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Impacts of The New Class IIIA Price on Blend Prices

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Since November 1992, several Federal Milk Marketing Orders, including the Texas Order, added a Class IIIA to the utilization classes and a Class IIIA price to determine the uniform blend price. The reason the Class IIIA was adopted was because the M-W price did not seem to reflect the value of non-fat dry milk (NFDM). It was claimed that the M-W was too high. A lower Class IIIA price would help plants making non-fat dry milk powder recover the cost of converting raw milk to non-fat dry milk. The impacts on producer blend prices were discussed during the hearing process and many marketing organization meetings. Some producers and processors felt the Class IIIA price was unnecessary and was of no benefit to them. Others felt including a Class IIIA price in the order was long overdue. The issue needs to be discussed so that each side understands the implications and ramifications.

A Bit of History

Federal Milk Marketing Orders were initiated to assure an adequate supply of fluid beverage milk in local markets. Much of the milk when the first orders were promulgated went into cheese and butter. Milk for beverage use had to be handled with more care since it is so perishable. Beverage milk is subject to weekly demand fluctuations and seasonal supply and demand fluctuations. These fluctuations created a dilemma for milk bottlers and marketing problems for dairy producers shipping to fluid milk bottling plants. In the days when bottlers did not need as much milk, some producers were shut out

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of the plant. Producers either had to take back the milk, or convince another fluid processor to buy the milk at a much lower price.

Fluid processors realized they had to pay a premium for milk if they wanted assurance that producers would ship to them during peak demands and not reject them during times of slow demand. Fluid processors found it was necessary to have a number of producers available to assure an adequate supply for peak demand periods. No producer was willing to give up the fluid market sales if that producer was the only one giving up fluid sales during slack demand periods. Federal Orders allowed all the producers to share in the sale of raw milk to fluid bottling plants both during peak and slow demand periods. In other words, the Federal Order assured the processor that an adequate supply of milk would be at the dock regardless of the time of week or year. Further, during periods of sluggish demand, all producers would share in the fluid price and the lower manufacturing milk price.

If milk production increases faster than the demand for beverage milk, a larger share of the milk in a market is diverted into manufacturing use. In most markets, the responsibility for disposing of milk in excess of the amount needed for bottling has been thrust upon the milk cooperatives marketing milk in the market order. A dilemma developed because the prices paid for raw milk and the wholesale prices received for milk products diverted from beverage use. The Class IIIA price was initiated to bring raw milk prices into line with product prices.

What Is the Dilemma?

Diverted milk can be converted to cheese, non-fat dry milk, and butter. However, cheese is more perishable. Ideally, cheese will be moved into the market within 60 days of production. NFDM has a somewhat longer storage life. Therefore, if markets for manufactured products are in doubt, it is probable that milk would be converted to NFDM.

Cooperatives, in theory, capture both the costs and the rewards of converting milk into cheese, non-fat dry milk and butter. In reality, milk processors manufacturing products from Grade A milk have become price takers on both the selling and buying side. These processors have little room to negotiate price. The prices received for products depend on both wholesale and support prices for products. Before the introduction of Class IIIA pricing, the price paid for raw milk used to make butter, powder, and cheese was the Minnesota-Wisconsin price (M-W).

Nearly all milk moving into butter/powder plants is Grade A milk diverted from bottling plants. Under the old rules, the price these plants paid for raw milk entering the powder plant was the M-W price, the same that Grade B plants were paying for Grade B milk going into manufacturing plants. The M-W is a composite monthly average price reflecting the competitive price paid for Grade B milk for all manufacturing uses. Grade B butter/powder plants will not always pay the same price for milk that cheese plants pay. Grade A plants paid the same price for milk for powder production as paid for cheese production. Many times most of the value of the M-W price reflected the prices paid by cheese plants for milk.

Grade B plant prices change many times a month. The Grade B plant operator knows what is paid as the month progresses. Before the introduction of the Class IIIA price, the Grade A plant processing diverted milk did not know what was to be paid for raw milk going into powder until the powder was made and

sometimes sold. The price paid for the raw milk going into powder was the same paid for milk going into cheese. If powder prices were increasing over time, there was little worry about what was paid for raw milk. When powder prices declined faster than the M-W or the M-W increased while powder prices fell, the powder plant usually lost money on every powder sale.

A Change in the Butterfat Differential and the Raw Milk Price

Some NFDM powder processors maintain most of the price/cost squeeze dilemma is the direct result of declining butter prices and the decline in the butterfat differential. The value of the butterfat differential is derived from the wholesale price of butter. For 1982, the annual average butterfat differential was 17 cents a point; for 1990, it was 11.7 cents a point and in December 1993, 5.9 cents a point.

The value of the butterfat in milk declines as the butterfat differential declines. As the value of butterfat goes down, the value of the skim increases and the value of the solids in the skim increases. This increase in the value of skim solids is an increase in the cost of ingredients for the NFDM processor. If the price of ingredients increases, the cost of manufacturing does not drop, and the wholesale price of NFDM does not change or goes down, then a cost/price squeeze can develop.

Table 1 illustrates what a change in the butterfat differential, a change in the raw milk price, and simultaneous changes in both can do to breakeven prices. The data presented in Table 1 do not represent the actual data from a particular firm, but are calculated from the raw milk prices, the butterfat differential, a generally accepted average powder composition, and USDA price support "make allowances.[2]"

When the raw milk price is $12.41 and the butterfat differential is 17.9 cents, then the breakeven price for NFDM is 83.1 cents per pound. The breakeven price increases to $1.289 per pound when the butterfat differential is lowered to 5.9 cents. Lowering the price paid for raw milk from $12.41 per cwt. to $10.22 per cwt. lowers the breakeven price for NFDM through the effect of lower prices for the skim portion of the milk. When the raw milk price is $10.22 and the butterfat differential is 17.9 cents, the breakeven price is 58.5 cents per pound. At $10.22 and a butterfat differential of 5.9 cents, the breakeven NFDM price is $1.044 per pound.

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[2] The make allowance is the amount CCC, USDA builds into the NFDM support price to cover manufacturing costs. The costs used here are estimates of the portion allocated to powder manufacturing.

Table 1: Affect of Milk Prices and Butterfat Differentials on NFDM[3] Breakeven Prices						
Milk Price[4]	Butterfat Differential	Skim Value	Butterfat Value	NFDM Powder Value	Processing Costs of Raw milk[5]	NFDM Powder Breakeven
$ / Cwt.	$ / Point	$ / Pound	$ / Pound	$ / Pound	$ / Cwt.	$ / Pound
12.41	0.179	0.0615	1.8515	0.706	1.07	0.831
12.41	0.119	0.0825	1.2725	0.936	1.07	1.060
12.41	0.059	0.1035	0.6935	1.165	1.07	1.289
10.22	0.179	0.0396	1.8296	0.461	1.07	0.585
10.22	0.119	0.0606	1.2505	0.690	1.07	0.815
10.22	0.059	0.0816	0.6715	0.920	1.07	1.044

Class IIIA Price

The Class IIIA price was introduced into many federal order markets to allow powder plant operators processing diverted Grade A milk to value raw milk relative to the cost of manufacturing and the wholesale price of powder. The Class IIIA price for December 1993 was $1.78 per hundredweight below the M-W. The desire for a Class IIIA price developed after the passage of the 1990 Farm Bill. In that legislation, the support level was frozen at $10.10 per hundredweight for milk at market test. During much of 1990-1993, the M-W price was above the support price. During the same period, the USDA systematically lowered the support price paid for butter. As the butter price came down, both the powder support price and the cheese support price increased. However, the M-W price generally tends to follow the cheese price. The cheese and the sluggish demand for powder exacerbated the cost/price squeeze for butter/powder makers. As a consequence, market balancers making powder wanted some relief from the price/cost squeeze. These manufacturers petitioned the Secretary of Agriculture to introduce Class IIIA pricing into Federal Milk Marketing Orders.

What Is the Impact of the Class IIIA Price on the Blend?

The Class IIIA price is used to value only the skim milk going into non-fat dry milk powder. The cream going into butter is

[3]Assumes NFDM contains 3.5 % moisture, 1 % butterfat, and 95.5% solids-not-fat.

[4]Testing 3.5 percent butterfat.

[5]Estimated from levels published in FMO decision released in 1993 to reflect the portion of costs allocated to powder.

valued at the M-W price. The Class IIIA price is lower than the M-W price. Allocating any portion of the market utilization to Class IIIA utilization and valuing that utilization at the Class IIIA price will lower the producer blend price. Tables 2 and 3 illustrate the effects of introducing Class IIIA pricing into a market. In this example, the blend price decreased by 68 cents per cwt. The effect on producer blend prices will depend on Class IIIA utilization and the difference in Class III (M-W) prices and Class IIIA prices.

Table 2: Utilization and Class Prices @ 3.5 % Butter Fat for This Example

	$/cwt	Fat price Cents / lb.	Skim price Cents / lb.	Utilization Million pounds	
				Without	With IIIA
Class I	15.62	72.60	13.56	242	242
Class II	12.95	69.90	10.89	60	60
Class III	12.51	69.45	10.45	198	4.95
Class IIIA	10.73	not applicable	8.67		193.05
Total				500	500

Table 3: The Value of the Pool and the Producer Blend Price, Under Alternative Class Prices					
Utilization	Price	Util. without IIIA	Value without IIIA	Util. with III A	Value With IIIA
Product	$/lb.	Mil. Lbs.	Million Dollars	Mil. Lbs.	Million Dollars
Class I skim	0.1356	238.40	32.32	238.37	32.31
Class I fat	0.7260	3.63	2.64	3.63	2.64
Class II skim	.1089	52.98	5.77	52.98	5.77
Class II fat	.6990	7.02	4.91	7.02	4.91
Class III skim	.1045	193.05	20.16		
Class III fat	.6945	4.95	3.44	4.95	3.44
Class IIIA skim	.0867			193.05	16.73
Total milk marketed		500	69.22	500	65.78
Producer Blend with NO IIIA			$13.84 PER CWT.		
Producer Blend WITH IIIA					$13.16 PER CWT.

Is Class IIIA Pricing Equitable?

Accepting the idea that the Federal Milk Marketing Orders were established to allow all producers to share in the proceeds generated from the sale of milk in the market, it does seem reasonable that all producers should share in the costs of balancing the market. The Class IIIA helps to distribute the burden of balancing the market for all producers sharing in the market proceeds.