

MANDATORY REPORTING FOR DAIRY PRODUCTS REGULATION COST BENEFIT ANALYSIS

1) Need for Mandatory Reporting of Dairy Products Prices:

A. Statutory Requirement

Section 273 of the Agricultural Marketing Act of 1946, as amended, mandates the Secretary to establish a program of mandatory information reporting for “manufactured dairy products that are used by the Secretary to establish minimum prices for Class III and Class IV milk under a Federal milk marketing order.” USDA is issuing a regulation establishing mandatory price reporting as required by statute.

Each manufacturer is required to report to the Secretary information concerning the price, quantity, and moisture content where applicable of dairy products sold by the manufacturer. In addition, entities storing dairy products are to report information on the quantity of dairy products stored. Any manufacturer or other entity that processes and markets less than 1 million pounds of dairy products per year is exempt.

Aside from being a statutory requirement, the regulation establishing mandatory price reporting is likely to improve the accuracy of reported prices under the earlier reporting system.

B. Federal Order Milk Prices

The Federal Agriculture Improvement and Reform Act of 1996 (the Act), Public law 104-127, mandated reform of the Federal milk marketing orders and authorized the Secretary to review “the use of multiple component pricing when developing one or more basic formula prices for manufacturing milk.”

In January 2000, the Agricultural Marketing Service (AMS) implemented a multiple component pricing system for establishing minimum Class prices under the Federal milk order (FMO) program. This system uses wholesale prices for selected dairy products in product price formulas to determine milk component values. The dairy product prices are those collected by the National Agricultural Statistics Service (NASS). AMS had precedence for using NASS generated wholesale dairy product prices in computing milk prices under the FMO program, as prior to 2000, the NASS price for Cheddar cheese was included in the calculation of the Basic Formula Price.

AMS computes monthly weighted averages of the applicable weekly NASS prices for butter, Cheddar cheese, nonfat dry milk, and dry whey. These monthly average prices are inserted in the specified formulas for butterfat, protein, nonfat solids, and other solids that then are combined to arrive at the specific Class prices. NASS collects these prices for AMS under a cooperative agreement.

C. The NASS Surveys

NASS conducts weekly surveys of dairy product manufacturers that sell specified products on a bulk, wholesale basis; prices are f.o.b. processing plant or storage center. With the assistance of AMS, NASS has established product specifications for the products reported. NASS collects prices and volumes traded for Cheddar cheese (40-lb. block and 500-lb. barrel styles), butter, nonfat dry milk, and dry whey. NASS releases the information for the previous week's trading period on Friday mornings in "Dairy Products Prices." Each report includes the information for five weeks; revisions to previously released data are included.

Dairy product manufacturers that produce 1 million pounds or more of the reportable product during the year are included in the survey. Through other data collection activities, NASS has information on the plants that meet this volume criterion. NASS visits these plants informing them of the reporting requirements under the Act and reviews the reporting procedures. The current reporting universe is 98 plants; the participation rate is 100 percent.

Respondents can complete the dairy product prices questionnaires using their normal day-to-day operating records.

Collection of weekly dairy products prices data are by facsimile, e-mail, and telephone follow-up of non-respondents.

The Cold Storage survey is conducted monthly. It is the only survey which measures the pounds of butter and cheese stocks held in warehouses artificially cooled to temperatures 50 degrees Fahrenheit or lower and whose food products are normally stored for 30 days or more. Currently, approximately 1,400 facilities are included in the monthly cold storage survey, of which 110 of these facilities have been identified as meeting the mandatory reporting requirements.

2) Examination of Alternatives

A. Non-Mandatory Alternative

Industry was concerned about the reliability of voluntary surveys and supported the need for full participation. When cheese prices rise, those results will be used to raise the minimum price of milk under Federal milk marketing orders. Hence, when the cheese makers report that the price of cheese is going up, it is going to cause the price of milk to increase. Without mandatory reporting, any manufacture may choose not to participate when the price is increasing.

Voluntary surveys raise doubts whether fully accurate data are forthcoming and accordingly, whether minimum milk prices will be accurately set. The bulk manufactured dairy product market is moderately concentrated with approximately 25 manufacturing plants currently included in the cheddar cheese price series. It is important that all qualifying plants report to ensure reported prices are accurate.

The Dairy Market Enhancement Act of 2000 explicitly states that all eligible participants are required to report the requested information to NASS. Therefore, the option of non-mandatory surveys is precluded from consideration.

B. Alternative Data Sources

Other alternatives to the NASS surveys were considered when determining the best vehicle for determining an accurate price of dairy products. The Chicago Mercantile Exchange was considered a “thin” market due to low volume traded. The NASS survey represented 13 times the volume of CME’s 40 pound block transactions during 2004. The actual weekly volume of 40 pound cheddar cheese blocks sold on the CME during 2004 averaged 640,000 pounds. The weekly sales volume of 40 pound blocks in the NASS survey over the same period averaged 8,300,000 pounds. The NASS-weighted price more closely represents the prices actually received by manufacturers. Also, sales volumes are important since the weekly prices are weighted by pounds of sales to calculate component prices.

Producer groups also were concerned about the reliability of CME and the potential for market manipulation.

The Dairy Market Enhancement Act of 2000 explicitly states that all eligible participants are required to report the requested information to NASS. Therefore, the option of utilizing other data sources is precluded from consideration.

C. Alternative Surveys Timing

Collecting data less frequently would prevent USDA and the dairy industry from being kept abreast of changes at the State and national level.

Dairy products prices data are collected weekly to meet the time requirements for the announcement of milk prices under the Federal Order Program.

Weekly price data reflect current market conditions.

D. Alternative Survey Universe

Small producing firms, those with less than 1 million pounds of production annually, are excluded from the survey by law.

Bulk wholesale marketings of cheddar cheese meeting the Dairy Product Mandatory Reporting Program specifications accounts for more than 60 percent of total cheddar cheese production. These sales are represented by only 25 manufacturing plants.

E. Alternative Sample Survey

The option of surveying a sample of eligible participants was considered as a less costly alternative. However, the Dairy Market Enhancement Act of 2000 explicitly states that all eligible participants are required to report the requested information to NASS. Therefore, the option of surveying only a sample is precluded from consideration.

3) Evaluation of Benefits and Costs

A. Impact on Dairy Farmers

It is in the industry's best interest that NASS-reported prices be as accurate as possible for calculating milk prices. Sellers of milk do not want to be underpaid and buyers of milk do not want to overpay given market conditions at any particular point in time. This is best assured through the largest possible response by dairy product manufacturers. Soundness of the decisions and recommendations is highly correlated with the accuracy of the data they have for analysis. Although dairy farmers under the Federal milk marketing order program account for 61 percent (approximately 103 billion lbs of milk in 2004) of U.S. milk production, all U.S. dairy farmers are affected to some degree by the Federal order pricing.

Statutory authority exists that permits NASS to protect the confidentiality of data provided by respondents.

Data are used by CME for cash settlement of Futures Contracts. Economists from the manufacturers associations and institutes, universities, colleges and others in the dairy industry will be using the data for analysis in formulating recommendations to membership/readership.

Imprecise price information can be costly. For example, a 1 cent per pound error in the May 2005 cheese price would cause a 9.65 cent per hundredweight error in the Class III price and a 3.76 cent per hundredweight error in the all market uniform or blend price (price paid to dairy farmers). Multiplying the price error (3.76 cents) times the quantity of milk marketed in Federal milk marketing order system indicates that either producers would have received \$4 million less for their milk in the month of May 2005, than they did, or that manufacturers would have paid \$4 million more for milk in May 2005, than they did.

Minimizing the likelihood of underpayments or overpayment to producers by manufacturers also could be viewed as the benefits received by dairy farmers and manufacturers due to NASS conducting a more accurate survey.

This same process of calculating the impact of a 1 cent error in the cheese price could be done for any of the other 11 months of the year or for the other dairy products. However, the amount of milk produced and sold varies and in turn would vary the benefit received by dairy farmers or manufacturers. The lowest and highest months of milk production usually differ by about 7.5 percent from the average monthly production.

Dairy farmers are not subject to the requirements of the Dairy Product Mandatory Reporting Program. Therefore, they will bear no incremental cost from its implementation.

B. Impact on Dairy Manufacturers

The program will provide timely, accurate, and reliable market information; facilitate more informed marketing decisions; and promote competition in the dairy product manufacturing industry. Milk is needed to produce dairy products, and therefore, an accurate price for milk creates equality in the market place for all dairy farmers and manufacturers and improves all economic decisions.

The cost to the dairy manufacturers and cold storage facilities of completing the survey is assumed to be comparable to the hourly rate of those collecting the data. Manufacturers must submit product prices 52 times a year and it is estimated that each report takes 20 minutes to complete. Cold storage facilities must report their inventories 12 times a year and it is estimated that each report takes 30 minutes to complete. The salary for employees completing the survey is estimated at \$22 per hour. Therefore, the annual cost to a manufacturer reporting product prices is estimated at \$381.26 and the annual cost to cold storage facilities completing reports is \$132.

Most manufacturers subject to reporting under the Dairy Product Mandatory Reporting Program already report this information to NASS. Therefore, the incremental cost of implementing the program will be for those manufacturers who do not already report to NASS.

When the mandatory reporting program is implemented an additional 25 manufacturing plants were required to submit product price reports. Therefore, the incremental cost to the industry of implementing the mandatory pricing program is estimated to be \$9,531.50. It is estimated that 110 cold storage facilities meet the mandatory reporting requirements. Thus, the annual total incremental cost to cold storage facilities is estimated to be \$14,520. The total incremental cost borne by dairy manufacturers and warehouses is approximately \$24,000. With respect to total annual costs, the cost to cold storage facilities completing reports is \$132 per facility for a total annual cost of \$14,520. The cost to manufacturers reporting product prices is estimated at \$381.26 per plant for a

total annual cost of \$37,363.48. Thus, the total annual cost for submitting information under the mandatory program is \$ 51,883.48.

C. Effects on Consumers

A conclusion cannot be made as to whether the incremental cost of implementing the mandatory reporting program would be passed on to consumers. However, if the additional incremental cost is passed on to consumers it will be negligible.

D. Impact on Government Costs

Background: In 2005, NASS collected prices information from 98 plants that were submitted on 71 reports from 60 unique locations.

Reports generally are filed via fax with the appropriate State NASS office. Some reports are sent via fax directly to the NASS headquarters office in Washington, DC. Some reports are filed via NASS' electronic data reporting (EDR) system. In all cases, the reports are keyed into NASS' Dairy Product Prices (DPP) system (a SAS database). The headquarters NASS staffer who is responsible for the published report, queries the DPP to generate various reports. Among these reports is the data listing which has individual report information.

For the AMS prices verification program, NASS will generate a report from the data listing matching AMS' requirements.

Assumptions for Incremental Cost Estimates: For the first year, all of the 60 reporting entities will be visited and the information contained in each of the 71 reports will be verified for a specified review period. Sales transaction records for all of the 98 plants will be analyzed. The review period will be four weeks in the same month, with the selected month varying according the Verification Plan. It will take four hours to analyze the sales transactions for one week; two full days per plant. The hourly salary for the verifier is \$40 with a 30 percent benefits rate. The travel cost per location is \$100; per diem cost is \$75. In the subsequent years, those reporting locations that account for top 80 percent of the reported volume will be visited each year, as well as one-third of the reporting locations that account for the remaining 20 percent of reported volume. Reporting locations in the latter category will be visited at least once every three years. The other assumptions concerning review period, length of time to analyze records, and cost figures apply the same as for the first year.

First Year Incremental Cost Estimate: \$102,236

Travel -- \$6,000 (60 locations X \$100)

Per Diem -- \$14,700 (98 plants X 2 days X \$75/day)

Salary/Benefits -- \$81,536 (98 plants X 16 hours (2 days) X \$52/hour)

Second & Subsequent Years Incremental Cost Estimate: \$69,594

Travel -- \$3,800 (38 locations X \$100)

Per Diem -- \$10,050 (67 plants X 2 days X \$75/day)

Salary/Benefits -- \$55,744 (67 plants X 16 hours (2 days) X \$52/hour)

E. Net Benefits

The major benefit of mandatory price reporting is to assure accurate price reporting by dairy manufacturers. The total incremental cost of implementing the program is estimated to be \$126,287.50 in the first year and \$93,645.50 in subsequent years. The incremental benefit of the program cannot be quantified; therefore, net benefits cannot be quantified.

F. Conclusion

Mandatory reporting is required by law and it is expected that it will eliminate price error associated with non-reporting plants that have a large production of dairy products. The benefits of implementing this program can not be quantified. However, it can be concluded that mandatory reporting will improve the reliability of prices reported by NASS above by adding an auditing requirement to the current reporting program. By collecting data from only large, qualifying operations, an accurate dairy products price can be determined while minimizing the impact on the dairy manufacturing industry. Such a collection and verification process also is considered to be the most efficient use of limited funds available to carry out this requirement.