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The Chobani Paradox

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The Chobani Paradox: Although the dairy industry, generally and instinctively, desires growth, market and regulatory conditions sometimes make the cost of growth appear larger than its benefit.

Farmers generally flourish when demand for their product grows. They also appreciate it when that growth is nearby, when they can see the processing plant. Yet, when a plant desires to significantly expand or enter a market, it is often met with resistance from cooperative milk suppliers, who, of course, are already delivering every pound of milk to other customers. Classified pricing, by its very design, tends to reward growth in Class I, and pooling tends to discourage growth in manufacturing classes.

One of the more interesting conundrums for New York is its desire to grow the industry vs. the watering down of the blend price when growth occurs in the manufacturing sector. The poster child for this is the recent growth and ultimate plant expansion by Chobani yogurt, although there are other examples.¹

Milk Production Growth in New York

For years, the New York dairy industry has been lamenting the fact that growth in total production in the state has been tepid for decades. In contrast, Idaho production in 1990 was

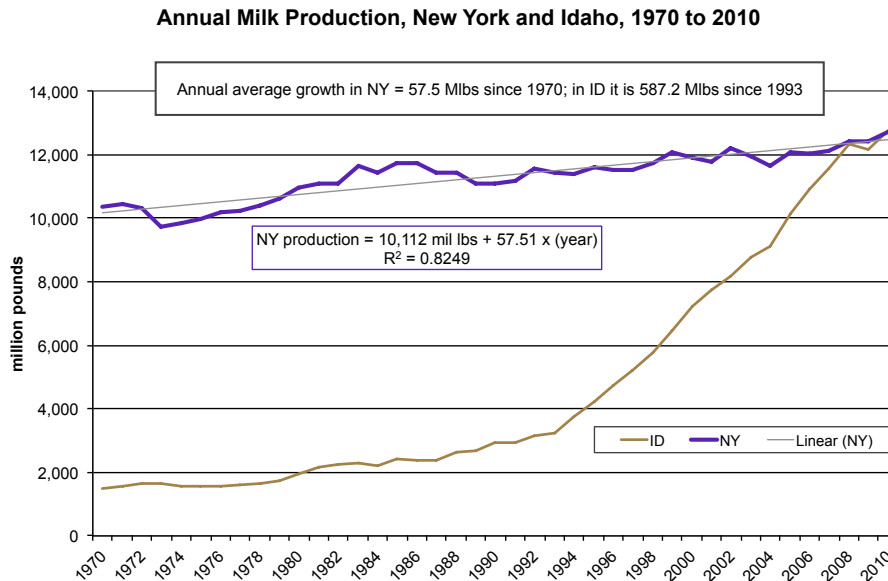
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¹ Chobani is the brand of the market leading Greek-style yogurt manufactured by AgroFarma, a private company headquartered in Norwich, NY with a processing plant in nearby South Edmeston, NY. This paper is intended as a discussion of a marketing phenomenon for which Chobani is a case in point. It is not intended in any way as a commentary on the merits of AgroFarma, the growth of Chobani, or any other personal or business characteristic of the firm or its product. Indeed, other examples of this phenomenon exist, but this particular one has been dramatic and much in the public eye.

about 1/4 of NY. Since 2008 the states have run neck and neck and in 2010, Idaho surpassed New York, albeit just barely. This is illustrated in the following graph.

Other traditional dairy states have trends similar to NY and other western states have had similar growth to Idaho. Many other states are actually shrinking their milk production. Nevertheless, this remains a dramatic reminder that the dairy sector in NY has been rather lackluster in a US industry that has steadily grown over the decades.



Industry Growth is the Sum of Decisions by Many Individual Farms and Firms

Periodically, industry and government leaders in New York have called for a resurrection of the industry. The purpose of public calls to grow the industry is no doubt to be inspirational and proactive, but this language has proven to be more talk than anything else. One reason that this rhetoric has been ineffective is that it is not so terribly easy a thing to accomplish.

Growth decisions are made by individual farm businesses on the supply side and processors on the demand side. Each owner makes this decision on the basis of their business, and often the family's, goals and the opportunities that they see before them. Growth may be an industry goal, but it is a firm decision.

When growing and therefore prospering manufacturers have gone to cooperative suppliers and asked for a commitment to a significant increase in milk sales to go into a planned plant expansion or green field construction, they have often gotten a tepid response. The reality is that cooperatives ration the supply of their members to existing or potential customers. They do not create the supply. Clearly, they can work with buyers and sellers to encourage production, but in the end the production decision belongs to each farmer. Farmers who are located near a plant expansion or a new plant are almost always enthusiastic about local growth, but that doesn't necessarily translate to a decision to grow on their own farm, or a collective decision to grow that matches projected plant needs. In the end, supplying milk to

a growing plant is a challenge for the supplying cooperative. It is perhaps a happy challenge, but a challenge nonetheless.

Regulated Pricing Issues

If a cooperative ends up having to reallocate existing milk supplies between existing customers and growing customers, it is easy to see how this presents challenges. This is all the more true in a market environment that is largely ruled by minimum price regulations. While there are always favored customers and less desirable customers, it is seldom the case that below average earnings from one customer are sufficient to make it easy to short him and move the milk to a new plant. When plants pay regulated minimum prices, it becomes even less likely that there will be significant variations in the ability or willingness to pay across different customers.

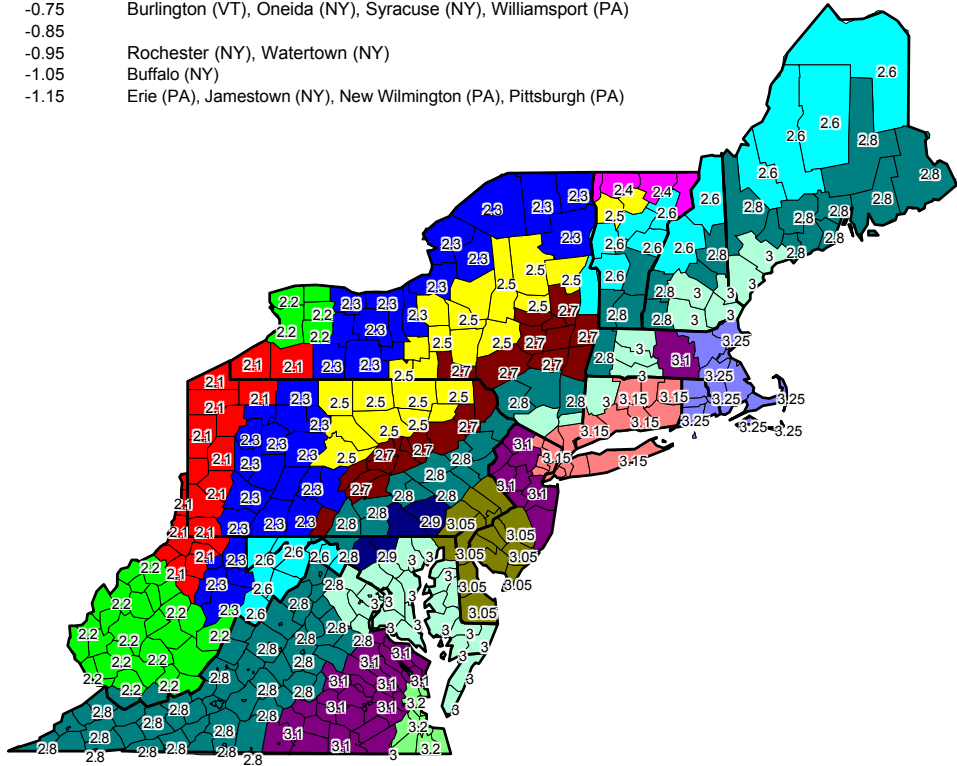
When it comes right down to it, cooperative suppliers unequivocally enjoy growth in Class I sales but are more ambivalent to growth in manufacturing classes. It is necessary to single out cooperative suppliers because they, unlike individual direct-ship farmers, deal with and are acutely aware of the marketwide impacts of how milk is allocated across a variety of customers, both in terms of processing type and location. The preference for Class I growth is very simply because the Class I price is a good deal higher than the Class II, III or IV prices (about \$2 higher in New York on a base that ranges from about \$12 to \$22). Because the industry primarily judges its collective success by the average price of milk, not by total employment or something of that sort, decreasing the percentage of milk going to Class I is mostly viewed as a negative, it reduces the average price of milk.

Indeed, a typical recent marketing strategy in the Northeast has been to look for new Class I customers in the South. The Class I price is highest in the Southeast and even with shipping costs it can be quite lucrative to move milk from the Northeast to the Southeast for this purpose. The growth in Class II (yogurt) production in the Northeast has reduced the amount of northeastern milk moving to Class I in the South, but this was not an easy decision to make at the outset.

Another issue, related to spatial market economics, comes into play in many circumstances as well. Spatial prices of milk, the price in one part of New York vs. another, hinge on a combination of transportation costs and the geographic pattern of where milk is produced vs. where it is used. Since the days when milk was delivered to plants in cans by the farmers who produced it, milk prices are generally set at the plant of first receipt. They are "delivered" prices. For almost 200 years, the economics of spatial markets in the Northeast have dictated a high price for milk delivered to the major cities on the Atlantic coast, with prices generally decreasing to the north and west. This pattern is encoded in the regulated blend prices under the Northeast Milk Marketing Order, but it is a general pattern that exists because cooperatives and other marketers acknowledge that it makes sense.

Northeast States Class I Differentials, by County

Differential	Adjustment From Base	Selected Major Cities
3.25	0.00	Boston (MA), Providence (RI)
3.15	-0.10	Hartford (CT), New York (NY), Newark (NJ)
3.10	-0.15	Richmond (VA), Worcester (MA)
3.05	-0.20	Philadelphia (PA)
3.00	-0.25	Baltimore (MD), Concord (NH), Londonderry (NH), Portland (ME), Springfield (MA), Washington (DC)
2.90	-0.35	
2.80	-0.45	Allentown (PA), Bangor (ME), Charlottesville (VA)
2.70	-0.55	Albany (NY), Binghamton (NY), Scranton (PA)
2.60	-0.65	
2.50	-0.75	Burlington (VT), Oneida (NY), Syracuse (NY), Williamsport (PA)
2.40	-0.85	
2.30	-0.95	Rochester (NY), Watertown (NY)
2.20	-1.05	Buffalo (NY)
2.10	-1.15	Erie (PA), Jamestown (NY), New Wilmington (PA), Pittsburgh (PA)



This map shows the pricing zones for the Northeastern US. A map showing the zones for the entire US is available at this URL.

<http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3101903>

What this means is that any Class I milk delivered to a plant in one of these areas must be paid a price reflecting the zone differential at that location. Class II, III, and IV prices are

not adjusted by plant location. They are identical everywhere in the US. But, blend prices are adjusted by the same location factor as the ones used for class i pricing. Thus, a farm located in Chenango County is in the \$2.50 Zone - pink on the map. This zone runs southwest to northeast, from about State College PA to Warren County, NY. Everything east of that line is in a higher zone, and of course everything west is lower.

Now, this only pertains to the regulated minimum price, which means plants are free to pay premiums above this level if that makes sense to them. If a farmer is shipping directly to a plant, i.e., he is not a cooperative member, then the plant must pay the regulated minimum price directly to the farmer and any premium goes directly to the farmer. If the plant receives milk from a cooperative, the entire cooperative milk supply is held to that same payment rule, but then the cooperative has some latitude in how it pays the individual farmer. Cooperatives generally follow the minimum blend price requirement, at least as a starting point, but they generally are not required to pay specific premiums received from a plant to the farmers whose milk went to that plant on any given day. Whether they do or not, or do fully or partially, depends on a host of factors that are mostly internal to the cooperative.

The bottom line is that Chobani has the same regulated minimum price for milk it buys in New York or would buy in Alabama, Minnesota, or any other area whose milk is regulated under a federal order. What it pays in premiums to its supplier is one thing. What the supplier returns to farmers whose milk ends up in Chobani's plant is another.

Spatial economics and regulation also come into play in determining whose milk is shipped to which plant. The regulated price zones do not fully reflect actual costs of hauling milk. Thus, plants will always prefer local milk, but if they have to get milk from a greater distance, they will have an economic incentive to get it from the north or west. As a general rule, the only times a central New York plant would get milk from New England is if 1) they had no other choice or 2) the New England milk was in a bind for a customer and willing to sell at a "distressed" price (it happens). Yogurt plants need more skim solids and less fat than normally occurs in farm milk. They can purchase additional skim, ship out excess cream, or a bit of both. For this reason, it could make sense for a central New York plant to ship skim milk from a supplier in New England on a routine basis.

The Net Net in Northeast Milk Marketings

From the standpoint of available milk supplies, the increase in Class II milk used in the Northeast Order is partially offset by a dramatic decline in Class I sales. This is discussed in the page 2 article in the January 2012 NE Order Market Administrator's bulletin.

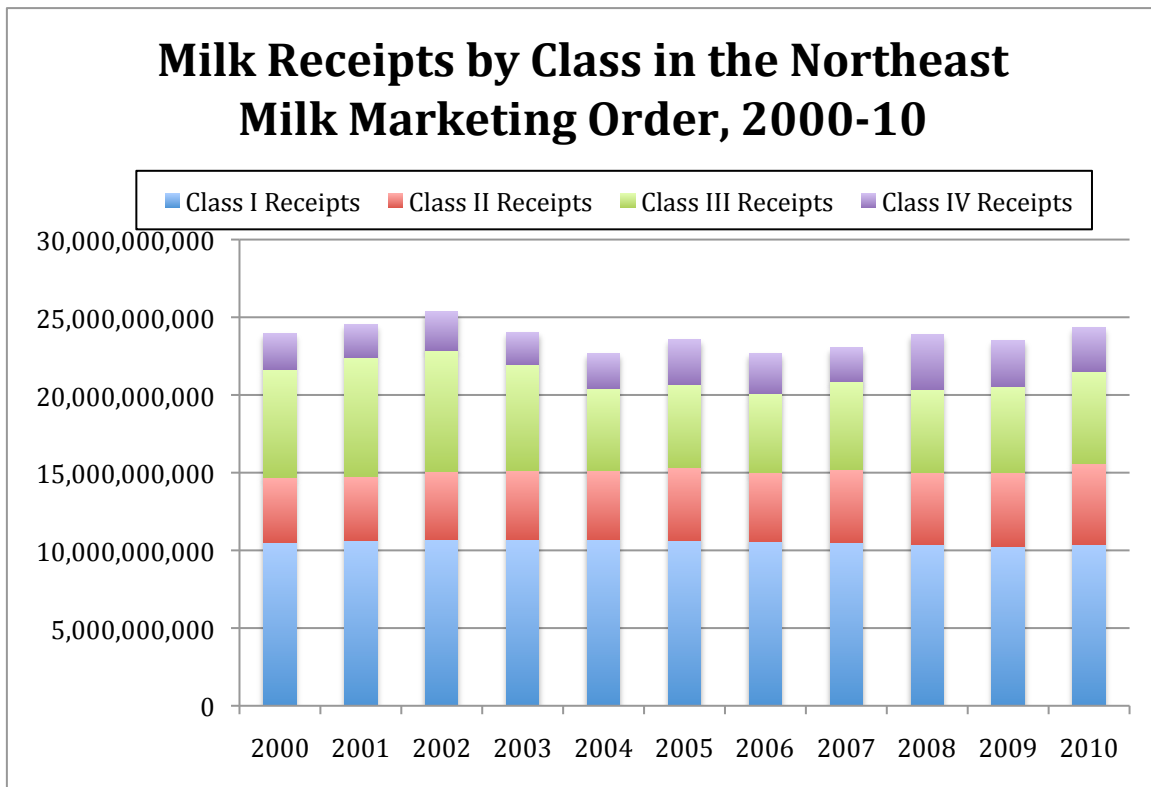
http://www.fmmone.com/Northeast_Order/MA_Bulletin/bull1201.pdf

This has two different and important ramifications. The decline in Class I utilization means that the blended price paid to farmers is diluted, relative to a given base price level. Thus, the growth in Class II does not necessarily mean a lift to prices because of market tightness. Secondly, the drain in Class I sales frees up milk marketings to move to other uses; hence, this also takes some supply pressure off of the growth in Class II demand.

Northeast Order milk marketings used in each class are illustrated in the following chart. There are ups and downs in the Northeast Order total marketings and usage in each category. If one compares 2010 to the average usage from 2000 to 2010, Class I in 2010 is down 153

million pounds. Class II is up 629 million pounds. Total marketings were 552 million pounds higher. Through October, Class I marketing in 2011 were down 203 million pounds while Class II was up 429 million pounds. Total milk marketings were up 132 million pounds.

By either measure, Class I sales are down and Class II sales are up. Total marketings fluctuate in a fairly narrow range and without an obvious trend, but it is clear that Class II volume is growing at the expense of usage in other areas. Class I has declined, despite being the preferred market outlet. The growth in Class II demand is a most welcome replacement for the demand driven decline in Class I, but Class II recently has been up by more than the increase in total marketings plus the amount freed up by the decline in Class I. This has led to a situation where Class II is growing by more than the easily available supply.



Summary

For dairy farmers and others in the industry, growth in the demand for milk is assuredly better than the opposite. However, there are adjustment challenges when growth is localized and dramatic. Moreover, the system of regulated prices can create seemingly perverse incentives that may dampen the obvious appeal and incentives of demand-driven growth.