

# **Information Letter Series**

# Federal Milk Marketing Order Functions

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## **Christopher Wolf**

Dyson School of Applied Economics and Management, Cornell University

USDA recently released a set of recommended decisions for modifying Federal Milk Marketing Orders (FMMOs) based on hearing testimony. Dairy producers will have a choice between adopting the modified FMMO or terminating the order. FMMOs are primarily known for defining minimum farm milk prices by class and pooling revenues across participating milk. However, FMMOs also provide other functions to maintain orderly dairy markets. This information letter describes FMMO functions and their farm level impacts.

#### Introduction

On July 1, 2024 USDA released a recommended decision from a hearing process in response to 22 proposed changes that took place between August 2023 and January 2024. The final decision will modify Federal Milk Marketing Orders (FMMOs) and present dairy farmers with an opportunity to accept or reject In order to facilitate producer decisions about the modified FMMOs, this paper presents and discusses the functions of FMMOs including those beyond milk pricing and revenue pooling.

#### **FMMO Background and Objectives**

As with many agricultural policies in the United States, the Federal Milk Marketing Orders (FMMOs) have their origins in the Great Depression. The Agricultural Marketing Agreement Act of 1937, amended several times since enactment, provides permanent authority for FMMOs. The motivations for creating FMMOs were the volatile and unreliable dairy market conditions that existed during the early 20<sup>th</sup> century.

Milk production has several characteristics that historically led to market failures that resulted in periods of "disorderly" marketing. These characteristics include: required daily

harvesting to maintain cattle lactation, perishability with related food safety concerns, bulkiness as milk is approximately 87 percent water making it expensive to move long distances, and asset fixity at both the farm and manufacturing plant levels (Novakovic and Wolf, 2018). These aspects of milk production historically led to disorderly marketing conditions which, in turn, gave rise to institutions and government programs intended to ensure an adequate supply of milk and equitable returns to farmers.

The objectives of FMMOs are to:

- promote orderly marketing conditions in fluid milk markets,
- improve the income situation of dairy farmers,
- supervise the terms of trade in milk markets to achieve more equality of bargaining power between producers and processors, and
- assure consumers of adequate supplies of quality milk at reasonable prices (Greene, 2022).

Orderly marketing refers to marketing throughout the year so that avoidable shortages or price spikes do not occur. According to Manchester (1983) economic "orderliness" has several dimensions: order in the time dimension (through seasons and cycles), order in the geographic dimension, and order in competitive relations (i.e., no unfair price advantages).

An economist would frame the issues that FMMOs are intended to address as "market failures." Market failure refers to the inefficient distribution of goods and services in the free market. Causes of market failures that might occur or be related to milk markets include:

- <u>Public goods</u>—for example, market balancing benefits all participants in that market,
- <u>Market power</u>—for example, selling a perishable product can give buyers bargaining power,
- <u>Imperfect or asymmetric information</u>—FMMO price and utilization statistics supply a base level of market information for all participants,
- <u>Equity imbalances</u>—for example, market access across farms.

FMMOs aim to address these potential market failures and facilitate orderly milk marketing through the objectives listed above. In order to achieve these objectives and address the potential market failures, the mechanics of FMMOs include classification, pricing, pooling and auditing.

### **Milk Pricing and Pooling**

Price discovery is an important function of FMMOs. Classification of milk is defined based on use to which minimum prices are assigned. Class I includes milk consumed as a beverage. Class II includes creams, yogurt, cottage cheese and ice cream. Class III is milk used to make cheese and whey co-products, and Class IV is milk used to make butter and dried milk powders. The valuation of milk used in these classes is derived from the monthly average

wholesale prices for benchmark commodities indicative of Class III and IV products including cheddar cheese, dry whey, butter and nonfat dry milk. The monthly average wholesale prices are adjusted for manufacturing costs and yields to produce an implicit value to a corresponding farm milk component (milkfat, protein, skim milk solids, and other solids besides protein and fat). Class I prices also add a differential to reflect costs and location value within the US.

There are seven FMMOs which use multiple component pricing (MCP). These FMMOs include the Northeast, Upper Midwest, Central, Mideast, California, Pacific Northwest, and Southwest. In MCP orders, farmers are paid based on pounds of butterfat, protein and other solids. The remaining four FMMOs are "skim-fat" Orders and pay farmers based on the pounds of skim milk and butterfat.

Blend prices are weighted by use to determine a minimum uniform price. Uniform prices happen through the Producer Settlement Fund in each FMMO. Plants whose average use value of milk exceeds the weighted average value of milk across all buyers are required to pay the difference into the pool called equalization payments. Plants on the other side of the equation receive the difference between their internal value and the market-wide value in amounts called the "pool draw." Pooling provides a uniform base price for all farm milk participating in the order that month.

Four FMMOs also incorporate somatic cell count (SCC) adjustment which includes a premium for milk with SCC less than 350,000 cells per milliliter of milk. The Orders with SCC adjusters built in are the Upper Midwest, Central, Mideast and Southwest.

It is important to remember that FMMOs define minimum prices. Actual farm prices are adjusted for cooperative and state market aspects as well as farm-level quality and hauling.

#### **Auditing and Testing**

Beyond establishing market-wide uniform prices that must be paid to producers or their cooperatives, USDA milk market administrators' responsibilities include:

- operating a laboratory to test milk to verify milk components, including butterfat, protein, and other solids. An accurate assessment of milk components is crucial to the eventual minimum price determinations for each class of milk end use;
- auditing milk handler records to ensure compliance with order language; and
- assembling and publishing dairy market information (Greene, 2022).

FMMOs establish and verify tests of milk components to ensure that farmers are paid the component levels in the milk they sell. Auditing includes monitoring and checking market transactions by USDA, which has enforcement authority. Auditing ensures accurate and timely payments to dairy farmers.

Through their activities surveying and defining market prices as well as collecting and reporting uses by class, a significant amount of market information is produced each month in every FMMO. Industry, academia and other government agencies rely on the data collected and analyzed by the FMMO program. The weekly, monthly and annual publication of FMMO program data is a comprehensive and timely source of dairy information not reported elsewhere. Alternative data sources of this type do not exist as private parties do not have the ability or authority to collect the data reported by FMMOs which is publicly available without cost.

#### Farm Impacts of FMMOs

Federal Milk Marketing Orders define the base price from which farmers are paid for most of the milk produced in the US. Wholesale prices of dairy products are collected and reported weekly with mandatory participation depending on product and other parameters. Farm price is calculated using a transparent method that is audited and enforced by the Market Administrator. The resulting minimum class prices provide a benchmark from which negotiation can occur for over-order premiums. Further, the market information helps reveal market conditions that can facilitate pricing, production and investment decisions.

#### References

Greene, J. Congressional Research Service. Federal Milk Marketing Orders: An Overview. R45044. June 2022.

Manchester, A. The Public Role In The Dairy Economy: Why And How Governments Intervene In The Milk Business. Routledge, 1983.

Novakovic, A. and C. Wolf. Disorderly marketing in the 21<sup>st</sup> Century US Dairy Industry. *Choices* 33(November 2018).