meat prices and quantities, giving economists better data with which to estimate meat demand models and to use more accurate price elasticity estimates.

The switch from VPR to MPR was a major change. In some regards, we still have inadequate information to measure the gain in transparency or price reporting accuracy from the new system compared with its predecessor. However, two factors suggest potentially greater satisfaction with MPR now than initially, compared with VPR:

- Increased familiarity over time with data and information available from MPR.
- Enhanced confidence in reported prices after USDA's modification of the initial confidentiality rule and correction of the reported boxed beef price.

It seems clear that various research and information by agricultural economists tend to validate improvements made by moving from MPR relative to VPR.

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