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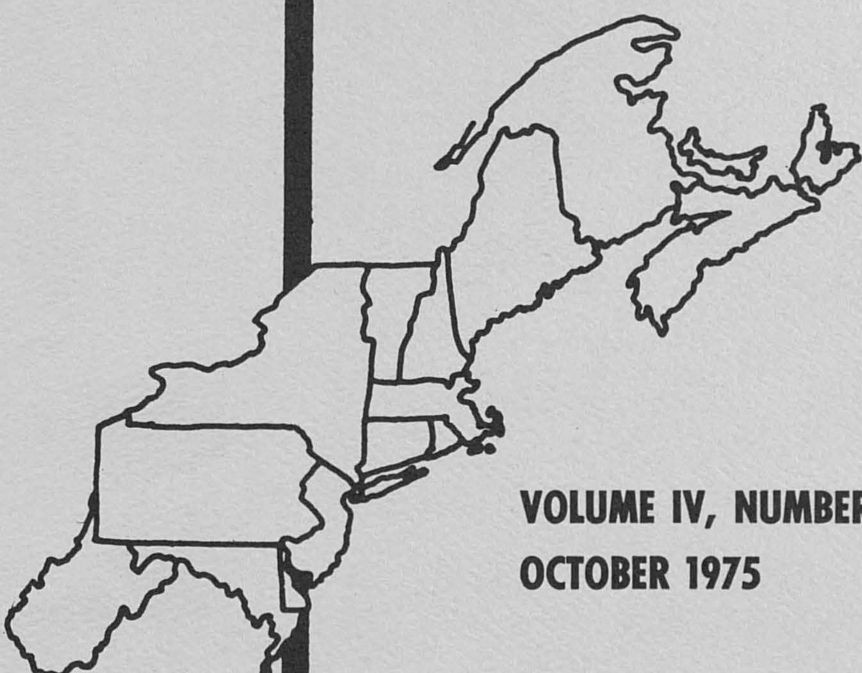

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RATIONALIZING MILK MARKET ORDERS IN NEW ENGLAND[1/]

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Milk has both suffered and enjoyed from more price and quality regulation than almost any other farm product in the United States.

Despite these regulations, or perhaps because of them, competition among producers still closely approximates a competitive model. In New England, milk price fluctuations are dampened but production is primarily a matter of economic survival. No government regulation limits entry, exit, or volume of production as long as minimum quality standards are maintained.

Federal and state regulation of milk prices have been a part of the milk industry in New England for about 40 years. Greater economies of scale and improved transportation network have increased the use of federal orders and reduced the viability of state orders.

Currently two large federal milk market orders exist in New England. One order covers the state of Connecticut; the other covers most of Massachusetts, all of Rhode Island, and the southern parts of New Hampshire and Vermont. Three states--Maine, Vermont, and Massachusetts--have state milk control agencies.

The merger of the present federal orders and extension of the merged orders to include all of New England have become goals of several milk marketing cooperatives. Merger is sought to reduce the problems of dealer involvement in both markets and to achieve a more equitable sharing of the Class I sales among all producers. Extension of the order is sought primarily to achieve a more equitable sharing of all Class I sales and to obtain for producers the fullest use value of all milk sold for fluid purposes. It is also sought to eliminate what some picture as nearby differentials received by Maine, Vermont, and some Massachusetts producers. Farm location differentials under federal orders were discontinued several years ago after federal court action.

Producers and milk processors not now under the federal orders are tending to resist expansion of the federal orders. Their resistance is

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1/ Vt. Agr. Exp. Stat. Journal Article No. 341. This paper is based on research at the Agricultural Experiment Stations, Universities of Maine and Vermont (Project NE-86).

generally based on one or more of the following: (1) barring disorderly marketing, no new regulations are needed, (2) preference for local control, or (3) "better" prices under their present system than would be offered by extension of the federal orders.

The Agricultural Experiment Stations in Maine and Vermont have undertaken (1) to gather data on current marketing situations and (2) to determine the economic impact of expanding the federal milk marketing orders into northern New England. Emphasis was placed upon the potential impact on producers but implications for milk dealers and consumers also were considered. The main focus was on Maine and Vermont situations but some data were also collected on the nonfederal order markets of New Hampshire and Massachusetts.

Marketing Situation

In 1973, nearly 60 percent of the milk marketed by Maine producers was sold in local markets while about 40 percent was sold under the Boston regional order. Most milk marketed in local Maine markets was regulated by the Maine Milk Commission.

Table 1
Estimated New England Milk Marketings, 1973

State	Federal orders	State control	No control
	Million pounds		
Connecticut	585	--	--
Maine	254	346	35
Massachusetts	533	37	--
New Hampshire	291	--	30
Vermont	1,759	132	--
Rhode Island	63	--	--
Total	3,485	515	65

In Vermont about 7 percent of the milk marketed was sold in local markets not under any federal milk marketing order. All of this milk was controlled by the Vermont Milk Marketing Board. The other 93 percent of Vermont's milk was sold under the Boston Regional, Connecticut, or New York-New Jersey federal orders.

In New Hampshire and in Massachusetts, nearly 10 percent of the milk produced was sold in local markets not subject to control by federal agencies. Slightly more than 90 percent was regulated under Boston or Connecticut federal orders. In New Hampshire, the nonfederal milk was subject to no price control. In Massachusetts, milk sold in Berkshire County and a few isolated towns in the center of the state was priced by the state. Of an estimated total of 600 million pounds of milk marketed in New England which was not under federal regulation, about 65 percent was produced in Maine, about 5 percent in New Hampshire, about 25 percent in Vermont, and about 5 percent in Massachusetts.

Utilization

The Boston Regional Federal Order had annual milk receipts from producers of about 3.5 billion pounds in recent years. Of these receipts about 2.1 billion pounds or 60 percent were used for Class I outlets. The annual receipts in state controlled markets in Maine were 350 million pounds with a Class I utilization of 78 percent. The annual receipts in state controlled markets in Vermont were about 130 million pounds with over 90 percent Class I utilization.

The higher Class I utilization in the state order markets was a major factor resulting in substantially higher blend prices being paid producers in these markets than in the Boston federal order market.

Classified Pricing

Producers serving most local markets in Maine are paid on a dealer pool basis. Federal orders use a market-wide pool. Class I and Class II prices for milk under state control in Maine were the same as the nearby plant prices established by the Boston Regional Federal Order. An exception was that for Class II milk disposed of in designated manufacturing plants, a 26-cent reduction in the producer price was authorized. The higher Class II price to nonspecified Class II markets appears to assume that some of this milk may go into higher value uses but at locations or in situations which the Maine Control Commission is unable to adequately audit.

Vermont producers associated with the state order were not paid on a classified basis. They received 40 cents per hundredweight over the 21st zone blend price of the Boston order for all milk, regardless of the location of the plant within the state or the final use of the milk. This pricing scheme recognizes the high Class I use of milk in local plants but minimizes the need for detailed audits.

The Massachusetts producers not under a federal order were paid on a dealer pool basis similar to that used in Maine. Northern New Hampshire producers serving their local market sold to processors on a negotiated basis.

Milk Movements

State orders in New England have been disturbed by two situations where milk was moved across state lines and the full use value of that milk was not being returned to producers. While the magnitude of the movement was not determined by our study and not enough milk moved to arouse strong producer reaction, there was evidence of some price inequalities which state orders were unable to control. Milk was apparently being purchased from Maine producers at or above competitive blend prices for the appropriate Boston country zone, and moved to an out-of-state fluid milk packaging plant. This milk could be sold for fluid use in state controlled markets outside of Maine or brought back into Maine without its price being regulated simply because it moved across state lines.

Such milk movements prevent producers from receiving the full use value of the milk and give the dealer a competitive advantage in raw product cost. The principal reasons for continuance of these situations to date are: (1) Maine produces some milk in excess of in-state fluid requirements. (2) Despite the leakage under state orders they appear to yield prices to local producers above those offered by alternative markets. (3) Correction would involve acceptance of federal order regulation. Loss of the local market has been considered too high a price to pay by producers supplying these local markets.

Alternative Situations Influencing Impact of Federal Order Extension

The impact on producers of an extension of the federal order into northern New England will depend upon such factors as:

1. The federal order situation at the time of extension—whether a merged Boston and Connecticut order or from the Boston Regional Order.

2. The area covered by the extension. The amount of milk production and Class I sales added to the pool will influence the pool blend price.

3. The attraction of milk from areas outside of New England which might occur as a result of raising the blend price under an extended federal order.

4. The zone prices (Class I, Class II, and blend) which would apply to the local market plants included in the expanded order. These might vary from city plant prices to widely different country plant zone prices. A further alternative might be adoption of farm zoning in place of plant zoning.

5. The hauling charges for transporting milk from the farm to the plant. High producer prices tend to be associated with high hauling charges.

Areas Added in Extension

Portions of the states or all of the states of Maine, Massachusetts, New Hampshire, and Vermont could be included in an expanded federal order, depending upon marketing conditions, administrative problems, and the volume of milk supplies. Testimony at public hearings must justify any extension and two-thirds of the producers in the total marketing area must approve the expansion. Justification and approval would probably require proof of unstable marketing conditions and interstate commerce in milk. Another important consideration justifying extension might be the degree to which dealers currently regulated under a federal order are doing business in the areas considered for inclusion, i.e., equality of raw milk costs among dealers competing in common markets. Finally, economic analysis alone is insufficient to change a regulatory situation. Support for and opposition to extension of a federal order is based on the attitude of producers, cooperatives, proprietary handlers and the general public.

Maine Only

Of the New England states, Maine has the largest amount of milk not subject to federal regulation. Including Maine in a federal order thus would have the greatest impact on price of any single state. The entire state could be included or any portion of it. Various considerations to determine how much of Maine might be included are: volume of milk, geographic area in which dealers compete, marketing conditions, and number of dealers to be regulated.

By extending the order into Cumberland and York Counties, it is estimated that 44 percent of Maine's local milk would be regulated or about 150 million pounds. This could be accomplished by auditing eight dealers. However, Portland based dealers are in competition with dealers north to Augusta. This tends to define a common marketing area and could be a major justification for order extension into central Maine.

There are two reasons for going beyond Augusta. One reason is that it would add another 30 percent of the milk supplies and bring the total milk regulated to 93 percent of all local Maine milk. The other reason is the competition between Bangor-based dealers and dealers in southern Maine. Should regulation be extended to include all dealers from Bangor south, the entire state could be seriously considered as the regulated area. There is not much additional milk involved and some Bangor-based dealers are competing throughout northern and eastern Maine.

For purposes of this analysis, the assumption of statewide inclusion of Maine was made. The total amount of milk in the state which would be subject to regulation is estimated to be about 360 million pounds.

All of Northern New England

Some have proposed that all of New England be brought under federal regulation. The major considerations in a decision to extend federal regulation in Massachusetts, New Hampshire, and Vermont are: (1) equity in producer prices and (2) equity in dealer costs for milk. Other considerations are centered on the need to obtain full use value on certain interstate movements of milk now going at cut prices and to enlarge the quantity of milk utilized as Class I but not currently pooled for the benefit of all producers.

There are no large population centers in counties not now under federal regulation in New Hampshire. Thus it becomes a matter of no extension in New Hampshire or complete coverage. In Vermont, the major population center is Burlington, located in northern Vermont. Because of the volume of milk associated with this market, all or none of the Vermont markets not now under regulation would probably be included under any expanded federal order. In Massachusetts, Berkshire County would be considered in an expansion because of its substantial volume of milk remaining under state regulation. Aggressive marketing and purchasing policies of handlers serving the area in 1974 have shown the situation to be somewhat unstable. Also, proposals are currently before the Massachusetts legislature to remove state price controls from milk and to ease farm inspection requirements.

If all the rest of New England were added to the federal order, the added milk was estimated to be nearly 600 million pounds a year. Estimates of Class I milk sales outside federal regulation indicate a volume of about 465 million pounds of Class I milk annually would be added by inclusion of all of New England in a federal market order.

Impact of Extending the Federal Order

Two possible situations were examined. First, an extension to include only the State of Maine. Second, an extension to include all of New England.

Situation #1—Extension Into All of Maine

In this situation, Boston Regional Order price levels and zone price differentials for February 1974 were used in making price comparisons. Milk received at plants regulated by the Maine Milk Commission was assigned to zones and prices in accordance with the Boston Regional Order zone prices. Quantities of milk were combined and a blended value per hundredweight computed.

The resulting pool price was $9.26 per hundredweight (21st zone, 3.5% milk). This compares with the actual Boston Regional pool price of $9.19 per hundredweight. Thus adding the State of Maine to the Boston Regional Federal Order marketing area would increase producer prices to those producers already under the order by 7 cents per hundredweight. This increase would apply at all zone locations. The 7-cent price increase would be the principal impact on producers currently under the federal order.

For producers in Maine marketing under the state order, the impact was determined by (1) compiling prices paid producers by dealers according to the estimated federal order zone location of their plants and (2) comparing these prices with federal order prices under the expanded situation. Compilations were based upon individual producer blend prices for 515 producers shipping to 22 dealers. Thus the zone location prices were weighted by the number of producers receiving each dealer's price.

Results of this analysis indicate that producers in zone group 9-11 received an average blend price of $9.70, f.o.b. plant, under the state order. This compares with $9.55 which it was estimated they would have received under the expanded federal order. Producers in zone group 21-23 received an average price of $9.79 and would have received $9.25 under an expanded Boston Order. Some producers in more distant zones would have suffered downward price adjustments in excess of $1.50 per hundred pounds of milk.

The average price received by all producers under the Maine State Order was $9.95 as compared to an estimated average price of $9.42 which these same producers would have received under an expanded Boston Federal Order. Thus Maine producers supplying local markets would have suffered a 53 cents per hundred decline in milk prices if they had been included in the Boston Order in February 1974 without any other price adjustments.

The average price paid for milk by Maine milk handlers under a federal order would depend on the exact wording of any market order extension. If the Boston Regional Order were merely extended, Class I prices would decline by 10 to 40 cents per hundredweight. If some possible zone changes were made to recognize the density of population in southern Maine, Class I prices could remain approximately the same. In any event, no increase in Class I prices seems likely.

Dealer problems of balancing fluid market needs with Class I sales would change. Maine dealers would no longer be able to sell milk as Class II and move it out-of-state to Class I outlets or sell Class II below the Boston Class II price by selling it to in-state dairy manufacturers.

As for consumers, extending the federal order to Maine would have little if any effect unless the Maine Milk Control Commission discontinued resale pricing. The federal order would <u>not</u> lower Class I prices significantly and does <u>not</u> control retail milk prices.

<u>Situation #2--Extension to Include All of New England</u>

In February 1974, if the pool were an extension of the Boston Regional Order alone, a total of 287 million pounds of milk would have comprised the February pool and 66.2 percent would have been utilized as Class I. A total of 389 million pounds of milk would have been involved in New England-wide pool representing the extension of the two merged federal orders. Of this total, 267 million pounds, or 68.5 percent, would have been utilized as Class I.

Blend prices were estimated for an extension of the Boston Regional Order ($9.32 per hundred pounds) and extension of the two merged orders ($9.40 per hundredweight). This compared with $9.19 as the actual 21st zone blend price for the Boston Regional Order and $9.55 for the Connecticut Order. Thus adding all of New England to the Boston Regional Order would have increased prices to all producers in the Boston Order by 13 to 21 cents depending upon whether or not the Connecticut Order was included.

Table 2
Prices to New England Producers, February 1974

Item	Price	Difference over Boston
Boston, 21st zone	$9.19	--
Vermont State Control	9.59	$0.40
Range by zones (13-23)		0.14 to 0.42
Maine State Control		
Weighted average (all zones)	9.95	0.53
Range by zones (7-37)		0.08 to 1.93
Expected Effect of market extension (21st zone)		
Boston + northern New England	9.32	0.13
Boston + Connecticut	9.33	0.14
Boston + Connecticut + northern New England	9.40	0.21
Possible hauling reductions		
Maine		0.15
Vermont		0.05

For Maine and Vermont producers marketing under state orders, the impact of the expanded federal orders would vary by state, by zone location of their plant, and by dealer utilization. While a merger of all New England milk sales would have lowered the average price to producers now supplying local Maine markets by 39 cents (assuming no hauling rate or zone adjustments) the range is wide—from a gain of 8 cents to a loss of $1.77 per hundred pounds. Similar assumptions show that Vermont producers would have lost an average of 19 cents. However, some would have gained up to 5 cents while others would have lost as much as 23 cents.

For Maine, prices paid by milk handlers and consumers would be the same as in Situation #1. Vermont handlers would pay on a classified plan into the pool. Their costs might rise slightly but so would their flexibility because their balancing costs would be reduced.

Price F.O.B. Farm

As every farmer knows, his net return for milk is less than the plant price. Hauling costs vary with location, volume, negotiating position, and other intangible variables.

The average cost of hauling milk from farm to plant was 53 cents for Maine state order shippers.2/ If they had been paying the same rates (adjusted for size of pick-up and length of haul) that Maine farmers shipping to federal order plants were paying in February 1974, shippers to the Maine local market would have paid only 38 cents per hundred—a saving of 15 cents per hundred pounds of milk shipped.

A similar analysis for Vermont shows a possible reduction in hauling charges—5 cents per hundred pounds of milk from farm to milk plant.

2/ Regression Equations:

State Order Producers

$$Y = \$.417 + \$.0007\ (X_1) - \$.00001\ (X_2)$$

Federal Order Producers

$$Y = \$.309 + \$.002\ (X_1) - \$.0002\ (X_2)$$

Where: Y = Calculated hauling rate, dollars per hundred pounds

X_1 = Distance, farm to receiving plant

X_2 = Volume delivered per month (hundred pounds)

Summary

The interest of producers serving local markets tends to favor continued state regulation. Benefits to the majority of all New England producers would accrue from merger and expansion of a single New England Federal Order. Such an order would equalize returns among producers and insure full utilization value to producers of all milk marketed.

Whether or not the loss of local control, the lower prices to some producers for local markets, and the changes in market structure offset the advantages of a market-wide order is a matter for producers to decide.

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