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HOW SHOULD MILK BE PRICED IN THE FUTURE?

*Bob Cropp*¹

Summary

Milk pricing will continue to change. Clearly, the dairy industry will continue the trend toward MCP. The federal dairy price support program will terminate at the end of 1999. Changes will occur in federal order pricing. The FAIR ACT of 1996 requires some changes. Pricing provisions must be market oriented. The U.S. dairy industry must be competitive internationally. Federal order provisions must provide less rather than more regulation. Federal order prices must be minimum prices allowing for industry pricing above those prices. Markets are national. Hence, California should be a part of the same pricing system. Compacts such as the Northeast Interstate Compact should not be allowed.

(Key Words: Milk Marketing, Milk Price.)

Introduction

This paper discusses how milk may be priced in the future. In this discussion, the requirements for changing the federal government's role in milk pricing, as specified under the Federal Agricultural Improvement and Reform Act of 1996 (FAIR), are presented. I also present my own opinions as to how milk should be priced in the future.

Multiple Component Pricing

Let's start with the less difficult topic, multiple component pricing (MCP). MCP is pricing milk on the basis of two or more of its components. Butterfat is retained as one of

these components with the addition of protein or solids-not-fat. MCP may be distinguished from fat-skim pricing, that is, pricing milk on the basis of its butterfat content with the remaining value assigned to the skim portion. Fat-skim pricing has been used to price milk under federal milk marketing orders. Thus, all of the discussion on MCP is directed at amending federal milk marketing orders to recognize MCP. Federal milk marketing orders require that regulated Grade A milk plants pay producers at least established minimum prices according to how milk is used. These milk plants may pay producers prices above these minimums, but not below. (Cooperatives may pay their producers less than the minimum, but competition among other milk plants in reality prevents this. Cooperatives must pay competitive prices.) Hence, milk plants have no problem paying premiums for above average milk composition, but may violate the established minimum price if discounts for below average milk composition, other than butterfat, are applied.

Why the interest in MCP? Major shifts in consumer demand for beverage milk and manufactured dairy products over the years have reduced the value of butterfat relative to the value of solids-not-fat in milk. Consumers continue to switch from whole milk to low fat or skim milk. Although the consumption of all cheese has shown strong growth in the last two decades, the largest growth has come in "other" varieties, primarily Italian, which have considerable lower butterfat content than traditional American varieties.

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With this shift to lower butterfat beverage milk and manufactured dairy products being consumed, the dairy industry experienced a growing problem with surplus butterfat during the mid-1980s and until the last 3 years. This surplus butterfat was manufactured into butter and sold to the government under the federal dairy price support program. Under this program, the price of milk is supported at a set level through Commodity Credit Corporation (CCC) purchases of butter, nonfat dry milk, and cheddar cheese at specified prices. These specified prices are to enable a manufacturer selling at these prices to pay its producers at least the support price. In the case of butter and nonfat dry milk these are joint products. Hence, the Secretary of Agriculture has the discretion to set the CCC purchase prices of butter and nonfat dry milk at a level that will generate sufficient plant income to pay the support price. Because butter was the only real product in surplus and being purchased by the CCC and because of the concern over government program costs, the Secretary reduced the support price on butter from \$1.0925 per pound in 1990 to \$.65 per pound in July, 1993. Correspondingly, the CCC purchase price for nonfat dry milk was increased from \$.79 per pound to \$1.034 per pound. Because butter was in surplus, its value followed the support price down. And because the butterfat differential received by producers is based upon the price for butter, the butterfat differential declined from about 13 cents in 1990 to less than 6 cents in 1994. The result of all of this was a shift in the relative value of butterfat and skim in 100 pounds of milk. For example, in 1990, butterfat constituted 49 % and skim 51% of the value of milk. In 1994, butterfat accounted for only 20% of the value and skim 80%.

With butterfat constituting a relatively low value in milk, both producers and processors showed increased interest in testing for and paying on the basis of butterfat and either protein or solids-not-fat. The color breeds pushed the hardest to amend federal milk marketing orders to recognize MCP. However, MCP is not a breed issue, because producers are paid on the basis of pounds of components and not on percent of components. The first federal order to adopt MCP was the Great Basin order in Utah. This was followed by the

Middle Atlantic order in 1992; the Indiana, Ohio Valley, and Eastern Ohio-Western Pennsylvania orders in 1993; the Pacific Northwest and the Southwestern Idaho-Eastern Oregon orders in 1994; and the Chicago regional, Upper Midwest, Iowa, Nebraska-Western Iowa, Eastern South Dakota, and Michigan orders in 1995. Other orders have proposals or are considering adopting MCP.

The May 1995, Market Administrator's Report (Market Administrator's Office, Tulsa Oklahoma, *Multiple Component Pricing Programs Applicable to Federal Milk Order Producers*, May 1995 Update, May 1996) shows that MCP procedures were applicable to more than 79% of the dairy farmers marketing milk under federal orders during May 1995. Thirty of the 38 federal orders in operation during May 1995 reported the use of either federal order or industry-sponsored MCP programs. More than 42% of the producers marketing milk under federal orders during May 1995 received an MCP adjustment to their milk pay price.

Not all federal order MCP programs are the same. In regions where a major use of milk for manufacturing is cheese, protein is the component tested for and paid to producers. In other regions where the production of nonfat dry milk is an important use, solids-not-fat is the component. Some orders use a two component system--butterfat and protein or solids-not-fat, and others use a three component system--butterfat, protein, and other solids (lactose and ash). In all, the value of butterfat per pound is unchanged from the fat-skim payment method, which is based on the value of Grade AA butter. But rather than paying a butterfat differential, producers are paid a price per pound of butterfat sold. The value of protein is determined differently among orders. All use the Basic Formula Price (BFP) and decompose it into component values. So in some federal orders, the value of butterfat in the BFP is subtracted, and all of the residual is assigned to the protein or solids-not-fat content. In other orders, the protein value is derived from the price of cheese, and both the butterfat value and the protein value are subtracted from the BFP, with the residual value going to other solids.

In none of the federal order MCP programs is MCP applied to the Class I use (beverage milk use). This is because the additional milk components do not yield more pounds of packaged beverage milk to sell. But the additional milk components do increase the yields of manufactured milk products that may be sold. Hence, producers under federal orders receive a value for the pounds of butterfat, protein, or solids-not-fat sold, plus the additional value received from a portion of their milk being utilized for Class I (beverage use) and Class II (soft manufactured use) and Class III-A (nonfat dry milk use, which is normally a lower value than the Class III price).

Milk quality adjustments are incorporated in some, but not all, of the federal order MCP programs. Under some programs, the level of somatic cell count is used to adjust the protein price per pound. In others, the somatic cell count is used independently and applied as a premium or deduction per hundredweight of milk.

Clearly, the dairy industry is moving away from fat-skim pricing to MCP. The 1996 FAIR ACT calls for the Secretary of Agriculture to consider an MCP program for manufacturing milk use under all federal milk marketing orders. It is not certain what the Secretary will recommend. But MCP is simply a more equitable milk pricing system for both dairy producers and milk plants. It prices milk on the basis of milk components and the market value of associated milk products produced from 100 pounds of milk.

Federal Pricing Programs

Historically, two federal programs affected farm-level milk prices, the federal dairy price support program and federal milk marketing orders. It should be recognized that some states have state milk pricing programs, the most significant being California's state order. The federal dairy price support program will soon be history. This program, which had its beginning with the 1949 Agricultural Act, terminates at the end of 1999. Since 1989, the price of cheese has been above support, except for a couple of months, and most recently butter and nonfat dry milk have been above support more

of the time. Hence, farm-level milk prices have been above support every month since 1989. Therefore, the consequences of terminating the support program will be minor. Perhaps a little more price volatility may occur at times, but market forces and not the federal support program have been determining prices. Market forces will continue to provide an environment of price uncertainty and volatile prices. Dairy producers and milk plants must learn how to manage this price risk through the use of the new dairy futures and options.

The FAIR ACT of 1996 has provisions to expand exports of U.S. dairy products. The Act extends and fully funds the Dairy Export Incentive Program through 2002. It authorizes USDA to assist in forming export trading companies. And it authorizes the National Dairy Board to use funds for export market development. Without the federal dairy price support program, the prices of milk and dairy products will need to be at market clearing levels. With greater market access from GATT and NAFTA provisions, the U.S. dairy industry must be competitive on the world market. Without expanded dairy exports, the growth of the U.S. dairy industry would be limited.

Ever since the 1985 Agriculture ACT when Class I differentials were increased in most federal orders, with increases greater for federal orders East of the Rockies and more distant from the Upper Midwest, federal orders have been under attack, mainly from those in the Upper Midwest. The Upper Midwest claimed that these increases in Class I differentials were factors in expanding unnecessary milk production in the South and Southwest. In response to these concerns, the Secretary of Agriculture in 1990 held a national hearing. The final decision from this hearing brought with it no changes in Class I differentials and only minor other changes. As a result, the Minnesota Milk Producers sued the Secretary of Agriculture, claiming that he was not fulfilling his responsibility under the 1937 Act to change federal orders so as to meet the intent of the ACT. That lawsuit, initiated in the U.S. District Court for the District of Minnesota, was appealed to the federal appellate court, which sent it back to the U.S. District Court of

Minnesota, where the final decision is yet to be determined.

Federal orders became a very controversial issue in the 1995 farm bill debates. Regionalism was very evident, with the Upper Midwest proposing major changes in federal order pricing and other regions arguing to maintain a more or less status quo. The FAIR ACT of 1996 requires the Secretary of Agriculture to make some changes in federal orders and to consider other changes. These changes are to be implemented no later than April 1999.

Under FAIR, the Secretary of Agriculture is required to consolidate the existing 31 federal orders to no more than 14 and no less than 10 orders. California could be one of the 14 orders, if the initiative comes from California. It authorizes the Secretary to consider uniform MCP in designing a replacement for a new BFP. It also authorizes the Secretary to consider multiple basing points and fluid milk utilization rates in setting Class I prices in the consolidated orders. The ACT also authorized the Northeast Interstate Dairy Compact for a limited time (whenever the Secretary makes changes in federal orders, but no longer than April 1999), but the Secretary was required to determine if the compact was in the best public interest in the compact area. The Secretary has determined that it is in the best public interest. However, a lawsuit has been filed by the Milk Industry Foundation and joined by other interests to put an injunction against implementation of the compact. Hence, implementation is not certain.

Clearly, 31 federal orders are more than needed when one considers the distance both bulk milk and package milk moves. It is hard to determine market boundaries for beverage milk. We have been moving towards fewer orders with order mergers anyway. Back in the 1960s, there were as many as 83 orders. But as modern packaging and transportation technology improved, market areas expanded. However, drawing lines for 10 to 14 orders is no simple task. Class I utilizations differ widely among some orders, and, therefore, how they are combined has major implications for some producer prices. Tough decisions on order lines will need to be made. California should be part

of this federal order pricing system. California is the leading milk producing state, the number one butter and milk powder producer, and second largest cheese producer. What California does impacts on the entire dairy industry.

Everyone is pretty much in agreement that a replacement is needed for the BFP. The supply of Grade B milk is simply declining and no longer can be used as the basis for determining the level of federal order class III prices (Grade A milk used for cheese) and as the mover for other classes. The choices are another competitive pay price that includes Grade A prices, some type of product price formula, the use of dairy futures, or MCP. I believe that the industry is moving towards MCP, and, therefore, an MCP alternative should replace the BFP. Regardless of which alternative is chosen, the replacement must set a minimum price and not be price enhancing. The market level for manufacturing use must be market clearing.

Determining Class I prices in the new orders is a much more challenging endeavor. Regionalism remains strong. But clearly, the single-point basing (Eau Claire, WI) can no longer be retained. The Upper Midwest is no longer the only major reserve supply of Grade A milk. Grade A milk no longer moves North to South in the same fashion as it did 30 or even 10 years ago. Class I differentials need not be the same among all orders, but more uniform than they currently are. Class I differentials need to recognize differences in milk supply-demand situations among regions. The Southeast requires higher differentials than other regions, because it is a high milk production cost region and a fluid milk deficit region.

We need to reexamine the overall purpose of federal milk orders, that is, to assure consumers of an adequate supply of Grade A milk for beverage purposes. To achieve this purpose, an adequate supply of Grade A milk produced nationally is needed, not self sufficiency in every region. Second, an incentive(s) must exist to allocate this Grade A supply of milk to Class I beverage use. We have been doing a pretty good job of producing an adequate supply nationally. But we have not always adequately or efficiently allocated this supply

to Class I use. Class I differentials minus location adjustments all pooled to producers will not get the job done. Part of the differential should be allocated to transportation credits. These transportation credits will be paid to those milk plants and producers who directly ship milk for Class I use. Those who serve the Class I market must be better off than those who serve manufacturing uses. Care must be exercised in the use of transportation credits so as to only compensate the most efficient movement of Grade A milk to the Class I market.

Even with transportation credits, call provisions still may be required to allocate adequate supplies of Grade A milk for Class I needs. Market-wide service payments for balancing by manufacturing plants should also be considered. Transportation credits, market-wide service payments, and call provisions will better assure an adequate supply of Grade A milk for Class I needs than simply relying on Class I differentials that are entirely pooled to producers. The Southeast will always be short

of Grade A milk for Class I needs and will need to seek supplies from reserve areas. Transportation credits and call provisions will lessen the burden that Southeast dairy cooperatives and their member-producers now experience in attempting to obtain adequate supplies of Grade A milk for Class I needs.

All federal order prices should be minimum prices. Federal orders should not regulate all pricing. Allowances are needed for industry or market forces in pricing. Cooperatives should be in a position to negotiate for prices above these minimum prices to compensate for functions and services performed. Currently, a lot occurs beyond federal order pricing. This is evident with the mailbox prices received by producers across the country. Although Class I prices increase with distance from the Upper Midwest for orders east of the Rockies, mailbox prices don't always follow the same pattern. Some of the highest mailbox prices exist in the Upper Midwest (see front cover).