



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*ae (pd)*

**Staff Contribution** J-55

GIANNINI FOUNDATION OF  
AGRICULTURAL ECONOMICS

WITHDRAWN

FEB 24 1957

**Miscellaneous Staff Contribution**  
**of the**  
**Department of Agricultural Economics**

**Purdue University** *Sch of agric*  
**Lafayette, Indiana**

**For information concerning additional available publica-  
tions write: Librarian, Department of Agricultural Economics**

7-55

Pricing Milk Under the Cincinnati Federal Milk Order

E. M. Babb, Jr.  
Cincinnati Sales Association - Directors and Fieldmen Conference  
Hotel Gibson, Cincinnati, Ohio, October 5-6, 1960

-----

The Cincinnati federal milk order #65 uses the same basic pricing mechanism as is found in other federal orders. It contains formulas which establish prices to handlers for each use, class of milk, and a marketwide price equalization and distribution system to distribute returns to producers.

Minimum Class Prices

Each class of milk has a specific formula for arriving at its price per hundredweight, and such prices are computed each month by the Market Administrator. Class prices are established on the basis of the value of the milk in each use and other economic considerations and must be uniform among handlers. With class prices uniform among all handlers, handlers have equal raw product costs and one handler does not have an unfair price advantage over others. Class and blend prices are quoted for 3.5% milk F.O.B. market.

Class I Price

The Class I price is the key price which is changed to reflect supply and demand conditions in the market and consequently alter the level of blend or producer uniform price. It is higher than the other class prices, reflecting the higher value of milk in this use to consumers and the extra costs of producing milk in this class. Two systems are used to establish this price, one a formula based on economic factors such as production costs, consumer income, wholesale price index and similar factors and the other formula based on the value of manufactured milk plus a premium. Both types of pricing generally employ a factor reflecting market supply and demand conditions. The Cincinnati order uses the pricing system based on manufacturing milk values

The Order 65 Class I price is established on the basis of the midwest condensery pay price or a butter-powder price, whichever is higher, known as the basic formula price, plus \$1.30, plus a supply-demand adjustment of not more than 50 cents. The basic formula price reflects the value of manufacturing milk at the center or primary source of the national milk supply. The \$1.30 addition reflects the cost of moving milk from Wisconsin or Chicago to Cincinnati plus the added costs of producing fluid milk. The supply-demand adjuster reflects local market conditions.

When production increases relative to consumption, the supply-demand adjustment reduces the Class I price. When production declines relative to consumption, the supply-demand adjustment increases the Class I price. The supply-demand adjustment is computed by first dividing the total pounds of Class I milk in the second and third preceding months by total producer receipts for the same months to obtain the Class I utilization percentage. For each full percentage point that the Class I utilization percentage is above (or below) the applicable maximum (or minimum) base percentage listed below, add (or subtract) 3 cents to the Class I price, up to the limit of 50 cents. Contra-seasonal movements are provided in that the supply-demand adjustment for June can not be higher than May nor can January be less than December.

Month for which price is being computed	Base utilization percentages	
	Minimum	Maximum
January . . . . .	67	69
February . . . . .	66	68
March . . . . .	66	68
April . . . . .	67	69
May . . . . .	63	65
June . . . . .	60	62
July . . . . .	53	55
August . . . . .	49	51
September . . . . .	48	50
October . . . . .	51	53
November . . . . .	58	60
December . . . . .	63	65

The basic formula price for July, 1960 was computed as follows:

(a) Midwest condensery pay price		\$3.014
(b) Butter-powder formula		
92 score butter Chicago x 3.5 x 1.2		
\$.57988 x 3.5 x 1.2 =		\$2,4355
Nonfat dry milk solids Chicago (spray) - .064 x 8.2		
\$.1323 - .064 x 8.2 =		\$ .5601
		<hr/>
		\$2,9956

Since (a) or the midwest condensery price was higher it would be used.

The Class I price for August, 1960 is established by the basic formula price in the preceding month or the above July price and is computed as follows:

basic formula price + \$1.30 + supply-demand adjustment		
\$3.0140 + \$1.30 + \$1.8 =		\$4.494

Class II Price

The Class II price is the second highest class price since products in this class are able to command a higher price and generally are not uses made of milk which is purely surplus to fluid needs. The August, 1960 Class II price is computed as follows:

92 score butter Chicago x 3.5 x 1.18		
.59041 x 3.5 x 1.18 =		\$2.4384
Nonfat dry milk Chicago (spray) - \$.055 x 8.2		
\$.1325 - \$.055 x 8.2 =		.6355
		<hr/>
		\$3.0739

Class III Price

The Class III price is the lowest class price. Products in this class move freely in the national market and hence prices must be competitive.

This price should be set at a level which enables the market to handle its milk which is in excess of fluid requirements, but which does not encourage excess manufacturing facilities.

The Class III price is the same as the Class II price in the months of September through February. During the months of March through August the Class III price is the average of the prices reported in five nearby manufacturing plants. This system increases the level of the Class III prices during the months when surplus handling is at a minimum. The average price paid in the five nearby manufacturing plants in August was \$2.86 and was therefore the Class III price.

#### Differentials Affecting Prices

Differentials have the purpose of reflecting values associated with different units of milk. Order 65 specifies location and butterfat differentials.

#### Location Differentials

Location differentials equalize the cost of milk in each class among handlers regardless of the location of the source of such milk. It also reflects the value of producer milk relative to the cost of moving it to market. The same differentials apply to Class I and blend prices. Deduct the following amounts for milk received at plants the following distances from market:

6 cents	-----	30 - 39 miles
8 cents	-----	40 - 49 miles
10 cents	-----	50 - 59 miles
1.5 cents		each additional 10 miles

#### Butterfat Differential

Class I - this differential is the Class II butterfat differential for the proceeding month + 1.25 cents. For August, 1960 it is: \$.0678 + .0125 = \$.0803.

Class II - this differential is the 92 score Chicago butter price x 100 x 1.18 less skim divided by 1000. For August, 1960 it is:  $\$.59041 \times 100 \times 1.18 = \$.69.6684 - .6355 = \frac{\$.69.0329}{1000} = \$.0690$

Class III - this differential is the same as for Class II during the months of September through February, except for milk used for butter. During the other months, and for milk used for butter in all months, the differential is the 92 score Chicago butter price x 100 x 1.2 less \$5.00 less skim divided by 1000. For August it is:  $\$.59041 \times 100 - \$5.00 \times 1.2 - 964.8492 - .5617 = \frac{64.2875}{1000} = .0643$

Producer Blend or Uniform Price

The uniform price is the price payable to producers or the average of the prices paid by handlers subject to adjustments. In a marketwide pool, such as in Order 65, equalization of returns to producers is accomplished by means of the producer settlement fund. Handlers whose average of prices is above the market average pay into the fund and those below the average receive payments from it. In this way, all handlers can pay producers the same basic uniform price.

The following example illustrates the contribution to the blend price of each item in the market administrator's uniform price announcement for August, 1960 and the method of computing the blend price:

	<u>%</u>	<u>Price at test</u>	<u>Contribution to blend</u>
Class I	61.80	\$4.5155	\$ 2.791
Class II	23.85	3.4134	.814
Class III	14.35	2.9760	<u>.427</u>
Value at test			4.032

Add: Value of excess skim and butterfat	+ .0001
Add: Compensatory payment	+ .0057
Add: Value of Class I inventory	+ .0000
Less: Handler location differential	- <u>.0120</u>
Pooled value	4.026
Less: Butterfat differential to producers over 3.5%	- .121
Add: Producer location differential	+ .019
Add: Unobligated balance producer settlement fund	+ .049
Less: Cash balance reserve	- <u>.042</u>
Uniform price Grade A producer	\$3.93

There are several adjustments made in computing the uniform price in the previous example. These adjustments are as follows:

Value of excess skim and butterfat - volume of milk in excess of producer receipts after other allocations times appropriate class price. Compensatory payments - the purpose of compensatory payments is to prevent other markets or plants not associated with the order from dumping their excess milk in the order and to assure uniform raw product cost to handlers regardless of the milk source. Compensatory payments are not required in months when the market Class I utilization is 90 percent or higher. Compensatory payments are made on milk which comes from an unregulated source, other than a plant regulated by another federal order, which is used for Class I or Class II purposes. The rate of payment on such milk is the difference between the class price and the butter-powder formula in the basic formula price or the manufacturing value of such milk, adjusted by appropriate butterfat differentials. Thus, the compensatory payment rate required in other source 3.5% milk used for Class I in August, 1960 was \$4.4940 - \$2.9956 = \$1.4984 and for such milk used in Class II was \$3.0739 - \$2.9956 = \$.0783. Value of Class I inventory deducted from Class I - makes an adjustment for milk in inventory.



Cash in producer settlement fund - a balance is carried in the producer settlement fund to take care of errors that may be found in reports of handlers or in payments to producers. Not less than 4 cents or more than 5 cents per hundredweight is held in the producer settlement fund each month and returned to producers the following month.

Fall Premium or Louisville Plan - No adjustment is made in August. The purpose of this plan is to encourage production that more nearly fits market needs on a seasonal basis. During the months of April through July, the following amounts are deducted from the uniform price and set aside: 30 cents in April, 35 cents in May and June, 20 cents in July. The money set aside is paid back in September through December. The amount paid back each month usually averages over 35 cents.

THE POT

Handlers' Side

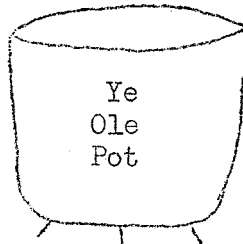
Determines how much goes in or charges to handlers for milk

- 1. Level of Class I price
  - (a) Automatic changes by formula
  - (b) Changes by hearing
 \$1284573.32
- 2. Class II Price  
\$339123.25
- 3. Class III Price  
\$189872.03
- 4. Butterfat differentials for each class  
\$ \_\_\_\_\_
- 5. Location differentials  
\$ \_\_\_\_\_
- 6. Compensatory payments  
\$ \_\_\_\_\_
- 7. Adjustments  
\$3408.09

Producers' Side

Determines how the money comes out or divides pot among the producers

- 1. Type of pool
  - (a) Individual handler
  - (b) Cooperative
  - (c) Market Wide
 \$1817837.23
- 2. Seasonal incentive
  - (a) Fall premium plan
  - (b) Base rating
  - (c) Seasonal factor in Class I price
 \$ \_\_\_\_\_
- 3. Butterfat differential  
\$ \_\_\_\_\_
- 4. Location differentials  
\$ \_\_\_\_\_
- 5. Market service payments  
not in excess of 6 cents to nonmembers



8. Special payments and premiums



- 6. Special premiums
  - (a) Bulk handling
  - (b) Quality
  - (c) Other

Handlers are charged for milk according to its use (classified pricing plan) with various adjustments intended to equalize costs among different handlers.

Producers are paid a blend price for their milk with adjustments intended to recognize the different values of various units of milk