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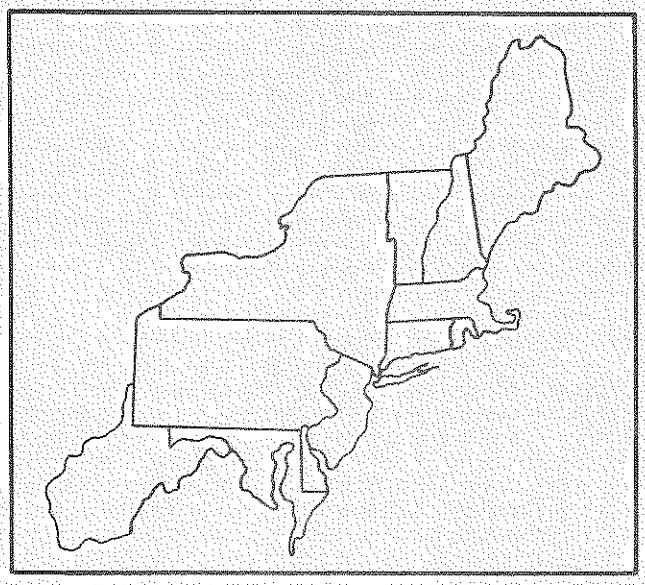

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IMPACT OF REDUCED INCOMES ON THE NORTHEAST DAIRY INDUSTRY

by

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My topic for this session presupposes a result--reduced dairy farm incomes--that may or may not come true or that may or may not be widespread. A more appropriate title may have been "What are the likely impacts on the Northeast dairy industry of possible reduced incomes for Northeast dairy farmers?" In any event I believe most dairy industry watchers do expect milk prices relative to costs to fall in the near future as the market and/or policy makers correct for the current surplus milk situation. This correction might take the form of any one or a combination of the following: (1) implementation of a dairy price support program that is less favorable to farmers than has been the case in the recent past, (2) implementation of a milk "refund" program such as was scheduled to go into effect on April 1, (3) implementation of a production control program for dairy, or (4) higher feed prices.

I and several other researchers in the Northeast have over the past several months been engaged in research designed to investigate in some depth the impacts of potentially reduced incomes on the Northeast dairy economy. I will review some of the relevant results of this effort and offer a few thoughts on what this means for the Northeast.

Impact on Dairy Farmers

We have read in the popular press many stories about the impact reduced "real" milk prices will have on dairy farmers. I do not wish to minimize the fact that this event will have a negative impact on dairy farmers' net income position. Reducing profitability is, of course, one way to try to discourage added milk production.

But how large of an impact can we expect? And will it have such an impact that we are likely to see producers exit from dairy farming? If so, what might these producers be expected to do? Can they be provided with some help so that they can become more efficient at producing milk and thus stay in the milk business? Can they be provided with some help to switch to other types of farming or even to seek non-farm jobs if that is their choice? Will it hurt the smaller dairy farmer relatively more than the larger dairy farmer? How will it impact on dairy farmers' ability to repay outstanding debt? What will it do to farmers' cash flow situation?

Our study of the Northeast dairy industry was designed to find answers to just these kind of questions. It was our intent to go beyond the question of

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"How will a given policy impact aggregate U.S. or Northeast demand and aggregate U.S. or Northeast supply?" to ask "How will a given program impact the individual producer--who will get hurt, and by how much, and what can be done to help the individual producer?"

One of the more interesting aspects of this study was an analysis of about 1850 actual farms in New York, Pennsylvania and Vermont. Each of these farms was examined through 1984 with the aid of a computer program that estimated family income based on various assumptions about prices and costs thru 1984. The actual farm debt position as of 1981 was known, and appropriate assumptions were made about each farm's future debt position and debt retirement. Income available for family living on each of these farms was estimated under two different milk price scenarios. The first of these assumed a set of prices thru 1984 that would be expected to "clear the market" if there were no lags in adjustment, no government interference, and if there had been no surplus milk prior to 1982. These we termed our "market" prices. They started at $13.40 in 1982 and increased by about 30 cents/cwt per year thereafter. The second set of prices we might term "more likely" prices. These were based on our best estimates of what prices will be in 1982 thru 1984 under the policy adopted in the Omnibus Budget Reconciliation Act of 1982. These prices were estimated to be $13.77 in 1982, about 70 cents lower in 1983, and about 30 cents higher in 1984 over 1983.

The first thing we observed was that not all dairy farmers have the same debt load--a not too surprising finding. Of those farmers with debt, there was a slight drop in debt per cow as the herd size increased up until about 100 cow herds. On farms with more than 100 cows, the pattern was quite mixed. We suspect that many of the latter farmers recently expanded their operation and thus show extremely heavy debt loads at the present time.

Interestingly enough a number of the smaller dairy farmers have little or no debt. Similarly on many of these smaller dairy farms, labor costs are significantly lower than on the larger farms. Presumably this is a reflection of the fact that smaller farmers can often avoid the cost of services and fringe benefits of salaried personnel. These two facts point out that the smaller farmer is not necessarily in more financial difficulty than is his larger couterpart under sharply reduced milk prices.

We also found that cash costs per cwt. of milk produced vary tremendously on these farms--from about $5.00 to as high as $15.50. This, I might point out, is consistent with a fact that has been observed ever since farm management specialists have been studying dairy farmers costs. The significant point is that there does, in fact, appear to be room for efficiency improvements on some of our dairy farms.

The average cash cost per hundredweight on groups of farms of different sizes was nearly identical. On the New York farms, cash costs were somewhat more variable on the larger farms. This is probably what most of us would expect. On the Pennsylvania dairy farms, however, there was about twice as much variability in cash costs on the smaller farms than on the larger ones. This would suggest that some of the smaller dairy farmers in Pennsylvania may need to take a critical look at their dairy operation.

The end result of most interest, I suspect, is the impact of lower milk prices on the dairy farmer's income available for family living. The relevant

comparison here is income under our "market" prices versus income under our "more likely" prices.

Under our "more likely" prices, family income was on the average projected to be 20-25 percent higher in 1982, but 65-70 percent lower in 1983 and in 1984 then under our "market" prices. In 1981, 39 percent of our sample farmers had income available for family living of $10,000 or less. Under our "market" prices, 47 percent were expected to have incomes below $10,000 in 1982, 44 percent in 1983, and 43 percent in 1984. Under our "more likely" prices, on the other hand, 41 percent were expected to have had incomes below $10,000 in 1982, 54 percent in 1983, and 54 percent in 1984.

Clearly many of our sample farmers required a source of supplemental income--even in 1981! A few more would appear to have the same needs in 1982 through 1984 under prices that approximated "market equilibrium" prices. Thus even if we had no surplus milk in 1981 and subsequent years, and if support prices are maintained at levels more consistent with market clearing prices, dairy farmers can still be expected to feel the pinch.

Under the policy that was to have been implemented on April 1, roughly ten percent more of our sample dairy farmers appear to be in need of supplemental income for 1983 and 1984 than would have been the case had our "market equilibrium" prices prevailed. Hence a crash program to right the system will create some hardship. We may object to the program worked out by Congress, but I suspect any reasonable alternative would have the same general impacts.

All of this points to the fact that dairy farm incomes are likely to be sharply reduced in 1983 and 1984 under reduced milk prices. Quite clearly milk production will still be a lucrative business for many farmers--for some small ones as well as for some large ones. In some instances this will be so because of relatively low debt loads. In all cases it will be so because these are efficient (i.e., relatively low cost) producers. Others, however, will either be forced to abandon dairy farming altogether or seek additional earning opportunities off the farm.

Alternatives to Milk Production

We did not have information from our sample farms on the amount of income earned from off-farm jobs. What we do know, though, is that many dairy farmers do have off-farm jobs. According to the 1978 Census of Agriculture, for instance, Northeast farmers earned about 62 percent of their net family income from off-farm sources in 1978. A high proportion of these farmers are dairy farmers!

It is becoming increasingly important to all farmers, not just to dairy farmers, to have access to off-farm opportunities, which in turn depends on the amount of non-farm activity in the local economy and on the health of the industries involved. Thus it is just as important to farmers as it is to non-farmers that we maintain a strong general economy and eliminate high unemployment rates.

A disturbing factor here is that the Northeast has over the past two decades experienced a slower rate of growth in manufacturing employment than have other regions of the country. Further, the Middle Atlantic states have a below average percentage of the fast growing industries of the nation.

Another question we addressed in the study was "Can dairy farmers shift to the production of some other agricultural commodity?" The answer to this question depends to a large degree on where the farmer is located. In many parts of the region, the land now supporting dairy is not suited to intensive row crop, or vegetable, or even fruit production. Nor is it suitable for the volume of alternative livestock--e.g., cow-calf or sheep operations--that is necessary to sustain a farm family. Futhermore, enterprises such as cow-calf, sheep, and vealers simply cannot generally be expected to yield an income commensurate with that dairy farmers have become accustomed in recent years. Poultry does not appear to be a feasible alternative either because of the high set up costs, the integrated nature of this industry, and the current demand situation. Swine appears to be a possibility, but here the lack of availability of adequate markets for hogs at the present time is a severe limitation. Vegetable production might be a possibility for some, but here too lack of adequate markets is a severe limitation.

Implications

Given the current situation in the dairy industry, it appears inevitable that dairy farming will be less attractive than in the recent past as the market and/or policy makers attempt to discourage the production of more milk than consumers wish to buy at current pries. To the extent that Northeast dairy farmers cannot compete with their larger and more efficient counterparts in this region or in other regions (e.g., the West and Southwest), some adjustments can be expected.

Reductions in dairy farms because of urbanization and high land prices bid up by developers appears to be waning. Selling out to a developer seems a less likely option today to most dairymen in the region. The majority of dairy farmers in the Northeast have few good alternatives inside or outside of agriculture. Hence shifts will come slowly. Those farmers using good management techniques and modern technology, located on the more productive soils, large enough to take full advantage of scale economies, and surrounded by other dairy farmers on good roads will have a competitive advantage. The smaller farms at some distance from other farms and at the margin of bulk tank routes will face stiff challenges.

As dairy farms become fewer in number and less dense geographically, the number of input suppliers will decrease. Added transportation costs and the prospects of serving a smaller population of farmers will force the smaller supply firms out of business.

Milk processing firms too can be expected to make adjustments in response to changes in the price they must pay for milk. These firms can be expected to be impacted most severely, however, by changes in the number and/or location of dairy farms.

If a number of dairy farms in a given area cease producing milk, the processor in that area may find that he must incur added assembly costs to obtain the same volume of milk, or he must operate at a reduced volume. Added assembly costs may put the firm under severe financial stress. But operating at a reduced volume may also cause financial stress.

In most processing facilities, economies to scale are substantial so that as processing volume falls, per unit processing costs rise. Some fluid milk processing plants are probably already large enough so that a small reduction in volume will not materially affect processing costs. Plants producing manufactured dairy products, however, typically must produce at capacity to realize maximum processing efficiency. Hence as the volume of raw milk available at a reasonable cost declines, some processing facilities may also be forced out of business. This could, in turn, impact producers who would otherwise remain in dairy production to the extent that a nearby market for their milk no longer exists. Thus the trend of fewer processing plants will likely be enhanced.

As supply and/or processing firms move out of the area in which a farmer is located, the farmer will be at a competitive disadvantage no matter how modern is his technology and managerial ability simply because the needed services, input markets, and/or market outlet for his milk are not readily available.

With the current surplus situation, more manufacturing plants are operating at capacity year round. Indeed some of our cooperatives are acquiring additional manufacturing capacity. If future dairy policy is effective in reducing supply to more nearly match demand, these cooperatives may find that they have generated too much excess capacity. This could result in financial stress for these firms and for their farmer members.

Our current policy goal for dairy is to reduce milk production so as to bring milk supply more in line with milk demand. By whatever means this is accomplished, it will result in a reduction of the nation's dairy herd and most likely in some of the nation's dairy farmers. The Northeast can be expected to share in this reduction. Thus we may want to consider a policy for providing assistance to those dairy operators who will withdraw from dairy but wish to stay in farming, and for those who wish to seek off-farm employment. Similarly we may want to consider a policy of assistance for the young farmers who will be replacing those dairymen planning to retire. Dairy cooperatives might, for example, want to explore the possibility of working with their Extension Services, the financial community, and possibly others in setting up such programs of assistance.

A final notion worth some thought relates to the policy option used to encourage reduced milk supply. Production quotas have been increasingly discussed in recent months, but are still as distasteful as ever. The most viable alternative appears to be to lower the "real" price of milk. But with the number of farm families today who look to non-farm jobs for the source of better than one-half of their income, I am skeptical that many of our smaller Northeast dairy farmers will respond to lower milk prices in text book fashion. I am equally skeptical, however, of the efficacy of any of our standard production control schemes, at least in the case of dairy. Perhaps the time has come for an effective policy of whole farm retirement for dairy.