Lessons and Questions from Fifty Years of Milk Marketing Orders

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The general purpose of this conference is to continue an exploration of the rationale for existing agricultural marketing policies given structural and technological changes in the U.S. agricultural and food system. A particular focus of this symposium centers on the generation and role of market information as it relates to market efficiency and performance. The session on marketing orders is oriented toward the role that they have played in contributing to orderly marketing for certain commodities and their potential role in other sub-sectors. This paper focuses on milk marketing orders (MMOs).

The literature on this topic is vast and rich, and the subject is a fertile field for contemporary controversy and debate. I will attempt to survey the current discussion about MMOs, but in keeping with the theme of the symposium, I will not dwell on contemporary issues so much as I will try to:

1. Illuminate some of the historical purposes of MMOs,
2. Assess how well they have met their objectives, and
3. Extrapolate possible lessons for other commodity sectors.

I begin with a brief discussion of why milk marketing orders were developed and what they are.

Conditions Leading to the Evolution of MMOs

Federal Milk Marketing Orders (FMMOs) were first authorized under the Agricultural Marketing Agreement Act of 1937 (AMAA). (Many state laws authorizing similar programs were also passed during the 1930s.) This is already quite some time ago—57 years—but in fact the first industry applications of classified pricing and pooling, the basic tools of MMOs, existed another 57 years before federal law sanctioned them. Beginning in 1880, milk in the Boston market was sold under a classified pricing plan. Gaumnitz and Reed (1937) state that by 1932 some 68 markets operated under a classified pricing plan (p. 31). Thus, to truly understand the factors that led to this system of pricing, one needs to understand dairy markets as they evolved in the 19th Century.[1] Fortunately, or otherwise, many of the characteristics of these ancient times are preserved in the 20th century.

The fundamental economic characteristic of evolving dairy markets in the 1800s was the development of functional specialization and distinct economic entities along market channels between farmers and consumers—the emergence and growing importance of "middlemen." Attempts by farmers to offset the bargaining advantage of middlemen by marketing milk cooperatively occurred in the United States as long ago as the early 1800s. These early efforts were characterized by numerous false starts and short-term successes; however, by the late 1800s and early 1900s there were more examples of success.

Dairy farmers were motivated to persist in their efforts for one simple reason—they thought they weren't being paid enough for their product[2] and that this largely derived from the fact that milk buyers had an oligopsonistic advantage in setting prices. It was further recognized that their structural advantage was exacerbated

[1]This history is reviewed at length elsewhere by Spencer (1933), Novakovic and Boynton (1984), and Novakovic and Pratt (1991) among others.

[2]The perceived chronic insufficiency of farm milk price is no doubt the root cause of every collective or public action taken on behalf of dairy farmers. Simple as this may seem, it is useful to remember that this is the yardstick by which farmers will generally judge dairy policy or dairy cooperatives. Policy-makers, regulators, and analysts often have additional, different, or less ambitious objectives for a particular program or institution.

by special characteristics of milk and milk markets, e.g., (1) milk is generally available over a very broad geographic area, hence for any one buyer a supplier is not hard to find, (2) milk production is seasonal and its seasonality is out of phase with the seasonal demand for beverage milk, (3) milk is highly perishable, hence the price elasticity of supply is low at the outset and quickly approaches zero as time shortens, and (4) consumer demand has a very low elasticity with respect to own-price but a very high political or social sensitivity to higher prices.[3]

In this environment, the conventional wisdom for the last century or more has been that fluid milk processors can do little to affect total demand for their product; hence they prosper only through strategies that minimize cost and/or maximize market share through competition with one another. At their extremes, this type of competition is frequently referred to as destructive competition, and the outcome it leads to is generally described as disorderly marketing.[4]

[3]This fact about consumer demand was a potent factor in the early 1900s. A surprising collection of papers and even books were written about the critical importance of milk in the diet, particularly for children. It was quite common to argue that milk was simply too important to leave to the uncertainties of free markets. Certainly this justification has greatly diminished over time, but one can still observe vestiges of it in public discussion today.

[4]In his paper for this symposium, Shaffer defines orderly marketing as matching supply and demand at prices consistent with the production and marketing costs of typical, well-managed firms. Taken broadly, this definition is not inconsistent with its normal usage in the dairy marketing literature; however, its dairy usage denotes much more than some kind of aggregate market balancing. In the dairy context, disorderly marketing is very much about the existence of marketing inefficiencies that arise as an artifact or tactic of anti-competitive behavior. When thinking about what it is we are trying to correct with marketing orders, it is important to keep in mind that there are concerns about competitive behavior not (just) about some externality that impedes market coordination within an otherwise competitive market.

Processors have little ability and no incentive to increase the prices they charge for fluid milk (outputs) and every reason to squeeze the price they pay for farm milk (inputs). Farmers, on the other hand, are understood to be price takers who, by the nature of their product, have little choice in the short run but to accept whatever price is offered by milk buyers. Historically, the contrary movements of milk supply (long in the spring) and fluid milk demand (long in the fall) have created a season of tight milk supplies when farm prices are high and a season of excess supplies which result in low farm prices. However, it is important to understand that the historical justification for marketing orders is as much, if not more, about seasonal access to markets and price equity across producers as it is about seasonal differences in market average prices paid by plants.

The ebb and flow of seasonal milk supply and demand resulted in three groups of producers, defined with respect to a large locus of consumption (see also Cassels, 1937 or Bressler, 1958). There is a group of producers near a metropolitan area whose milk is always in demand for the intrinsically more lucrative fluid market. Likewise, there is a group of producers far removed from the city center whose milk is never in demand for fluid use. Naturally, there is a group sitting in between whose milk is needed in the fall and not needed in the spring. The interior group is happy, the exterior group is envious, and the intermediate group is buffeted by having made the investment to serve fluid markets year-around (maintaining grade A status) but only getting the better price associated with fluid markets part of the time.

Thus, classified pricing and pooling were developed as a way to smooth fluctuations in (individual producer) price and accessibility associated with seasonal variations in overall farm milk supply and fluid milk demand. Although prices would continue to move up and down seasonally,

cooperative marketing of the milk and classified pricing was intended to help hold a line on prices in long markets and mitigate "destructive competition" by eliminating the possibility that fluid processors would use distant milk supplies to lower nearby milk prices by more than just transportation cost differences. Milk was priced by class of milk utilization, rather than the class of a buyer, to recognize that many dairy processors produce more than one product. In the interest of equity across processors, which has been necessary to gain their cooperation, fluid processors who also make non-fluid products are charged lower prices, comparable to what manufacturers pay for milk in unregulated markets, on that portion of their milk supply.[5] Pooling was used to create pricing equity across farmers and thereby mitigate the incentive of farmers who don't serve fluid markets to gain access by undercutting the price of the farmers who do.

Although cooperative action met with the approval of many farmers, conditions were clearly such that some producers always felt and responded to incentives to defect from the cooperative and take an unpooled price that was higher than the pooled price but lower than the fluid I price. In this way, both the independent seller and the buyer benefited. Although there were notable periods of cooperative successes, the cooperative pricing system started to fall apart in the 1920s and collapsed in the 1930s under the weight of the Great Depression. The Roosevelt administration was eager for ideas as to how government could assist in economic recovery. Dairy cooperatives argued that they had the method for stabilizing and enhancing milk prices but lacked the authority to enforce it over a market area. As a first step, federal law authorized "marketing agreements," which provided for government oversight of privately negotiated marketing and pricing agreements. This did little to ensure that producers could negotiate favorable prices; hence they were soon replaced with marketing orders which added government rule-making to government rule enforcement. The AMAA gave producers the ability to ask USDA to set up and approve a system of regulation patterned after the cooperative classified pricing and pooling plans.

It bears noting that the AMAA did not require all markets to come under regulation. Marketing orders are promulgated only if requested by producers and if USDA determines that conditions justify an order (which they usually have following a request). As late as 1950 the still fledgling FMMO system consisted of 39 geographically small orders whose milk receipts equaled 16 percent of U.S. production. The scope of FMMOs grew very rapidly through the 1950s, but it wasn't until 1969 that FMMO marketings exceeded 50 percent of the U.S. milk supply. The number of FMMOs peaked at 83 in 1962, but with order mergers and a growing size of order areas, the 39 orders in effect today represent 99 percent of U.S. grade A milk production.

Basic Characteristics of Milk Marketing Orders

A marketing order is a set of regulations governing the marketing of a particular product, typically confined to a specific marketing area. Marketing orders can be and are authorized under both federal and state law.

Marketing orders are presently used for one major agricultural product—milk—and various crops, including fruits,

[5]Economists recognize that classified pricing discriminates prices according to demand elasticities. Early creators of this system simply knew that the fluid market was large, fluid processors were capable of paying a higher price for milk than manufacturers, and total producer revenue is enhanced when different prices are charged in fluid and manufactured product markets.

vegetables, nuts, and other specialty crops. Beyond their basic objective of helping farmers and growers achieve more favorable prices and marketing conditions, milk marketing orders are more different than similar to the orders for other crops. These differences arise from fundamental differences in the characteristics of the product and product markets. Milk is unique among agricultural commodities in that its production is a flow process involving daily harvesting. The perishability of milk on the farm leaves producers with little option but to sell their product daily or lose it. Thus, the focus of MMOs is on the establishment of equitable and efficient prices to coordinate supply and demand at a minimal marketing cost. No or little effort is made to manage the amount of milk produced or marketed, stimulate demand, establish grades or standards, or some of the other things that could be or are covered by marketing orders of other types. Perishability is an important factor for many of the other crops covered by marketing orders, but given their more periodic harvesting, the tactic for their orders has in the past hinged on managing the flow of the product harvest to market in such a way as to obtain more favorable prices for growers. The flexibility of marketing orders to adapt to the characteristics of a product market should be recognized as one of its strengths as a policy instrument. The flip side of this coin is that these characteristics must be carefully taken into account when designing the rules under which the market is regulated.

What is Regulated Under Milk Marketing Orders?

Marketing orders regulate the minimum prices paid by milk processors and received by dairy farmers. How it does this is the result of a very sophisticated system.

MMOs have frequently been accused of being extremely complicated, supposedly to the point that few industry members or even dairy marketing specialists really understand them. Without question, marketing orders are complex, and the "legalese" in which they are written is tedious and hard to decipher. Nevertheless, the basic regulation is quite simple and boils down to four functions or mechanisms:

1. *Classification* of farm milk according to the dairy product into which it is made; presently four classes are used in FMMOs—class I is beverage or fluid milk products, class II is fluid cream and other so-called soft or perishable products (yogurt, ice cream, cream cheese, cottage cheese, etc.), class III is so-called hard or storable manufactured products (cheese, butter, evaporated milk, etc.), and class IIIa (a very recent addition) is nonfat dry milk.
2. *Pricing* farm milk according to its classification and requiring all regulated buyers to pay (at least) the minimum class price for the milk they buy and use in each class,
3. *Pooling* the price obligations of individual buyers so as to enable regulated buyers to pay all farmers in a market (at least) the weighted average of the class price obligations of all buyers in the market; the minimum blend price is uniform across all producers regardless of how any one producer's milk is used, but specified adjustments are made (always) for milk composition and (usually) for location within the market (transportation),
4. *Auditing* the reports and records of buyers by the federal government to ensure proper reporting of milk volumes received, utilization, and payment.

In the course of doing their regular business, Market Administrators (MAs) generate volumes of data, much of which is published by the MAs for their individual orders and collectively by the Agricultural Marketing Service (AMS) of USDA. Milk is

priced monthly; hence the data are reported on a monthly (and calendar year) basis. The provision of market data is not so much a function of orders as it is an important and valuable by-product of the regulation. Just how useful these data are is something that will be discussed later.

Much of the complexity of orders derives from the need to write specific rules for identifying who is regulated, whose milk is priced, and how milk is classified. To ensure the integrity of the system, rules must be written with precision and enough detail so as to accommodate situations that exist or may occur. In this regard, the rules probably have to be as complex as the situation or market requires them to be, given the overall objectives of the policy.

Who is Regulated Under Milk Marketing Orders?

Given the framework of minimum buying prices, it is the buyers of milk (handlers) who are regulated under marketing orders. In particular, class I handlers who operate in a defined marketing area are obliged to participate. Handlers of milk in the other manufactured product classes participate in the order only to the extent that they meet the order's rules with respect for qualification; this hinges on the notion that they relate to and somehow serve the class I market. More specifically, this service is generally thought of as providing a reserve or supply cushion for the seasonal milk requirements of the class I market. This distinction derives from the historical basis of MMOs, which was to regulate class I markets. Nevertheless, the appeal of marketwide pooling and pricing equity across farmers has resulted in orders that allow, in one way or another, virtually all producers of grade A milk to have their milk priced under an order. At most, this may require a farmer to join a cooperative. The relaxing of "qualification criteria" is in many ways not surprising, but it needs to be recognized that this has contributed to some tensions between people who disagree about what the appropriate scope of MMOs should be, i.e., are they for all milk producers or primarily for those who directly serve class I markets?

Farmers are not regulated under orders, but it is *only* the farmers whose milk is or would be priced under an order who are allowed to vote on the provisions of an order. Even granting this, the farmer's role is limited. Producers can only vote to accept or reject an order, in its entirety, as recommended by USDA. They are not allowed to choose only those provisions that appeal to them. While it is undeniable that marketing orders exist primarily to benefit dairy farmers, it is equally undeniable that USDA has the responsibility to write orders that balance the interests of producers, processors, and consumers. Moreover, I would argue that they have done a reasonable, even commendable, job of balancing these often competing interests over time.

Where Are Milk Marketing Orders?

Presently, there are 39 geographically delineated FMMOs and eight states that operate MMOs or similar pricing programs. Under either federal or state law, only grade A milk, i.e., milk that can be legally processed into beverage products, is eligible for market order regulation. Over 99 percent of the grade A milk produced in the United States is marketed under a MMO; this represents over 93 percent of all the milk produced (grade A and grade B).

In thinking about the spatial aspects of a marketing order, there are three distinct areas—the distribution or marketing area, the processing area, and the milkshed or procurement area.

Federal milk marketing order maps show distribution or marketing areas. This is an area in which fluid milk products are sold. These areas are very explicitly defined in each order because they determine who is regulated under the order. Handlers who

sell half or more of their fluid milk (route dispositions) in this area are subject to the regulations of the corresponding order. FMMOs have some marketing areas considerably smaller than states and some which encompass an entire state and more. Most federal order marketing areas cross state boundaries.[6] States may define the entire state as a marketing area, but even they often identify areas within the total state as the marketing area. Pennsylvania, for example, has six marketing areas. MMO distribution areas never overlap.

The area from which regulated handlers in a particular order procure milk is generally referred to as the order milkshed. When viewed on a map, it simply means that at least one farmer who supplies a regulated handler is located in the specified area. It does *not* mean that all farmers located in the area deliver milk to plants regulated under the corresponding order. Thus, milksheds may and often do overlap, and the overlap area may be quite large.

The term processing area is not one in common use. I have coined it to recognize that the area in which plants are located can be and generally is different from either the distribution area or the milkshed associated with an order. Processing areas also often overlap, but usually less so than milksheds.

Although there is certainly nothing to require it, these areas are typically loosely arranged in concentric circles, with the distribution area closest to the center and the milkshed reaching out the farthest.

The importance of this vocabulary is that it helps us understand how the economic agents involved in the regulation are identified. MMOs are defined by where fluid milk products are sold, not by the location of farmers or plants. This makes it theoretically possible for New Mexico farmers to be pooled under the New York-New Jersey Federal Order if they sell milk to an Ohio processor who in turn has a majority of fluid sales in New York City. This is a contrived example to be sure, but it makes the point that MMO data on the amount of farm milk received by regulated plants and the production of dairy products at those plants tell us nothing about the total milk or dairy product production in a specific geographic area. In fact, it is nearly impossible to reconcile federal order data with state estimates generated by the National Agricultural Statistics Service. Moreover, when federal order data show increases or decreases, one cannot be sure that the change represents a change in production for a consistent group of plants or farms *or* the switching of plants or farms to a different marketing area, and hence a different order. For that matter, order boundaries can change, usually through merger but also through expansion. The movement of plants to different orders happens fairly frequently and can make for some odd jumps in federal order data. Producers shift from one order to another regularly. This is no particular problem from a regulatory standpoint, but it makes a big difference in how one interprets the data. For this reason, federal order data are seldom used in economic analysis of dairy markets or milk production. Many industry participants do not use these data for their market analysis to any great degree either. The principal exception would be fluid milk sales data, of which federal orders are the primary source. Thus, even though MMO data are credited with a higher degree of accuracy, because they are from audited records, statistical estimates of economic activity in states are often preferred.

The Success of Federal Milk Marketing Orders

If we believe that FMMOs exist to repair or mitigate the ill-effects resulting from the disparity in bargaining power between

[6]The fact that economic marketing areas do not respect political boundaries is the primary reason that *federal* orders predominate, not state orders.

farmers and milk processors, we could probably argue that they have been successful. However, many farmers are disappointed that FMMOs don't do more to protect them from periods of low market price or to keep prices high all the time. MMOs fail as a tool for price enhancement, unless one's goals for enhanced prices are quite modest.

Milk Marketing Orders and Farm Price Support

This limitation of MMOs was recognized early on and ultimately led to the creation of the Dairy Price Support Program (DPSP) in the 1940s. In the 1930s, the concept of parity income and parity prices for agricultural products was introduced and definitions were refined. During World War II, farm milk prices were supported as part of the war-time effort to assure a steady flow of food. To achieve a farm price no less than a minimum parity price, the government offered to purchase manufactured dairy products at wholesale prices calibrated to the farm support price goal. The war-time program required annual authorization by Congress. According to Cook (1980, p. 2):

> When the war was over we had a great deal of pent up consumer demand, but this did not reflect itself in milk prices as the economists had expected. We soon saw that we needed a price support program...we saw a great need for expansion of the federal milk marketing orders...price wars among dealers broke out all over the country and price cuts were being passed back to producers.

This point of view was by no means universally held, but such thinking and a half century of producer complaints about price levels finally convinced Congress to make a dairy price support program a part of permanent agricultural law through the Agricultural Act of 1949. In 1981, following years of burgeoning surpluses, the setting of support prices was severed from the parity standard, and this has continued to be the case since then, even though the language of the permanent legislation has yet to be permanently revoked.

The DPSP and FMMOs quickly developed a symbiotic relationship which ensures that federal support targets for national average farm milk prices would in fact be achieved by all farmers. Because the DPSP operates through manufactured product markets and only directly impacts those manufacturers who sell to the federal government, other mechanisms must exist to ensure that the farm price goal is achieved. Federal orders and basic competition are these mechanisms.

The DPSP creates a perfectly elastic and more or less unlimited demand for manufactured dairy products (specifically, cheddar cheese, butter, and nonfat dry milk) positioned at the corresponding purchase prices. Competition among manufacturers in a national market ensures that the purchase price acts as a floor on wholesale product prices, which are otherwise unregulated. Competition for milk supplies ensures that the farmers across the United States who supply manufacturers will receive a farm price no less than the support price (assuming purchase prices are calibrated properly). MMOs further ensure that farmers who sell to processors of nonsupported products also receive prices that are no less than manufacturers of supported products will pay. This happens by virtue of how class prices are set.

At first, class prices under a particular order were set according to a more local determination of what was fair and reasonable. Over time, this local orientation gave way to a more coordinated strategy that sets class III prices the same everywhere; class II and IIIa prices are nearly the same everywhere and any differences are small; and class I prices differ across orders but move up and down

together. This occurs by virtue of setting all class prices according to the same "basic formula price." Since the 1960s, every FMMO has used the Minnesota-Wisconsin Price (M-W) as the basic formula price. The M-W is USDA's estimate of prices paid for grade B milk by manufacturers in Wisconsin and Minnesota. Thus, the circle is completed. The DPSP affects what manufacturers can pay for grade B milk, and a grade B price is used to move grade A prices in FMMOs.

This system ensures producers price equity, or at least consistent relationships over time, but it has its limitations. FMMOs do not judge the appropriateness of the M-W price; rather, they simply pass it along. As we learned in the early 1980s, when the DPSP pushes the M-W up to a level that generates surplus production, FMMOs very efficiently pass that price signal to all farmers in regulated markets. They have no mechanism to correct or offset this problem.[7]

Thus, when judged by either their ability to enhance prices to the satisfaction of producers or to provide the right price signals when markets are unbalanced because of DPSP actions, MMOs as currently constructed are ineffective. Theoretically, they could be modified to set prices at whatever level was desired, although any deviation in prices from market clearing levels will still require additional mechanisms to either manage or restrict surpluses and/or ration short supplies. Such provisions would be a radical departure from the current system.

If we look beyond the question of price support or supply management, the performance of marketing orders in addressing disorderly marketing problems has been, arguably, quite good. The simple fact that this regulation, which is voluntary, has grown to the point of covering virtually all the eligible milk supply is an indication of producer support. For that matter, dairy product processors, who bear the brunt of the regulatory burden, have generally voiced support for the program; this is significant in that it attests to the balance USDA has tried to maintain between producer and processor interests.

Most critics who would abolish the system take that position from a purely ideological perspective, and it could be argued that some base their criticisms on a poor understanding of dairy markets and what MMOs actually do. Within the industry, those who are critical tend to support the basic system but have complaints about specific provisions. Although the provisions with which they take issue may come in many forms, the basic argument almost always boils down to three simple complaints:

1. Class prices are too high or too low,
2. Blend prices are too high or too low,
3. Access to pooled prices is too hard or too easy.

Occasionally an issue will arise that deals with a more purely technical matter or something that relates to a marketing inefficiency question and does not apply so much to these three basic issues, but that is more the exception.

MMO Issues and Concerns in the 1990s

Recently, MMOs have been the subject of much debate. I have argued elsewhere that many of the complaints stem from the difficulties created by burgeoning surpluses in the early 1980s and an increasingly stingy DPSP since the late 1980s (Novakovic and Pratt, 1991). Such complaints may not indicate a flaw in MMOs so much as in other elements of dairy policy.

A list of recent concerns includes:

1. Replacing the M-W price as the basic formula price in FMMOs,

[7]Surpluses imply that more milk will be used in class III and IIIa, and this in turn will result in a lower (weighted average) blend price for any given M-W. This, however, is woefully inadequate in reflecting the marginal market value of milk to farmers.

2. Changing class I differentials,
3. Changing how class II prices are calculated,
4. Splitting nonfat dry milk out of class III and creating a new price class—IIIa,
5. Increasing California manufactured product class prices (4a and 4b),
6. State regulated class I premiums or prices in excess of FMMO minimum class I prices,
7. Interregional pooling and/or merging orders into a single or a few regions,
8. Adjusting class and blend prices to reflect differences in milk composition in addition to the traditional adjustment for milkfat content.

This list reflects most but not all items that have recently been the subject of administrative and/or legislative hearings, and in some cases actions to change orders have already been taken.

Item 1 exists mostly to recognize that USDA and the industry have lost faith in the M-W as a reasonable reflection of a competitive market value of milk used in manufactured products. In this sense, it is a technical correction, but different options could have marked impacts on average price levels. In many cases, support for a particular option hinges on the expected class and blend price impact.

Item 2, class I differentials, has easily been the most divisive issue, particularly within the producer community. To date, USDA has resisted Upper Midwestern pleas for increasing their prices and/or decreasing prices elsewhere. It is a debate that is not over.

Item 3, changes to the class II price formula, was the subject of a recent hearing. Like item 1, this is mostly a technical correction to a formula that produces erratic and sometimes unreasonable prices, but it has resulted in proposals that have clear price enhancing objectives.

Item 4, the addition of a new class just for milk used to produce nonfat dry milk, refers to USDA's most recent broad change in FMMOs. This change was made to address the fact that cooperatives who help balance supply and demand by being willing to turn otherwise homeless milk into nonfat dry milk were doing so at a loss. The new class IIIa price is intended to peg the milk price at no more than what manufacturers can afford to pay and usually means that blend prices will be somewhat lower as a result.

Item 5 seeks to change the way California sets manufacturing use class prices under its state order. USDA is presently soliciting comments on a rule to force the changes. Specifically, this rule, required by Congress under the Food, Agriculture, Conservation, and Trade Act of 1990, will result in increasing California class prices to equal federal order class III or IIIa prices, which will in turn increase the California producer price. Critics of the California system wanted to create more price equity across manufacturers of the same products, but they did not particularly want to raise California farm prices.

Item 6, premiums to increase class I prices above federal order minimums have been tried by some states as a way to enhance farm prices. In most cases, this has met with very limited success simply because states are limited in effectively enforcing such programs.

Item 7, interregional pooling or order merger, was part of the national debate at the 1990 hearing which also reviewed class I differentials. USDA chose not to change the current system, although there is some indication that order mergers on a less encompassing, but regional, basis may be likely in the future. The objective of these earlier

proposals was primarily to provide access for farmers in low price markets to higher priced markets. It also suggests that some people are now thinking that equity means equality.

Item 8, multiple component pricing, is slowly but surely being introduced into federal orders, as local producers have petitioned USDA to make these changes. This is more in the domain of a technical correction, which is certainly inspired in part by the marked reduction in the demand for milkfat. Nevertheless, discussions of this system are often framed in the context of pricing fairness or equity across producers and across manufacturers, not in the context of pricing or allocative efficiency.

Each of these subjects is rich in nuance, and much more could be said about any one of them. Let us simply say that federal orders are a dynamic policy tool, and the ability to change them is one of their strengths. Critics would argue that change comes too slowly, but then there are those who see that as a virtue. A key to the integrity of the federal order system has been that the most formal rule-making procedures are required when reviewing and amending orders. This requires the formal collection of evidence and a careful review based on a hearing record. Although tedious, this process makes it much more difficult to make changes based on shoddy thinking or for political reasons.

I would also note that many of the recent calls for change can be viewed as a logical extension of changes that have occurred at other times in the history of MMOs. The intense debate about class I differentials and regional or national pooling is an excellent example. The classic model of milk markets, producers in the outer ring whose milk was never needed for fluid markets were originally excluded from orders. They did not share in the higher revenue from class I markets. Over time, changes in transportation technology and incentives to garner class I revenue pulled more producers from distant locations to large metropolitan markets for fluid milk, and federal orders responded by enlarging order areas and often making it easier for producers to obtain a blend price. Even so, milksheds for a given order still had dimensions comparable to the size of states. Wisconsin producers developed access to Chicago markets but not New York or Miami markets. Today, many Upper Midwestern producers want either access to those markets or to have prices equalized across separated market areas. The fundamental objective of market access by producers who feel disenfranchised is a common theme in the history of federal orders. Its current incarnation simply applies it to a larger geographic scale. It should also be noted that this criticism has little to do with disorderly marketing and much to do with price equity.

A complementary issue is that as certain areas of the country have had increasing milk production, classified pricing has facilitated the development of manufacturing plants to help handle the growing production. Some people in traditional milk manufacturing areas look at this with concern and believe it is unfair. People in the growing markets can retort that they simply are charged the same minimum prices for milk as everyone else in whose milk is priced under a federal order. California's milk pricing system has provided lower prices for milk used in manufacturing; so then the argument gets reversed. The lower class price unfairly benefits manufacturers, but it obviously can't be accused of unduly benefiting dairy farmers. Reconciliation of these issues, or even a complete discussion, is beyond the scope of this paper, but this example indicates the kinds of stresses that are present.

Lessons of Other Agricultural Subsectors

No doubt numerous lessons can be taken from the dairy industry's experience with milk marketing orders. I am inclined to think that the overall experience has been positive. Some of the specific broad lessons might include the following:

1. Marketing orders should not be expected to solve all the problems industry members perceive; in fact, this is no doubt impossible. For the dairy industry the enduring vexation has been in finding milk prices that satisfy everyone. What must be made clear from the outset is that marketing orders can help alleviate competitive abuses; this may have some beneficial effect on prices for producers, but there is no price panacea.
2. As marketing orders gain success, more people will want to join them. As this occurs, questions of access and cross-market equity become more and more difficult.
3. For marketing orders to work, producers must be willing to sacrifice some individual initiative and opportunity to gain benefits for the larger group
4. Due to their complexity, marketing orders have a fairly high maintenance requirement. It is vital that industry members have people on whom they can rely who understand the system. In milk markets, this is frequently done through cooperatives.
5. If a market is going to operate with an umpire, a credible institution must be responsible for devising fair rules, and the umpire needs enforcement authority. For the most part, dairy farmers and processors would agree that USDA has played an effective role as the umpire, but others have suggested that USDA could be more oriented towards consumer interests. Marketing orders that were more under the control of producers would likely be a step in the opposite direction.

I am inclined to think that marketing orders have served the dairy industry and society rather well. Whether this is an appropriate policy tool for other agricultural sectors may well merit serious consideration.

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Barry Flinchbaugh, Kansas State: Several milk coops are working on self-help to replace dairy policy. How will the self-help approach fit in?

Novakovic: Self-help is oriented toward price enhancement, so it could work symbiotically with the various federal dairy supply management policies. There are at least three levels of involvement that can go under "self help." One is basic cooperative action that requires no additional legislative authority. A second is essentially a marketing board approach, suggesting a sort of single cooperative monopoly with compulsory participation. A third relates to mechanisms for marketing quotas to enhance price that could be accomplished with a marketing board or with more government control and oversight, perhaps in conjunction with existing institutions like marketing orders. The so-called self-help proposal presently being advanced by the National Milk Producers Federation pushes in the direction of a marketing board but

would retain marketing orders and price supports to a limited level of net removals. The board would kick in beyond this limit.
Kaiser: Congress has an interest in self-help, such as commodity promotion, with the hope of decreasing the role played by USDA. Perhaps, some day, the hope is that the department's only function will be to monitor the industry to check for violations of standards.

Armbruster: How good a tool are marketing orders for supporting dairy farmers under GATT? And what do NAFTA and GATT portend for the usefulness of marketing order for fruits and vegetables?
Novakovic: I could expand the question to ask, "How good are milk marketing orders at supporting dairy farmers (prices) in any event, given the way they're being operated." They are not terribly effective with or without GATT. However, GATT and NAFTA will probably induce some changes. Marketing orders always have to contend with opportunities for outsiders to gain an advantage by operating in the market not under the control of the market administrator. There is an arbitrage opportunity, for example, for bottlers in Mexico just outside an order area to pay farmers a higher price, yet be charged less than they would be within the order.
Comment: More product moving to Mexico will pose a problem for marketing order administration to verify the utilization of that milk.
Hatamiya: NAFTA will have an immediate impact on AMS because of extending grading functions to apply to imports. (Section 8e requires imports to meet the same minimum grade and size standards as those applied to the domestic market.)
Brader: There is the issue that quality control can be used to discriminate against agricultural imports. But export countries are finding that they also benefit from stimulating consumer purchases by careful control of quality.
Fairchild: There is a concern about phyto-sanitary restrictions and disease issues. I think that marketing orders can continue to be a good vehicle to assure that all products come to market on an equal footing and are of an equal quality.
Brader: One change in the regulations allows imports to enter below minimum standards—*if* they are directed to processing. This is in the spirit of opening up our markets, but it won't amount to much.
Holford: The fresh citrus industry is not as concerned about NAFTA as processors are. I'm looking forward to our industry selling fresh oranges in Mexico City.

Torgerson: A lot of people think that NAFTA and GATT will lead to the demise of marketing orders. I don't see that at all. Basically there are two systems that have evolved in the free world. The first is the extensive use of voluntary membership organizations, such as farm organizations and cooperatives that have, in turn, established marketing mechanisms such as state and federal marketing orders to augment their programs. The second are statutory marketing boards that have been common in the United Kingdom and the former commonwealth countries. Some refer to the marketing boards as a form of "compulsory cooperation." In time, I see forces leading to a merging of the two systems so they will become more similar than dissimilar. The statutory marketing boards will incorporate more voluntary features and recognize the role of cooperatives and farm organizations. Some cooperative systems will attempt to establish farmer marketing boards to handle discrete functions under governmental sanctions, such as surplus disposal. Eventually, some transnational memberships may become a part of both types of institutional arrangements.