Implications of Cuts in USDA Dairy Data: A Conversation with Dairy Industry Economist Thomas Wegner

Andrew M. Novakovic

JEL Classifications: Q11, Q12, Q13, C80
Keywords: Dairy Data, Milk Production Reports, USDA Data

Background to the Cuts in Dairy Data

On March 12, 2013, the National Agricultural Statistics Service (NASS) of the U.S. Department of Agriculture (USDA) announced that it would be “suspending a number of statistical surveys and reports for the remainder of the fiscal year due to reduced funding caused by sequestration” (USDA, NASS, 2013d). Among the 10 items listed in the NASS notice, the one that affected the largest agricultural sector and the most firms and individuals across every state are the Milk Production reports (USDA, NASS, 2013a). NASS proposed to complete the February report as scheduled and then suspend reporting monthly milk production estimates and the annual summary.

About three weeks after this announcement, on April 3, NASS yielded to industry and Congressional pressure and issued the following “partial restoration”:

USDA’s National Agricultural Statistics Service will provide an estimate of U.S. milk production each month through September, 2013, which is the end of Federal Fiscal Year 2013. The agency will use only various sources of administrative data to establish the monthly milk production estimates rather than incorporating information from the two remaining quarterly producer surveys, as is presently done….Because NASS is not conducting milk producer surveys, the dairy cow and milk per cow statistics that were provided in previous reports will not be available. In order to provide the additional estimates and true up estimates based on administrative data, a scientifically based statistical survey will be necessary in the longer term (USDA, NASS, 2013b).

On August 28, NASS announced that it will “resume milk production quarterly producer surveys in the new federal fiscal year, which begins October 1, 2013….With the quarterly surveys, the dairy cow and milk per cow statistics will once again be available. These are critical data points for interested parties to forecast future milk supply.” (USDA, NASS, 2013c). This restoration indicates that USDA heard loud and clear the voice from the dairy industry that these estimates were valuable. This interview explores how milk and dairy food marketers rely on and use government sources of market information.

The dairy sector has access to a rich variety of statistical estimates and market survey data that describe production, utilization, price, and other measures of economic activity along the dairy supply chain. As is true for other agricultural and food sectors, there has been a long, slow decline in the scope of data available over the last 50 years, but it remains the case that there is a lot of public information describing this sector. The proposed suspension of the Milk Production report represented only a fraction of the complete dairy data set, but it is arguably the most fundamental data and surely among the last that industry members would select for sacrifice.

The primary benefit of the Milk Production report is an improved ability to understand market conditions and formulate reasonable price expectations—price discovery and pricing efficiency. This reduces uncertainty about milk markets, both current and future. And, it may reduce milk price volatility, as buyers and sellers have an easier time getting it right the first time. Without this information the
future is not necessarily worse, but it would be more of a surprise or a mystery. The elimination of the USDA Milk Production reports, in short, would add risk to what has become a very risky business.

**Importance of Milk Production Estimates**

Milk production estimates are the beginning of any analyst's study of future milk prices. For most commodities, data on stocks are used as the most primary information about supply and demand balances and, therefore, about expected future prices. This approach does not work for dairy because milk is produced daily, with seasonal variation that is more anticipated than predictable, and is not a storable commodity. Stocks information only exists for a handful of storable dairy commodities. The dairy product stocks information is useful and used, but it is not as complete or meaningful as, say, estimates of corn, wheat, or soybean carryover. Moreover, without an estimate of usage, it is impossible to know if increased stocks are a) tracking an inventory demand to cover increased use, b) an expected seasonal bulge, or c) because of excess supply (which could reflect different combinations of changes in production relative to changes in consumption or sales).

Milk and dairy product prices continue to be estimated on a current basis, but milk production estimates aid price discovery on futures markets and the development of milk price expectations generally. This is important for the United States but also to the world industry insofar as the United States is the third largest exporting region of the world.

Without reliable, official milk production estimates the efficient discovery of current prices is impeded—i.e., we might not get it right, or less right, anyway. Price discovery in milk markets is more than a short story, especially for the uninitiated. The key is that the value of farm milk is calculated or inferred from the prices of basic dairy commodities. If the wholesale value of bulk, cheddar cheese increases, the farm price of milk is pushed up. This is certainly true in regulated price systems, but it also is a factor in unregulated milk pricing. So, might the lack of good information about farm milk production hinder the process by which current prices for cheese, whey, butter, and nonfat dry milk are established? It is not that USDA wouldn't be surveying these prices, but rather would the marketplace—buyers and sellers—arrive at the right cash prices as efficiently—as easily and accurately—as they do with reliable production information? It is hard to make an unassailable argument that this would have become a big problem with big consequences, but it is safe to say that the loss of this basic information wouldn't help and may lead to more jerky and larger price movements—volatility—because buyers and sellers have more difficulty getting it right the first time.

**A Dairy Industry Perspective**

Land O’Lakes, Inc., is one of the nation’s largest milk marketing cooperatives and manufacturers of dairy products. Thomas Wegner, director of economics and dairy policy for Land O’Lakes, shared his perspective on the value of dairy data to the dairy industry in the following interview:

**WEGNER:** We use market information as part of our business planning, risk management and policy analysis functions. In general, we use market information to project market supply and demand for agricultural products. To this end, we use a wide array of USDA generated reports pertaining to crops and livestock, including costs of production, planting intentions, product stocks and product processing. We also purchase scanner-collected data to more fully evaluate consumer buying habits and trends emerging at the retail level. We monitor the economic research conducted by the Departments of Agriculture, Commerce, Bureaus of Census and Labor Statistics related to trends in consumer demand, market structure, international trade, etc. As the U.S. stake in global trade grows, our reliance on market information about our global customers and global competitors grows. We make full use of monthly export data collected by the U.S. International Trade Commission and have recently joined the International Farm Comparison Network to increase our understanding of milk production across the world.

In light of the heightened level of price volatility in U.S. agricultural markets, especially in the dairy sector, our efforts to assist our members and customers in risk management requires the most current market information that we can find. Helping producers interpret the market information and compare it to their own production cost information will become even more important as the form of federal support for agriculture migrates towards insurance programs designed to help producers self-manage their exposure to market risk.
NOVAKOVIC: The dairy industry was taken aback when USDA announced it was suspending the Milk Production report for the remainder of the 2013 fiscal year as part of its sequestration requirement. Vigorous lobbying resulted in a partial restoration of the report, with NASS providing production estimates for the United States and its 23 selected states based on non-survey data, but not providing detail for other states or estimates of cow numbers and production per cow. Is this sufficient, or is the greater detail on the form of milk production changes valuable too?

WEGNER: More details about milk production changes help processors project milk supply and better anticipate how extreme heat events, local feed quality or significant changes in plant capacities may have impacted milk production; the monthly report of cow numbers by the major milk producing states also provides market insights into the future growth potential of states and regions.

Another consideration is the use of the Milk Production report to estimate the utilization of milk. For example, more milk produced in the upper Midwestern states will likely mean more cheese produced; more milk in the southeastern states will impact spot milk shipments from other regions which will impact milk availability in those regions. In essence, the absence of current market supply information impacts our ability to estimate and project market demand. Some have argued that less market information has the potential to add risk to the dairy markets—how much additional risk is added is a topic for another conversation.

NOVAKOVIC: There are basically four sources or types of data from USDA: statistical, regulatory, market news, and economic research. Obviously the NASS milk production number is a great example of USDA’s statistical estimates; the All Milk Price is another. The Federal Milk Marketing Order system, in particular, has an abundance of data that is a direct by-product of the regulation. Some of this is regulated prices but there is also a lot of information about how milk is used, where it originates and where it goes, numbers and types of plants and cooperatives, etc. Market News is the oldest of the USDA data functions, going back to the beginning of the 20th century. Today, Dairy Market News provides a wide variety of original information about wholesale dairy foods prices and markets as well as a compendium of other market information from a variety of domestic and international sources. What is the value of these different types of information and how useful are they for management or marketing purposes?

WEGNER: The weekly Dairy Market News (United States Department of Agriculture Agricultural Marketing Service, 2013) represents the best, most comprehensive assemblage of dairy market data that one can find and serves to inform our most immediate view of factors impacting the U.S. and global dairy markets. We strive to work with the Agricultural Marketing Service (AMS) reporters to increase the dairy industry’s confidence in the reliability of the market information collected and disseminated by dairy market news.

The data compiled by the NASS on a weekly or monthly basis combined with the data generated by the Federal Milk Order system supports our supply and price projection efforts that guide our participation in federal order pools each month. Additionally, these projections contribute to the management of our risk management tools that we offer to our customers and members.

The interpretation of market data provided in the monthly WASDE release has value to the industry. The WASDE is a great example of how the USDA pulls together market perspectives from several agencies (AMS, FSA, ERS and FAS) to settle upon a collective market projection—that’s not something that I can do from my desktop, and I value the effort and the regularity of their report. USDA’s interpretation provides another opinion on future market trends that producers, processor customers and consumers all can access. USDA reports provide a consistent, widely read opinion that most analysts use as a reference point for their projections. The library of historical data compiled by the USDA provides market analysts with a treasure trove of information to begin almost any kind of supply or demand based analysis. USDA’s data is the starting point in the process of formulating price projections, supply projections or consumption projections—the base that projections are built upon.

NOVAKOVIC: If you could go in the other direction and get some new information from NASS, what would it be?

WEGNER: Setting aside the difficulties of how to collect the data, the dairy industry would welcome a new price series that could be used within the federal milk order system to reflect the value that manufacturers of cheese and whey pay for Class III milk.

ERS provides some information on milk production costs, based on its ARMS surveys. State or even regional level costs of milk production on a monthly basis would enhance our market knowledge of the financial conditions of dairy farmers in different milk producing regions. Perhaps a monthly estimate of a margin over feed costs in these regions, representing the unique aspects of each region (e.g., purchased feed vs. their own grown feeds), would expand our understanding of some of the newer dairy regions compared to the well-established ones. On the crop side, on-farm storage and feed production data needs to reflect the new market.
products—think of the byproducts of ethanol production like distillers grain.

The existing FAS and DMN international reports would be improved by shortening the lag time between when dairy products actually move in international channels and when they are reported would be beneficial as the United States’ stake in global dairy markets continues to grow. Additionally, timely information on international milk production, milk production costs, dairy product processing, dairy stocks and trade volumes would enhance our understanding and help us to anticipate their impacts on global dairy markets.

NOVAKOVIC: John Naisbitt, who coined the concept of megatrends in the 1980s, has recently said that “the new source of power is not money in the hands of a few, but information in the hands of many.” A younger observer of evolving information technologies—Angela Llamas Butler—has said, “Information is money, but data is squat.” With this distinction in mind, what is the appropriate role of USDA, or any government agency, in providing “data” vs. “information,” especially if we believe that a lot of market “information” depends on market “data”?

Related to this is who pays for what. USDA data and information services, whether it is from NASS, AMS’ Dairy Market News, or the Economic Research Service, are budgeted items. From time to time, it has been suggested that user fees should be established for NASS products or that industry should pay for the cost of a standard survey or report. Obviously there are very significant sums of money paid for private industry reports, many of which heavily utilize public data. However, NASS has been very reluctant to go that route, primarily for fear that industry funding could taint public perceptions of the quality of the report, or lack of bias. Have we reached a point where we should cultivate more private funding or user fees for public reports? Do you think your colleagues in the dairy industry would be willing to pay for the full cost of a report like Milk Production? Would you worry about the free-rider problem or prefer to do this under some kind of mandatory check-off program? Who should pay under these circumstances?

WEGNER: The USDA has a stellar reputation as an unbiased, objective collector of data. It offers a comprehensive, consistently collected array of data that has and (hopefully) will continue to be made readily available to the participants in the U.S. agricultural sector as well as anyone else interested in the data.

As I understand, the NASS has both the responsibility and the authority to protect the confidentiality of the data collected—would a private firm be able to provide that assurance of unconditional authority to protect confidentiality? Would a private firm hired to collect data that will ultimately get released to the public have an incentive to release the data to its own clients first? Would privatizing the collection and distribution of data somehow skew the axiom of ‘complete market information’ by making a distinction between market participants who access the information first?

Market participants currently pay for market information; the difference here is that market information that had been provided at little cost will now have a cost. I think that an assessment on the market participants would be the fairest way to do it. A mandatory check-off program that would support NASS’s enumerators who would retain the responsibility and authority to protect the confidentiality of the data collected seems to be one method to consider.

For More Information


Andrew M. Novakovic (a.novakovic@cornell.edu) is The E.V. Baker Professor of Agricultural Economics, Cornell University, Ithaca, New York and Thomas D. Wegner (tdwegner@landolakes.com) is the Director of Economics and Dairy Policy, Land O’Lakes, Inc., Arden Hills, Minnesota.