ADPI Intelligence
Volume VI
Issue 1

Why Is There a Different Value Placed On Milk Destined for Production of Fluid Milk, Yogurt, Cheese or Milk Powders?

The existence of different values for milk use resulting in four product categories under Federal Milk Marketing Orders has a long history dating to the 1930's. The system we know today is rooted in two original concepts (a) to provide an orderly market for milk producers enabling them to obtain a fair price for their milk and (b) to assure an adequate and reliable supply of fluid milk for consumers at reasonable prices. As the system evolved to achieve these objectives it became necessary to measure the total market value of milk supplied in a given region defined by the geographic boundaries of the Federal Order area concerned. The volume of milk involved here is called the "pool". Once the market value of this pool is calculated it can be used to determine the milk price paid to farmers in that area. There are ten individual orders in existence encompassing about 65% of the milk produced in the United States.

Calculating the market value of the milk pool is complicated and the work is carried out by the Federal Order managers at the USDA. Making the calculation requires information about the prices paid for the dairy products manufactured from the pool's milk. To make this task manageable the wide range of products into which milk can be processed have been reduced to just four general categories or Classes I-IV listed below.

I Fluid milk	III Cheese, whey products
II Cream, cultured products, ice cream	IV Milk powders, butter

This is still a lot of information and to make the process as manageable as possible, the current system only determines the actual market value and corresponding prices of milk used in classes III and IV for cheese/whey products and butter/milk powder. This is done by mean of marketplace price surveys for these products. The collected price data is converted to an equivalent value and price for the original milk using various, occasionally controversial, formulae and product yield estimates.

The higher of the two prices between Classes III and IV for a given month is then used as the basis to establish the price that must be paid in the following month for milk used to produce Class I fluid milk. The price is determined is by adding a premium to the Class III or Class IV price, as the case may be. The Class IV price alone is used as the basis for determining the Class II price. A smaller premium is added in this instance.

Now that the market order managers have established prices for the four classes of milk, the spreadsheets can get to work on the remaining calculation. The dollar value of total receipts for the pool is determined based on how much milk has been used in each class of milk, information that has been collected as well. An average milk price is then determined from the total receipts and this number becomes the basis for the milk price received by farmers with individual adjustments for several factors such as quality and composition included.

That's the background. As can be seen, Class III and IV prices are actual market based prices which will usually be different but may by coincidence of market conditions occasionally be equal or very close in value. On the other hand Class I and II prices are derived prices based off of the other two classes. As noted above, two different levels of premium are added to determine I & II prices so they will by default be different from each other and the Class III and IV prices. The Class I price will always be highest usually followed by II with III and IV switching place subject market conditions. The rationale for this derives from the concept of a hierarchy of value in dairy products. The costs and risk associated with assuring a steady supply fluid milk were traditionally viewed as greater than for other products and so should be priced higher. Fluid milk is more perishable than Class II, Class III and Class IV, in that order. In some essential terms this model has become outdated but continues to hold sway.

All of these administratively complex arrangements serve the overarching objective of the system which is to provide an equitable milk price to producers by evenly distributing the revenues of the pool irrespective of the actual use to which their own milk is put. As with any system it has its flaws and imperfections. The goal of assuring a supply of fluid milk is supposedly sustained by commanding a premium compared to other uses for milk. This approach may have had merit at one time, it's debatable how constructive it is for producers and consumers under 21st century conditions. Beyond that, the actual use regulated pricing overall is often questioned for a range of reasons including its inefficiencies, limits on responsiveness to market conditions and barrier to market innovation by the industry. These and other related issues will continue to draw attention.

Additional Information

Federal Milk Marketing Orders: An Overview – Congressional Research Service
https://www.everycrsreport.com/files/20171213_R45044_baafabe1aacbb480e033c56e90ef5ea610a2ee2d.pdf

Federal Milk Marketing Orders and their Role in Dairy Pricing – CoBank Knowledge Exchange
http://www.cobank.com/Knowledge-Exchange/~/media/Files/Unsearchable%20Files/Knowledge%20Exchange/2014/KEReport_FMMODairy-Dec2014.pdf

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