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USDA's Recommended Decision
on
Replacing the M-W Price

by

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**USDA's Recommended Decision
on
Replacing the M-W Price**

Bob Cropp and Ed Jesse¹

The U.S. Department of Agriculture held a public hearing in June 1992 to consider proposals to replace the Minnesota-Wisconsin Price Series (M-W Price) as the basic formula price under federal milk marketing orders. The M-W Price is an estimate of the average price paid to farmers for Grade B milk in Minnesota and Wisconsin. It is used to establish minimum prices for Grade A milk in all federal milk marketing orders.

USDA issued a recommended decision for a replacement to the M-W Price on August 5, 1994, more than two years after the hearing. This paper discusses why the M-W Price had to be replaced and explains the recommended replacement. Conclusions emphasize the negative effects on the Upper Midwest of setting milk prices nationally on the basis of Grade B milk prices in that region.

How the M-W Price is Calculated and Used

The M-W Price is computed by the National Agricultural Statistics Service (NASS). It is reported on or before the 5th of each month and applies to Grade B milk delivered during the previous month. For example, the M-W Price for July 1994 was reported on August 5. Derivation of the M-W Price involves a two-stage process involving two different surveys of manufacturing milk plants that buy Grade B milk in the two states.

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In the first stage, *base month* prices are estimated from a summary of monthly reports from approximately 160 to 170 manufacturing milk plants located in Minnesota and Wisconsin. The plants procure about two-thirds of all Grade B milk marketed in the two states. The plants report after the end of the month to which the base month estimate applies. Hence, the base month price is after-the-fact; it represents an estimate of what plants actually paid for Grade B milk. The base month M-W Price is reported by NASS by the fifth of the month two months after the month to which it applies. For example, the base month M-W Price for June 1994 was reported on August 5 (the same day that the M-W Price for July was announced).

In the second stage of deriving the M-W Price, NASS surveys a subsample of about 67 Minnesota and Wisconsin plants that purchase about 35 percent of the two states' Grade B milk. These plants report actual pay price data for the first half of the month and estimated pay prices for the second half of the month to which the M-W applies. NASS uses this information to calculate an estimate of the *change* in Grade B prices from the base month to the current month. This change in price is added to (subtracted from) the base month price to create the M-W Price estimate.

The M-W Price is an estimate of the average price for Grade B milk delivered in bulk tanks and in cans f.o.b. plant or receiving station. It is intended to represent pay prices before hauling costs or producer assessments under government programs are deducted. It includes all premiums paid to producers but excludes plant hauling subsidies. The M-W Price is reported both "at test," that is, at the average butterfat test of milk received, and adjusted to 3.5 percent butterfat using a butterfat differential. The 3.5 percent butterfat adjusted price is used in federal order pricing.

The M-W was first used as a basis for setting minimum prices paid by regulated milk plants (handlers) in the Chicago Regional marketing order in 1961. During the remainder of the 1960's, it was gradually adopted by other federal orders, and is currently used in all orders as the *basic formula price*. That means that milk used to make Class III products, cheese and a few other non-perishable manufactured dairy products, is priced at the M-W Price for the current month.² Milk used to produce Class II products, semi-perishable manufactured products like ice cream, yogurt, and cottage cheese, is priced via a formula that is based on the M-W Price from two months earlier. Class I milk, for fluid dairy products, is priced by adding a Class I differential that varies among markets to the M-W Price from two months earlier. All of these prices are minimum prices; handlers can and often do pay more than the announced federal order prices for all classes of milk.

Prior to adopting the M-W Price, most federal orders set prices by using formulas that reflected prices paid by non-federal order plants (unregulated plants) making manufactured dairy products or wholesale prices of one or more manufactured dairy products. By the early 1960's, using different procedures to establish minimum federal order prices in different markets became

²Milk used to make nonfat dry milk (Class III-a) is currently priced according to a product price formula based on nonfat dry milk prices.

controversial. Butter, nonfat dry milk and cheese were sold in national markets. Midwest manufacturing milk plants complained that "surplus" Grade A milk (milk not needed for Class I beverage needs) was being priced lower in the Northeast. This situation placed Midwest manufacturers at a competitive disadvantage in selling their manufactured dairy products in national markets.

Through a series of federal order hearings, the need for uniformity and consistency in federal milk order provisions was emphasized, since pricing of surplus milk was no longer a matter of purely local interest. USDA consistently concluded that in order to achieve competitive equality, surplus milk had to be priced uniformly among orders and these prices must be aligned with competitive pay prices being paid for the majority of the unregulated manufacturing grade milk (Grade B) in the United States. USDA further concluded that this objective could best be achieved through the use of the M-W Price.

When the M-W Price was first adopted in 1961, Grade B milk represented the majority of total milk production in Minnesota and Wisconsin and these two states accounted for the majority of Grade B milk production in the nation. Manufacturing milk plants in this region competed aggressively for Grade B milk supplies. Further, since Minnesota and Wisconsin represented the major reserve supply area for Grade A milk, national milk supply and demand conditions were reflected in the M-W Price. When there was a need to ship Grade A milk out of the area to deficit fluid milk markets, not only would the value of Grade A milk in the two states increase, but so would Grade B prices. Therefore, the competitive pay price for Grade B milk in these two states was judged to represent a fair market value for Grade B milk. And since manufactured dairy products made from this milk is sold nationally, Grade A milk used to make manufactured dairy products and priced under federal orders should have a minimum priced established at this same level.

For orderly marketing, it was deemed necessary to tie federal order Class II and Class I prices to the base price (Class III). So, not only did the M-W Price become the base price in orders for Grade A milk used for manufactured dairy products (Class III use), it was also established as the mover of both Class II and Class III prices. And since the federal price support program supported manufacturing grade milk (Grade B), using the M-W Price created a tie between the federal support price and Grade A prices in federal milk orders.

The Need For Change

The declining supply of Grade B milk in Minnesota and Wisconsin is the major reason underlying the need to replace the M-W Price. When the price series was first adopted in 1961, Grade B milk production accounted for 68 percent, or 18 billion pounds, of the total milk production in the two states. This production was purchased by about 1,200 milk plants. By 1993, Grade B production had declined to less than 4 billion pounds or about 11 percent of the total milk production in the two states, with about 260 plants purchasing the milk. Because of the decline in Grade B production and the number of plants purchasing the milk, and because

even fewer Grade B plants could provide actual pay price data for the first half of the month, the statistical reliability of the M-W Price came into question. According to NASS testimony at the 1992 hearing, some plants in the survey were unable to provide actual price data and could only estimate what they expected to pay for the first half of the month. The plants in the estimate survey that were able to report actual price information accounted for about 25 percent of the Grade B milk in the two states at the time of the hearing.

There are additional concerns about the M-W Price as a reliable indicator of Grade B milk prices. The M-W Price no longer reflects national supply and demand conditions for milk. The competitive price situation in Minnesota and Wisconsin is unique to these two states. Both states have experienced declining milk production, resulting in excess manufacturing milk plant capacity. Plant pay prices for milk are a reflection of this unique supply-demand situation in these two states and not necessarily national supply and demand conditions. Localized weather conditions in the Upper Midwest during several years since 1988 have exacerbated this situation.

Multiple component pricing is prevalent in both Minnesota and Wisconsin. Many Grade B producers receive not only the standard butterfat differential but also a premium for higher than average protein composition. But the M-W is only adjusted for butterfat content varying from 3.5 percent; it is not correspondingly adjusted for protein percent relative to a standard.

One of the procurement tools used by Minnesota and Wisconsin milk plants is subsidization of farm-to-plant milk hauling. The M-W Price is supposed to reflect pay prices to producers before any deductions for hauling; it is assumed that full hauling costs are paid by producers. Since this is not the case, the M-W Price is understated to the extent hauling subsidies exist.

Proposals For An Alternative To The M-W Price³

Proposals at the June, 1992 hearing for an alternative to the M-W Price can be grouped into four categories: (1) competitive pay prices, (2) product price formulas, (3) cost-of-production formulas, and (4) the price support level. Most of the competitive pay price proposals were in conjunction with product price formulas for purposes of updating.

The majority of the testimony at the hearing was in support of a competitive pay price. Most witnesses testified in opposition to the use of product price formulas, the support price, and cost-of-production formulas as replacements for the M-W Price.

Three primary competitive pay price series were proposed: (1) the A/B price series, (2) the base month M-W (which is currently used to calculate the M-W Price), and (3) the

³For an expanded discussion of the proposals defended at the 1992 M-W price replacement hearing, see *Proposals for Replacing the M-W Price*, Marketing and Policy Briefing Paper No. 41, Department of Agricultural Economics, University of Wisconsin-Madison, May 1992.

Agricultural prices M-W. These competitive pay price series were proposed in combination with product price formulas to be used to update the previous month's price to the current month.

At the time of the hearing, NASS had been reporting for several months an A/B price series that represented prices paid for milk used in the manufacturing of dairy products, regardless of grade. That price is still reported in *Dairy Market News*, by the Dairy Division of USDA's Agricultural Marketing Service. In constructing the series, NASS collects data from 150 plants located in Minnesota and Wisconsin that receive Grade B and/or Grade A milk used primarily to manufacture cheese, butter, and nonfat dry milk. The sample represents 78 percent of Minnesota's total milk production, of which approximately 75 percent is Grade A, and 65 percent of Wisconsin's total production, of which about 84 percent is Grade A. The calculation of the A/B price requires the deduction of the "pool draw," which is money that the Grade A plants receive from the federal milk order pool as part of their share of market Class I and Class II receipts.

Proponents of the A/B price series argued at the hearing that the current M-W Price, which is based solely on Grade B milk, understates the true competitive value of milk for manufacturing purposes. Thus, incorporating Grade A milk into the M-W Price survey would result in a price series which would better reflect the true competitive value of milk and promote more orderly marketing conditions. Opponents argued that the nature of the A/B survey results in an upward bias in the reported price because of the inclusion of the regulated (federal order) Grade A milk and the lack of adjustment for some price premiums. Further, they argued that adopting the A/B price series as a replacement for the M-W Price would result in higher prices under federal orders, and higher prices are not justified based on current supply and demand conditions.

The second competitive pay price series considered as a replacement for the M-W Price was the base month M-W Price. The base month M-W Price is the same base month price currently used in the M-W estimate. The base month M-W Price would be used in conjunction with a product price formula updater. With the updater the price could be announced on or before the 5th of the month and would be based on the price for the second preceding month updated by the change in a product price formula for the preceding month. For example, the reported *updated* July base month M-W Price would be the June base month M-W Price updated by a product price formula which calculates a change in value from the June base month M-W Price using July wholesale dairy product prices and yields. This final July base month M-W Price would be announced on or before August 5th.

Proponents of the updated base month M-W Price argued that it would best reflect the supply and demand conditions for all major uses of manufactured dairy products and would provide the industry with a reliable price series. It would still rely on the competitive pay prices for Grade B milk in Minnesota and Wisconsin, and the use of a product price formula would be a better updater than the current method of using a change from the base month survey procedure. Further, the updated base month M-W Price would essentially be revenue-neutral when compared to the current M-W Price.

Opponents argued that although product prices and milk prices are correlated, changes in competitive milk prices do not correspond exactly with changes in product prices. For example, the current M-W Price is highly correlated with changes in National Cheese Exchange prices, but changes in the M-W lag changes in cheese prices. Second, it was asserted that product price formulas used for updating are subject to controversy based on which product prices, product yields, and weighting factors are used. Some opponents also stressed the fact that Grade B prices in Minnesota and Wisconsin understate the value of Grade A milk used for manufacturing purposes and that this alternative is short-lived given the pervasive decline in Grade B milk production in the two states.

The third competitive pay price series advanced as an alternative to the M-W Price was the Agricultural Prices M-W (Ag Prices M-W). The Ag Prices M-W is an approximation of the base month M-W and is calculated from NASS' "Prices Received" series, which includes estimates of manufacturing grade milk prices for Minnesota and Wisconsin. The "Prices Received" estimates are computed approximately two weeks prior to the tabulation of the base month M-W Price. These estimates are published near the end of the month in "Agricultural Prices," a NASS publication.

The "Prices Received" estimates are derived from reports of plants that are part of the base month sample. These prices for Minnesota and Wisconsin are weighted using the same weights as in the M-W Price to determine the Ag Prices M-W. Thus, the Ag Prices M-W available on the 5th of the month would be the price for the second preceding month. The price announced August 5th would represent June pay prices. The volume of Grade B milk represents about 30 percent of all Grade B milk in Minnesota and Wisconsin.

The adoption of the Ag Prices M-W updated with a product price formula was supported by numerous producer organizations. Proponents argued that it would reflect a price level determined by competitive conditions which are affected by supply and demand in all major uses of manufactured dairy products. It is a free market pay price and would not be affected by regulated federal order prices as would the A/B M-W Price. Further, they argued that there is a sufficient supply of Grade B milk in Minnesota and Wisconsin to allow NASS to collect reliable price information received by dairy producers for Grade B milk in those states, as long as the sample included all Grade B plants, not just those who can report actual first-half pay prices. Opponents to using the Ag Prices M-W offered the same arguments as those opposing the base month M-W Price.

The National Cheese Makers Association proposed the adoption of a product price formula updated by a competitive pay price factor as a replacement for the M-W Price. They argued that there was a need for advanced pricing for Grade A milk used for manufacturing. The updater in their proposal would require the announcement of weekly prices based on a butter/powder/cheese formula using the most recent weekly product prices. This weekly basic formula price would be announced on Friday and would apply to the following Monday through Sunday pay prices. The weekly prices would then be used to compute a monthly average product

price formula value. Based on this monthly average price and other factors a final industry price would be computed.

The Minnesota Milk Producers Association and the Wisconsin Farm Bureau Federation proposed replacing the M-W Price with the support price. They argued that the adoption of the support price as the basic formula price would establish consistency between the price support program and the federal milk order program. The proposal would establish easily-determined minimum prices for all classes of milk and would not set an effective, or market price. It would allow local market over-order pricing and over-order premiums to set the price for milk, resulting in a more market-driven system. It would decouple classified pricing from the Upper Midwest, where supply and demand conditions are unique. Further it would make the federal milk order program consistent with the price support program in pursuing the objective of minimum prices.

Substantial opposition to the adoption of the support price as the basic formula price was presented during the hearing. Most of the opponents argued that federal order minimum prices should be *effective* prices; that using the support price as the basic formula price would cause actual prices to fall to the support level.

The final M-W Price replacement alternative considered involved use of a cost-of-production formula to determine the basic formula price. Opposition to these proposals was strong. One opponent argued that milk prices determine the cost of production; that is, producers adjust input costs in accordance with prices received for milk. Other opponents argued that while cost-of-production formulas may reflect supply-side market conditions, they do not monitor changes in national demand conditions. Also, determining an appropriate cost of production would pose a problem. Basing the cost of production on the national average would not account for regional variations in production costs and would tend to advantage larger, more efficient producers.

The Recommended Replacement

Based upon the hearing records and post-hearing briefs, USDA recommended adoption of the base month M-W Price updated with a butter/powder/cheese formula as the replacement for the M-W Price series. USDA rationalized their decision in the following manner: The hearing notice stated that any changes in price levels must be justified under the supply and demand pricing standards set forth in the Agricultural Marketing Agreement Act of 1937, as amended. The Act requires the Secretary to set prices that will assure a dependable supply of wholesome milk. The hearing record indicates that current price levels are achieving a reasonable balance between supply and demand for milk. Present prices are ensuring consumers of an adequate supply of milk while maintaining sufficient reserve supplies. The record conclusively demonstrates that product price formulas (except for updating), the support price, and the cost-of-production formulas would change current price levels and do not have sufficient justification in the evidentiary record for such changes. In addition, the support price and the

costs-of-production formula do not comply with the criteria for establishing prices to assure an adequate supply of milk under the Act. Consequently, such proposals are denied.

The recommended decision states that the M-W Price, as a competitive pay price, "... reflects all of the economic conditions that affect both supply and demand and it is automatically responsive to any changes that affect economic conditions." USDA discounted the concern over the declining amount of Grade B milk and the declining number of plants that purchase such milk, claiming that there are still adequate supplies of Grade B milk and plants purchasing this milk in the two states to establish a competitive pay price. The immediate concern is the reliability of the procedure to update the base month M-W Price to compute the current month's M-W Price. The NASS witness testified that the number of plants available for updating the base month has been declining as fewer plants pay twice a month. However, USDA claimed that the NASS witness did not express any reservations about the reliability of the base month M-W Price.

The recommended decision quotes the 1961 final decision to use the M-W Price as the basic formula price in the Chicago order to defend continuing to utilize a competitive pay price instead of a product pricing formula. Specifically, USDA argued that the initial decision to use the M-W was grounded in the economic premise that, in a highly competitive economy, dairy concerns will tend to purchase milk at prices commensurate with the more efficient concern's ability to pay for the product. Since, USDA claims, this economic rationale remains sound today, the basic formula price replacement should continue to be based on a competitive pay price series.

USDA further argued that evidence at the hearing record supports the adoption of either the base month M-W Price or the Ag Prices M-W, both updated by a product price formula. However, the NASS witness stated that the base month M-W Price is expected to outlive the Ag prices M-W in terms of statistical reliability because it relies on a larger sample size. Hence, the updated base month M-W Price is a preferable replacement.

The A/B price was eliminated as a possible replacement primarily because it would generate a price considerably higher (60 to 85 cents per hundredweight) than the current M-W Price. USDA concluded that there is no evidence submitted regarding supply and demand conditions that would warrant price increases of the magnitude generated by the A/B price.

The product price formula recommended for updating the base month M-W Price includes the following products and representative price series:

- Grade AA butter, Chicago Mercantile Exchange (AAB);
- nonfat dry milk, Central States production area (NFDM);
- dry buttermilk, Central States production area (DBM);

- cheddar cheese, 40 pound block, National Cheese Exchange (NCE);
- Grade B butter, Chicago Mercantile Exchange (AB).

USDA did not include dry whey in the formula on grounds that not all cheese manufacturers process whey, and that Whey disposal is a cost to many manufacturers. The product yields from 100 pounds of milk are basically those used under the price support program adjusted to milk containing 3.5 percent butterfat. The yields used are: butter, 4.27 pounds; nonfat dry milk, 8.07 pounds; dry buttermilk, 0.42 pounds; cheddar cheese, 9.87 pounds; and whey cream butter, 0.238 pounds.

The butter-nonfat dry milk and cheese components of the formula are weighted based on the proportion of milk used in the production of nonfat dry milk and in the production of American cheese in Minnesota and Wisconsin. The reason that nonfat dry milk, but not butter, is used to compute the butter-nonfat dry milk weighing factor is because significant proportions of butter are manufactured in Minnesota and Wisconsin from the butterfat that is in excess of fluid milk operations. Cheese accounts for about 95 percent of the milk used in these products in the two states. The weights used are based on the milk equivalent of these products for the second preceding month.

The gross value change in the product price formula from the preceding month to the current month will be used to update the base month M-W Price. The gross value change for each month will be computed as follows:

- 1) determine the gross value of milk used to manufacture cheddar cheese and butter/nonfat dry milk:
 - (a) The gross value of milk used to manufacture cheddar cheese equals $(9.87 \times \text{NCE}) + (0.238 \times \text{AB})$; and
 - (b) The gross value of milk used to manufacture butter/nonfat dry milk equals $(4.27 \times \text{AAB}) + (8.07 \times \text{NFD}) + (0.42 \times \text{DBM})$.
- 2) Determine the amount by which these gross values exceed or are less than the respective gross values for the preceding month.
- 3) Compute weighing factors to be applied to the gross value changes. The weighing factors will be calculated as follows:
 - (a) Determine the milk equivalent for both American cheese and butter/nonfat dry milk by using the American cheese production in Minnesota and Wisconsin divided by 9.87 to determine the cheese milk equivalent and the nonfat dry milk production in Minnesota and Wisconsin divided by 8.07 to determine the butter-nonfat dry milk equivalent;

- (b) Add the cheese milk equivalent and the butter-nonfat dry milk equivalent to calculate the total milk equivalent; and
 - (c) Divide the milk equivalent for cheese by the total milk equivalent to yield the cheese weighing factor and divide the butter-nonfat dry milk equivalent by the total milk equivalent to yield the butter-nonfat dry milk weighing factor.
- 4) Use these weighing factors to compute a weighted average of changes in the gross values described above.

Although the updated base month M-W Price will result in annual average price levels that are nearly the same as the current annual average prices, the updated base month M-W Price will not track the current M-W Price precisely from month-to-month.

This is because the product price formula used to update the base month M-W Price more rapidly reflects changes in wholesale product prices in both the upside and downside direction than does the current M-W Price. The current M-W Price lags behind changes in wholesale product prices. Table 1 below compares the recommended updated base month M-W Price to the current M-W Price for all of 1993 and January through July of 1994.

During the period January 1993 through July 1994, the updated base month M-W Price ranged from \$0.46 per hundredweight higher than the current M-W Price (April, 1993) to \$0.27 per hundredweight lower (October 1993). However, the annual average updated base month M-W Price for 1993 was only \$.01 per hundredweight more than the annual average M-W Price.

USDA's recommended decision recognized that the adoption of the base month M-W Price, or any Grade B milk series, is only temporary, since the amount of Grade B milk production is expected to continue to decline. However, the decision stated that the adoption of the base month M-W Price will provide the Department and the industry with more time to jointly develop a viable, long-term solution.

This may be true, but time is running out. It took two years from the hearing for the U.S. Secretary of Agriculture to make this recommendation for a replacement of the current M-W Price. Since the 1992 hearing, Grade B milk production in Minnesota and Wisconsin declined almost 2 billion pounds, or by about one third.

Table 1. Comparison of the Updated Base Month M-W Price and the current M-W Price, January 1993-July 1994.

Date	Updated base month M-W Price	Current M-W Price	Difference
January 93	\$11.02	\$10.89	\$.13
February 93	10.72	10.74	-.02
March 93	11.19	11.02	.17
April 93	12.61	12.15	.46
May 93	12.37	12.52	-.15
June 93	11.82	12.03	-.21
July 93	11.30	11.42	-.12
August 93	11.18	11.17	+.01
September 93	12.29	11.90	+.39
October 93	12.19	12.46	-.27
November 93	12.62	12.75	-.13
December 93	12.44	12.51	-.07
AVERAGE	11.81	11.80	.01
January 94	12.46	12.41	.05
February 94	12.34	12.41	-.07
March 94	12.98	12.77	.21
April 94	13.02	12.99	.03
May 94	11.52	11.51	.01
June 94	11.17	11.25	-.08
July 94	11.82	11.41	+.41

Impact of the Recommended Decision

Since the annual average updated base month M-W Price will be about the same as the annual average of the current M-W Price, the impact on both milk plants regulated under federal milk orders and producers selling to these plants will be minimal. The only impact will be the potential for more month-to-month price volatility. Since milk plants in the Upper Midwest pay well above the current M-W Price for Grade A milk, the recommended base month M-W Price is expected to have a limited impact on price volatility in this region.

The effects on interregional competition of continuing to link milk prices nationally to Grade B milk prices in Minnesota and Wisconsin are considerably more profound. In its recommended decision, USDA justified using the updated base month M-W Price as the basic formula price by claiming that it represents a good indicator of national competition for milk used for manufacturing purposes. It does not. There is not enough Grade B milk marketed in Minnesota and Wisconsin to ensure that Grade B milk prices reflect the competitive value of milk used for manufacturing even in that region, let alone nationally. Plants are increasingly uninterested in procuring Grade B milk except as a service to long-time patrons.

From the perspective of the Upper Midwest, there are much more serious problems with using the M-W Price or any modification based on Grade B milk prices in that region as the basic formula price in federal orders. As we have noted elsewhere, using the M-W Price as the federal order basic formula price places an economic penalty on Upper Midwest producers and processors.⁴ The recommended replacement does nothing to correct this problem.

In many markets outside the Upper Midwest, the price that plants actually pay for Grade A milk used for manufacturing is the M-W Price or less. In the Upper Midwest, excess manufacturing capacity and strong competition for milk to make cheese raises the actual price paid by Grade A plants well above the M-W Price; the gap recently has been \$.75 to \$1.50 per hundredweight. This means that Upper Midwest cheese plants are paying substantially more for milk than their competitors in other regions. Since cheese trades in a national market, this poses a major competitive problem, in fact, the same problem that led to adoption of the M-W Price in the first place..

Minnesota and Wisconsin cheese plants operate under much less favorable plant margins than do plants in other regions paying substantially less for raw milk. More profitable margins has stimulated new cheese plant expansion in these lower milk cost regions. Milk expansion in these regions has necessitated additional manufacturing plant capacity. But additional plant capacity has also recruited additional milk production to fully utilize this capacity. One feeds on the other. More milk means more plant capacity and more plant capacity means more milk.

⁴See *Federal Order Milk Pricing and the Economic Viability of the Upper Midwest Dairy Industry*, Marketing and Policy Briefing Paper No. 47, Department of Agricultural Economics, University of Wisconsin-Madison, April 1994.

At the same time that milk handlers in many markets pay the M-W Price or less for Class III milk, they can pay their producers more than handlers in the Upper Midwest, who pay much more than the M-W Price for their Class III milk.

This anomaly results from single basing point pricing. High Class I differentials in markets distant from the Upper Midwest mean that large Class I revenues can offset low Class III revenues, yielding a higher producer blend price than what is experienced in the Upper Midwest. The Upper Midwest dairy industry is caught in a box: Plants in the Upper Midwest pay more for milk used to make cheese, meaning that other regions can undercut cheese prices. Producers receive less for their milk than in most other regions but experience similar or higher costs, meaning that other regions expand milk production while the Upper Midwest contracts.

Continuing to use a modified M-W Price as an indicator of national supply and demand conditions for milk used for manufacturing exacerbates the problem. Grade B milk prices in Minnesota and Wisconsin do not reflect national supply and demand conditions. They reflect regional excess processing capacity, rapidly declining Grade B milk production, unusual weather conditions, and a host of other factors that are unique to an area that no longer dominates U.S. milk production.

Tying milk prices throughout the U.S. to the Grade B price in Minnesota and Wisconsin assures that milk prices will become increasingly distorted and that the Upper Midwest will be penalized. Conditions in 1993 exemplify this problem. The Upper Midwest experienced major flooding, which resulted in a restricted and poor quality supply of forages. As a result, culling was heavy and milk production per cow on the remaining herd was depressed. This caused milk production in the Upper Midwest to fall dramatically, raising the M-W Price. Other dairy areas of the U.S. experienced normal weather and no milk shortages. Yet because the M-W underlies all federal order prices, milk prices in all regions were elevated.

Moving prices nationally according to localized conditions in Minnesota and Wisconsin, where milk production is falling, makes absolutely no economic sense. More important, it has a devastating effect on the two states by encouraging expanded milk production in other areas, subsequently leading to reduced prices for milk used in manufacturing.

The Upper Midwest's importance in dairying led to use of the M-W Price as a measure of national supply and demand conditions for milk. As the region's relative importance diminished, the continued use of the M-W Price to set milk values in other regions allowed those regions to benefit from a purely local situation that called for higher milk prices locally, but not nationally. Using an expanded M-W as the basic formula price simply continues this distortion.

USDA's recommended decision and the hearing, itself, are disappointing in their narrowness. USDA refused to consider proposals that would have simultaneously corrected the problems of: (1) disparate regional values for Grade A milk used for manufacturing, and (2) cross-subsidization between Class I and Class III. USDA insisted that any alternative to the M-W Price be revenue neutral. It is not possible to maintain revenue neutrality by appropriately

changing the M-W Price to more adequately reflect the value of Grade A milk used for manufacturing without simultaneously making appropriate adjustments in Class I prices.

USDA failed to recognize the regional inequities in the current single basing point Class I pricing system under federal orders, and, thus, failed to take any corrective action. Without appropriate corrections to reduce the regional differences in Class I prices and changing the M-W Price to reflect a market value of Grade A milk for manufacturing, Upper Midwest manufacturers will remain at a major competitive disadvantage to manufacturers in other regions. Without appropriate federal order price adjustments, milk production and new manufacturing plant capacity will continue to expand in the South and West, while Upper Midwest manufacturers will struggle to remain profitable and competitive selling manufactured products on a national market.

Eventually, producer pay prices in other regions will approach and even fall short of pay prices of Upper Midwest producers. This is the inevitable result of milk production expanding faster than Class I needs and declining Class I utilization. This has already happened in some federal orders. But eroding the blend price through reduced Class I utilization is a slow process in markets with high Class I differentials, and that process involves glutting the market for manufactured dairy products at the expense of regions largely dependent on manufacturing. Thus, the inevitable result of current federal order pricing distortions is of very cold comfort to Upper Midwest dairy interests who are facing the consequences of these distortions.

The Upper Midwest must continue to pursue federal order reform. This reform involves both a *rational* replacement for the M-W Price, one that reflects the true market value of Grade A milk for manufacturing, and rational Class I price adjustments.