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Dairy Policy Working Papers 12-2006

MILK MARKETING ISSUES IN THE SOUTHEAST[1]

Geoff Benson, PhD
North Carolina State University
and
Tommie Shepherd, PhD
University of Georgia

Summary and Conclusions

The Southeastern region encompassing orders 5, 6 and 7 is primarily a fluid milk market. Regional milk production is declining and Class I sales are reasonably constant. This milk market area is becoming increasingly deficit in production. Basic economics would suggest that Class I utilization rates should be increasing and that uniform blend and mailbox prices should be increasing relative to other regions, but they are not. Class I utilization rates are fairly constant and the current volumes of milk classified in the other classes seems much greater than needed to provide reserve capacity. The reason that Class I utilization rates have not increased is the growth in milk volumes pooled on these orders from states outside the order boundaries. This milk adds to the pool and, under the logic that Class I uses have the priority claim, means that more pool milk is used for the lower paying classes thereby diluting the uniform blend price.

Mail box prices are declining relative to the order blend prices. There is a pronounced seasonal pattern to regional production that creates market balancing needs and the associated costs. Announced cooperative over order premiums show no clear trend. One possible explanation is that the costs associated with market balancing are growing and are being unequally borne, at least in part, by the dairy farm members of the cooperatives in the region. Another possible reason is that cooperatives are re-blending monies away from the producers in the region.

This analysis has been based primarily on published data from the market Administrators in the region. A more detailed analysis is not possible because of the aggregated nature of the data reported by market Administrators. The conclusions based on the available data indicate that problems exist that may be caused or exacerbated by the current federal order rules. On this basis, a more complete

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[1] This report was prepared at the request of the Southeast Producers Steering Committee, an ad hoc group that includes representatives of the Upper South Milk Producers Association, the North Carolina Dairy Producers Association, Georgia Milk Producers, Inc., the Kentucky Development Council, the NC Department of Agriculture, the North Carolina Farm Bureau Federation and the South Carolina Department of Agriculture.

investigation by Dairy Programs, AMS-USDA, is warranted. Such a study might include the effects of order reform, specific southeastern order pooling rules, market balancing activities, and transportation credits.

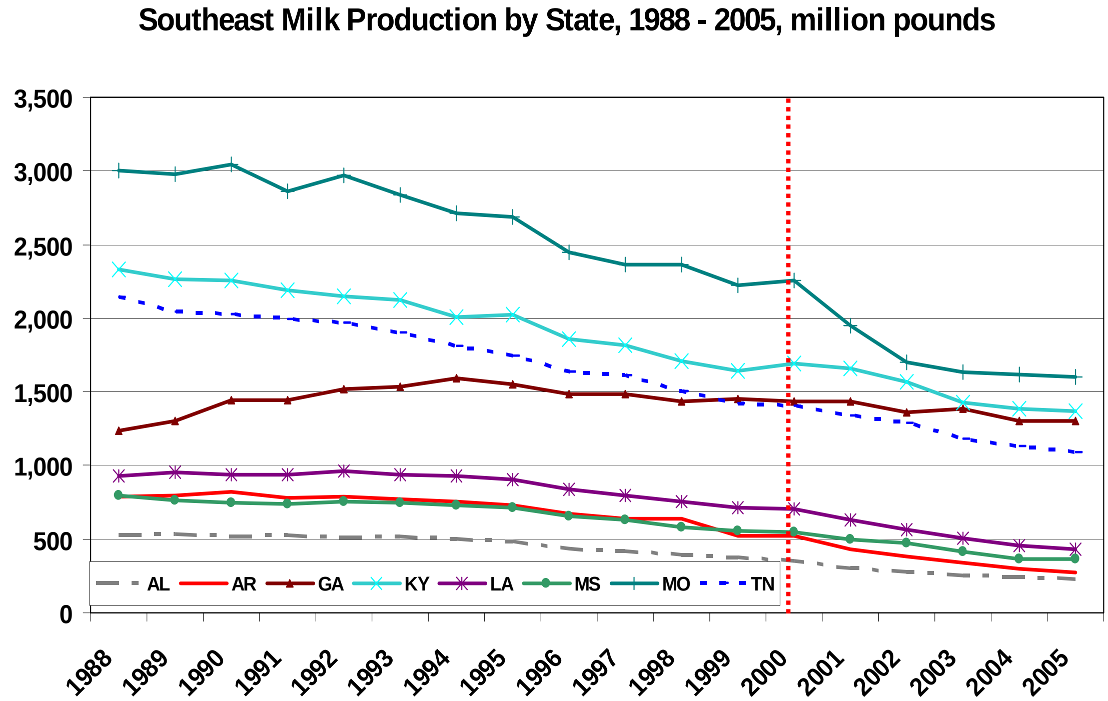
Discussion

1. Regional Trends
- Milk production

Milk production across much of the southeastern United States has been declining for more than two decades. Since the late 1980’s, states in the deep south including Georgia, North Carolina, South Carolina, Virginia, Alabama, Mississippi, Florida and Louisiana have witnessed average annual declines in milk production of about five percent. This decline, coupled with an increasing population in the region, and hence an increasing demand for milk, has sparked considerable interest in examining the causes, effects, and potential remedies for declining milk production.

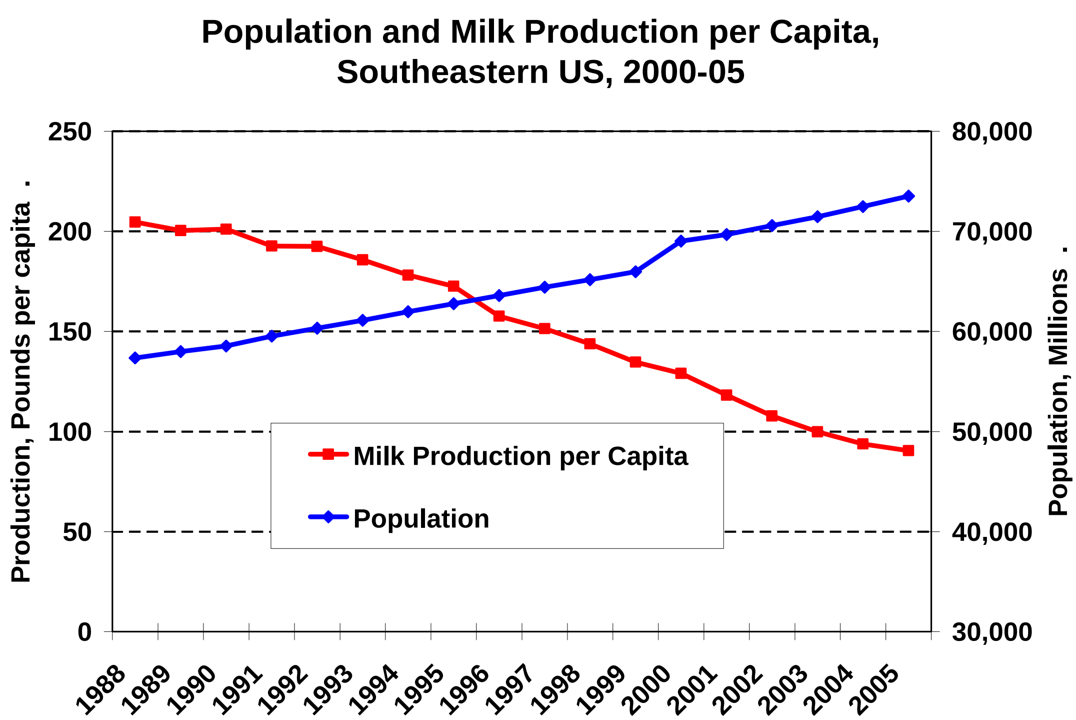
One factor that may be contributing to this decline are certain provisions of the Appalachian, Southeast, and Florida Federal Milk Marketing Orders, which calculate and enforce minimum prices that must be paid by processors for milk. Since January 1, 2000 such prices have been applied across larger market areas and are tied to often volatile prices for manufactured dairy products including cheese, butter, milk powder, and whey. The intent of federal orders is to ensure an adequate supply of fluid (Class I) milk and these three orders have a high Class I use. However, order pooling provisions allow milk produced outside the southeast and processed into manufactured dairy products such as cheese and butter to be pooled on these three orders, possibly resulting in reduced Class I utilization and lower Federal Order uniform prices which form the basis for payments to dairy farmers. Farm prices are believed to be a major factor in the observed trends in regional milk production.

Although milk production has been declining in these states for more than two decades, the data in the figure suggest that the rate of decline has not slowed and may have accelerated since 2000, the date when major federal order reforms were implemented. Order reform brought about several changes in milk marketing in the south including larger and more geographically diverse marketing orders, pricing formula changes, a transportation credit balancing fund, and changes in pooling rules.



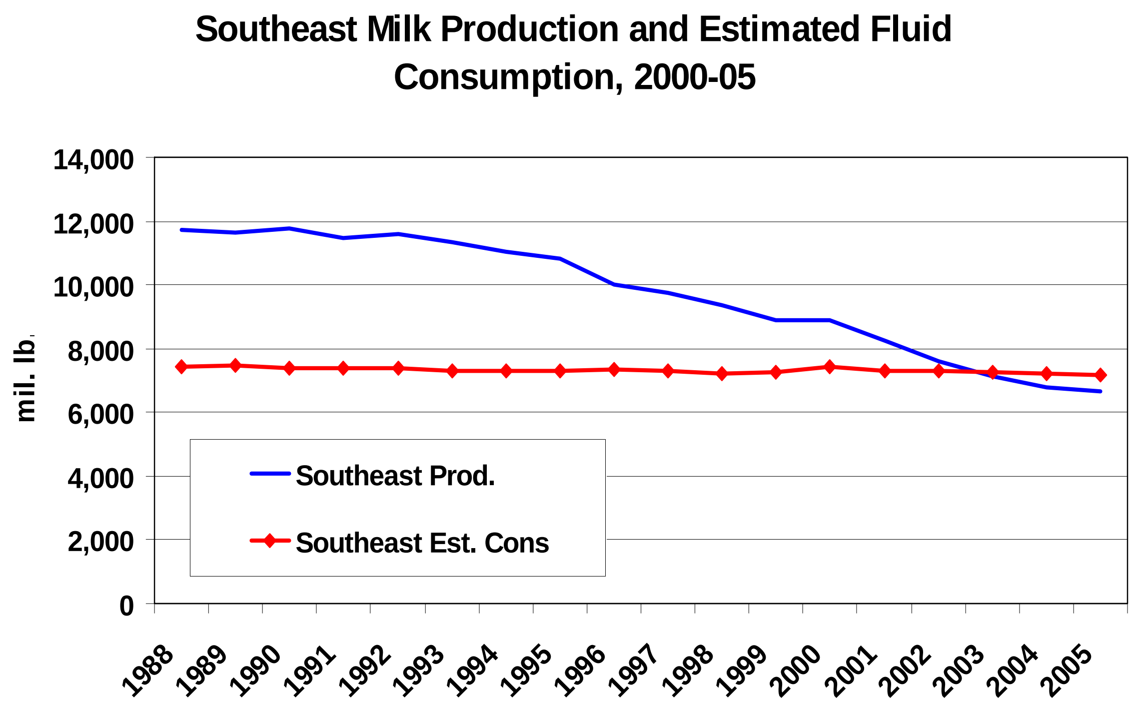
- Population

The population in the region has increased from 57 million in 1988 to over 73million in 2005. As a consequence, the amount of milk produced per person living in the region has declined steadily as the graph shows.



- Supply-Demand Balance

Regional data are not available on per capita fluid milk consumption. The graph shows estimated consumption based on national data. By the early 2000s, the region had become deficit.



2. Changes in the sources and volumes of milk pooled on two southeastern orders.

The sources of milk pooled in orders 5 and 7 are shown in the tables. Total pool receipts are fairly constant. Production from states in the market area is declining and increasing amounts of milk are coming from more distant states. These include Indiana and Michigan as growing supply areas for order 5 and New Mexico and Texas as growing supply areas for order 7.

Order 7 Quantity of Milk Received by State, 2000-05, mil. lb.

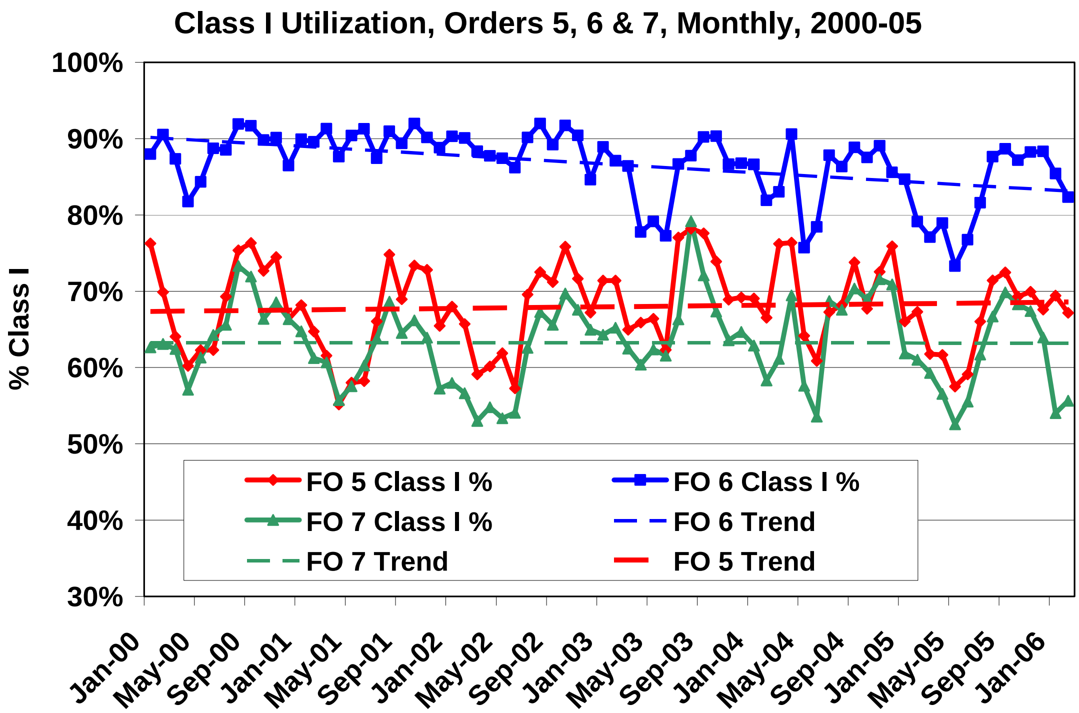
State	2000	2001	2002	2003	2004	2005	2005 as % of 2000
Alabama	334,759	287,630	262,291	228,492	220,845	195,073	58.27%
Arkansas	462,449	406,235	384,546	337,742	296,729	267,600	57.87%
Georgia	715,554	737,814	778,286	619,786	595,111	607,008	84.83%
Kentucky	494,608	513,332	498,172	521,355	451,266	482,051	97.46%
Louisiana	678,259	611,706	561,776	501,544	456,591	418,793	61.75%
Missouri	1,436,620	1,295,485	1,286,634	1,213,659	1,097,771	1,078,025	75.04%
Oklahoma	389,729	409,270	372,736	378,799	344,681	331,688	85.11%
Tennessee	586,534	572,742	594,791	583,422	547,712	491,553	83.81%
Texas	1,174,651	1,158,587	1,018,012	1,013,957	1,346,225	1,396,899	118.92%
New Mexico	106,815	406,106	708,223	220,929	578,430	837,074	783.67%
Total	6,379,978	6,398,907	6,465,467	5,619,685	5,935,361	6,105,764	

Order 5 Quantity of Milk Received by State, 2000-05, mil. lb.

State	2000	2001	2002	2003	2004	2005	2005 as % of 2000
Georgia	219,434	184,405	183,281	102,293	79,117	43,557	19.85%
Indiana	438,592	558,673	678,966	778,099	802,109	813,315	185.44%
Kentucky	1,130,307	1,087,888	1,059,466	891,252	920,567	836,858	74.04%
Maryland	118,496	95,451	93,599	93,131	81,606	79,816	67.36%
Michigan	124,292	171,882	191,497	329,003	249,335	291,512	234.54%
N. Carolina	1,082,036	1,053,038	1,070,849	984,173	950,017	935,714	86.48%
New York	119,106	199,196	97,376	--	--	--	--
Ohio	130,395	151,693	233,429	255,332	187,488	215,332	165.14%
Penn.	483,186	530,493	574,217	522,291	466,910	442,941	91.67%
S Carolina	356,229	348986	348,716	309,536	281,703	281,519	79.03%
Tennessee	765,917	728,435	685,057	594,730	576,640	571,675	74.64%
Virginia	1,118,465	1,264,546	1,217,386	1,075,532	1,033,193	1,101,785	98.51%
Other	234,953	298,619	272,565	379,343	573,808	785,788	334.44%
Total	6,321,408	6,673,305	6,706,404	6,314,715	6,202,493	6,399,812	101.24%

"Other" includes Alabama, Delaware, Illinois, Iowa, Kansas, Missouri, New Mexico, Oklahoma, Texas, West Virginia, Wisconsin

Class I utilization rates are similar in orders 5 and 7 and there is no trend in Class I use as a percentage of receipts, see graph. However, with declining local production and flat Class I sales one would expect Class I utilization rates to increase. The question must be raised as to the need under current conditions for approximately one-third of the milk in this order pool to be used in Class II, III and IV. On the surface, this seems to be an unnecessarily large “reserve” and indicates a marketing problem exists because it implies that supplies from distant sources are entering the pool for use in classes other than Class I. Order 6 Class I utilization has been in the 75 to 90 percent range without any apparent disruptions or problems in supplying fluid milk products to consumers. However, Class I utilization in this order shows a decreasing trend and more volatility over the 2000-05 period.



3. Seasonality in production and sales and market balancing issues.

- Production patterns

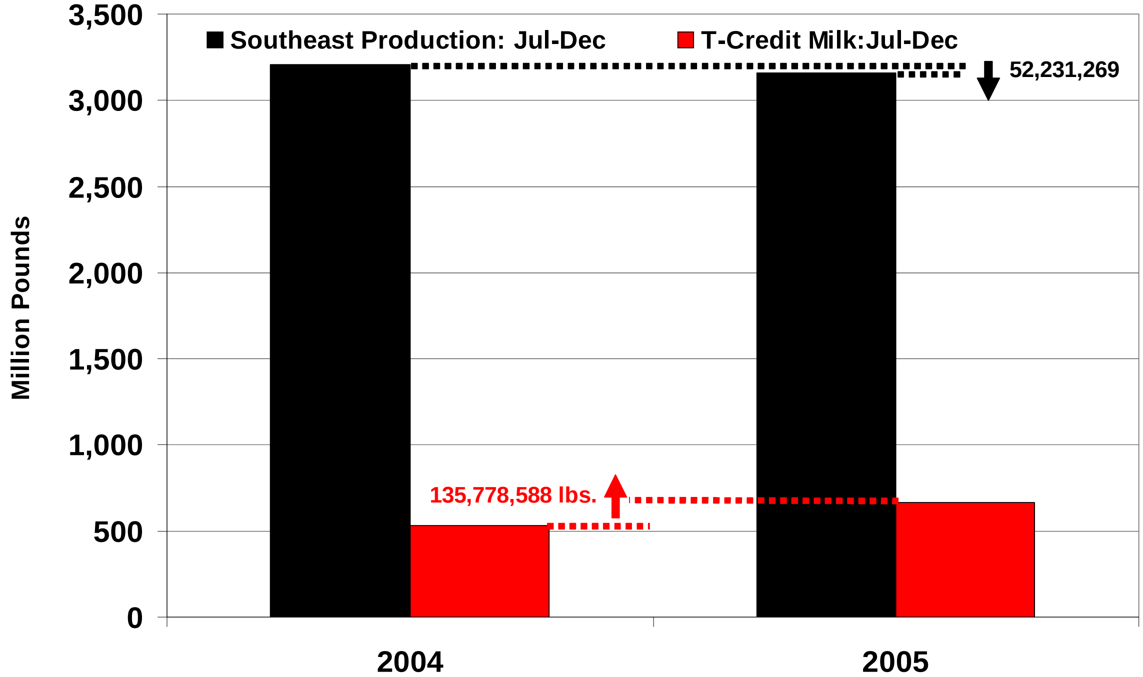
The figure shows a strong seasonal pattern to milk production in the Southeast and this is not matched by a corresponding seasonal pattern in demand. This creates seasonal imbalances and the associated costs of balancing the market. This means incurring costs associated with disposing of seasonal surpluses and the costs of providing supplemental milk to local processors when local supplies are insufficient.

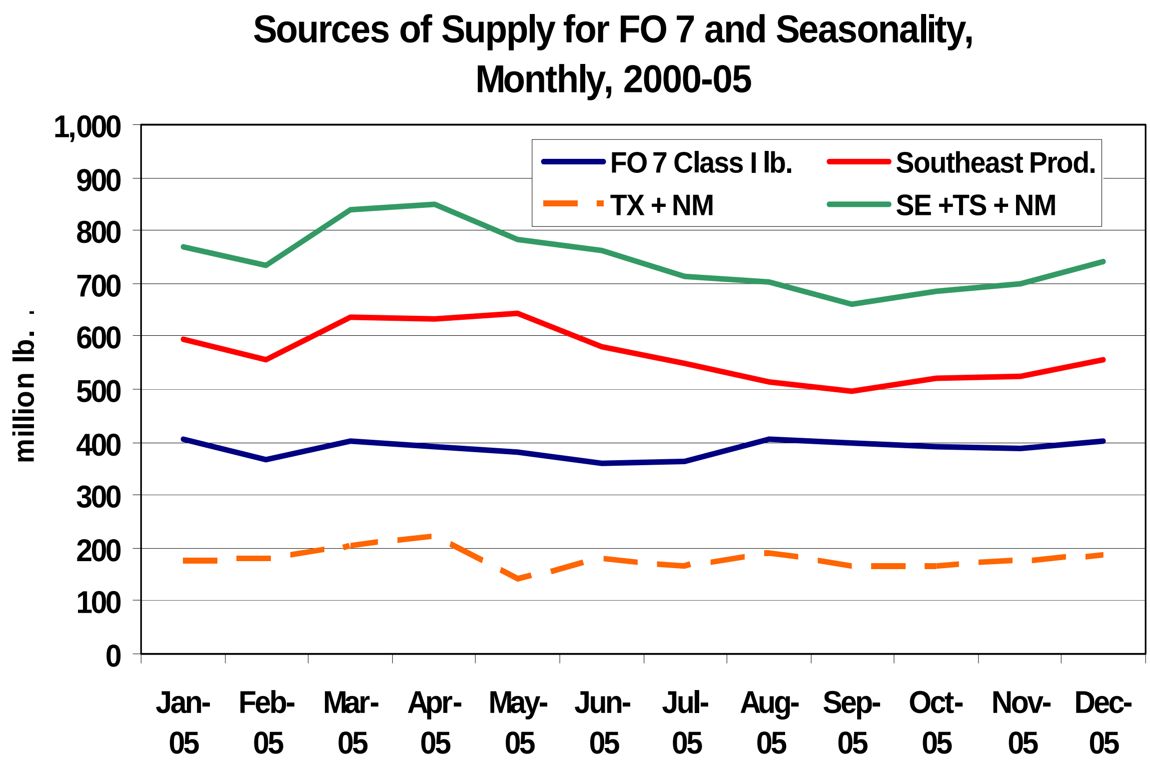
The graph also shows a less pronounced seasonal pattern in supplies from Texas and New Mexico but, more importantly, this milk does not enter the pool in a counter seasonal manner and, therefore, does not appear to be pooled as a source of supplemental milk.

- Transportation.

Trucking costs have increased over time and should also provide support for regional prices because the cost of alternative supplies is correspondingly higher. The BLS "General freight trucking, long distance, truckload" Producer Price Index is one measure of cost changes and this index increased 19% from January 2000 to December 2005.

Transportation credit (T-credit) assessments represent additional monies paid by Class I handlers to help defray the cost of hauling additional milk needed during the most deficit times of the year. In 2005, Southeast Federal Order these assessments amounted to $3.5 million. T-credit payments can be claimed by cooperatives only for milk delivered to Class I plants from producers that do not serve the southeast market on a regular basis. Milk produced by southeast order states between July and December 2005 declined by 52,231,269 pounds from the same July-Dec. time period in 2004, while transportation credit eligible milk increased by 135,778,583 pounds from Jul.-Dec. 2004 to Jul.-Dec. 2005. T-credit milk growing faster than the decline in local production that it is intended to compensate for raises the possibility of disorderly marketing if milk from regular suppliers to the market is shipped elsewhere for the sole purpose of drawing money from the fund.





4. Prices

Milk prices are undoubtedly an important factor in dairy farmers' plans and decisions.

- Uniform blend prices

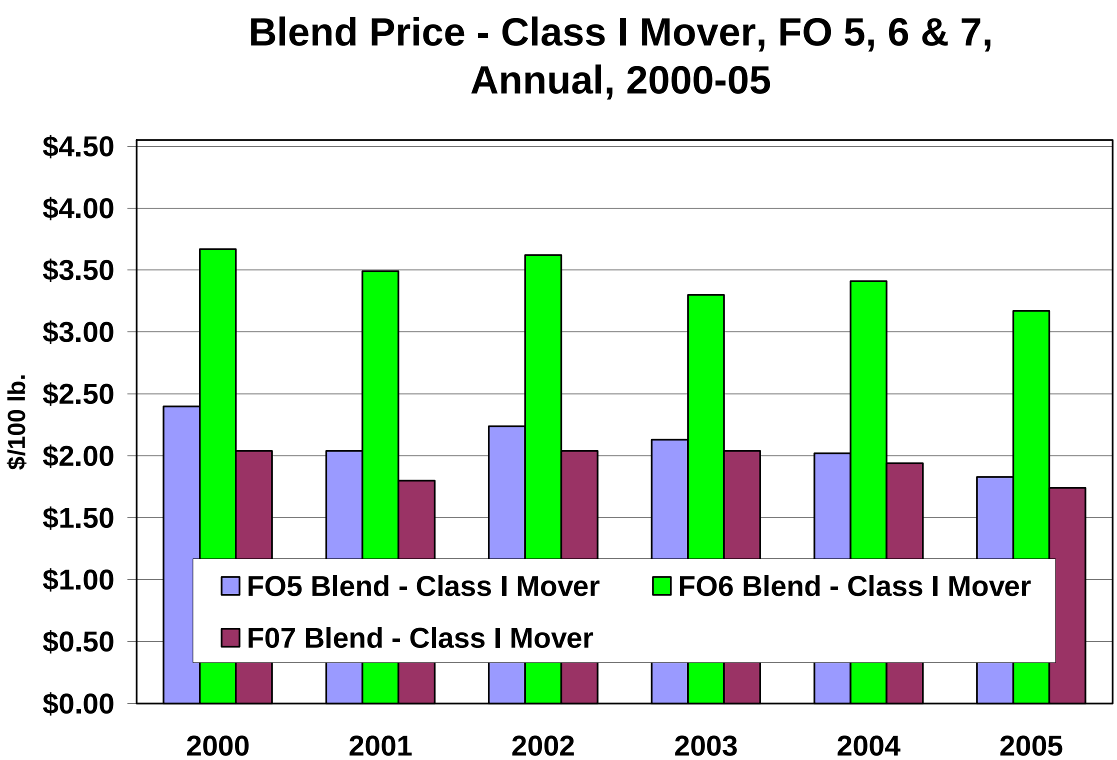
Milk prices are volatile, so the following figure shows the difference between the uniform minimum blend price and the Class I mover for the years 2000-05 for federal orders 5, 6 and 7. As local production declines one might expect prices to strengthen as less milk becomes available for the lower Class uses. However, if anything, the trend is the reverse, with the uniform blend price falling relative to the Class I mover in all three orders. This is consistent with the trends in Class I use noted above.

- Mailbox prices

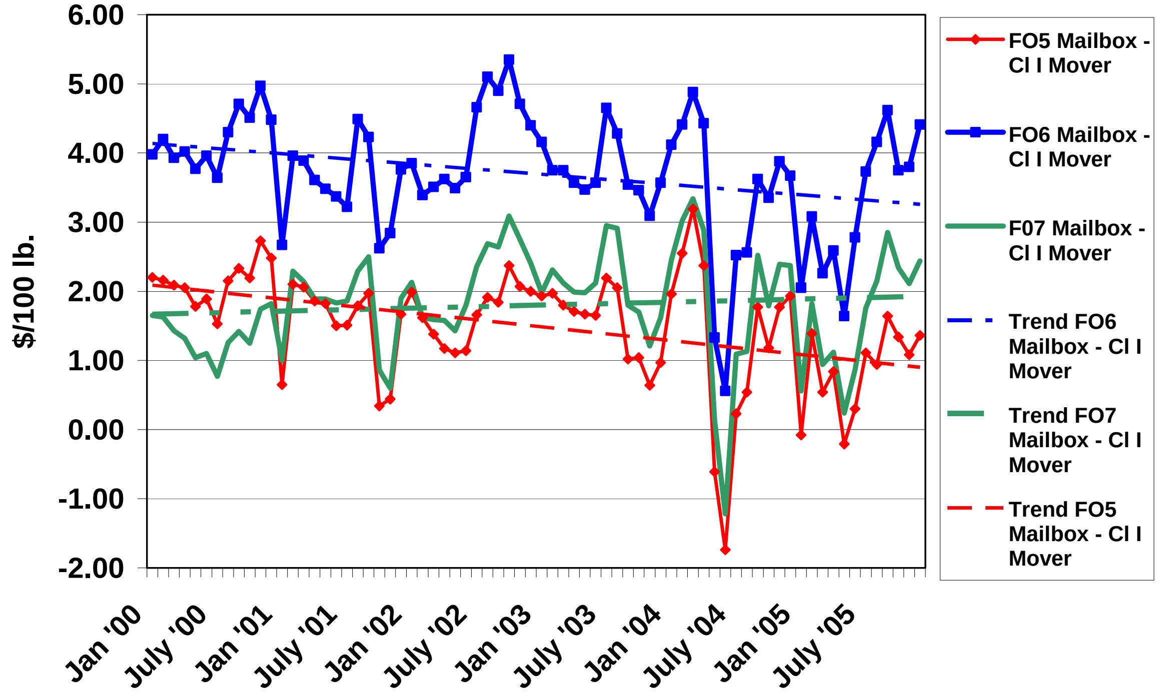
For most producers, the order minimum blend price is only the start of the process whereby they get paid. Most producers belong to cooperatives, which receive payments on behalf of their members. Coop operations such as market balancing and political activities on behalf of the members incur costs that are borne by the members. Coops may negotiate over order premiums to recoup some or all of these costs. The uniform blend price is quoted at 3.5% butterfat but producer milk is paid for at test. Volume and quality incentives and hauling costs also affect individual producers' mailbox prices. However, one might expect mailbox prices to strengthen over time as dairy farm cooperatives exert more influence over the market in the face or dwindling supplies. Again, the data do not support this contention. There are clear downward trends in the difference between the uniform minimum order blend prices and the mail box prices in federal order 5 and 6. No trend is discernable in order 7. So, not only are the order blend minimum prices failing to provide incentives to local producers but the activities that take place between the order pricing and mailbox prices are aggravating the problem.

A comparison of the difference between the uniform price in order 5 and orders 1 and 33 shows that mailbox prices in the Northeast and Mideast orders seem to be improving relative to their respective order blend prices, while FO 5 is headed in the opposite direction. Even if balancing costs in the low Class I order (FO 33) are lower, this would not explain the trend. Milk entering the FO 5 pool from FO 33 states has increased, so pool riding seems to be occurring. Milk from FO 1 states has decreased. Milk from a number of other states that is pooled on FO 5 has increased but individual state data is not available (see table).

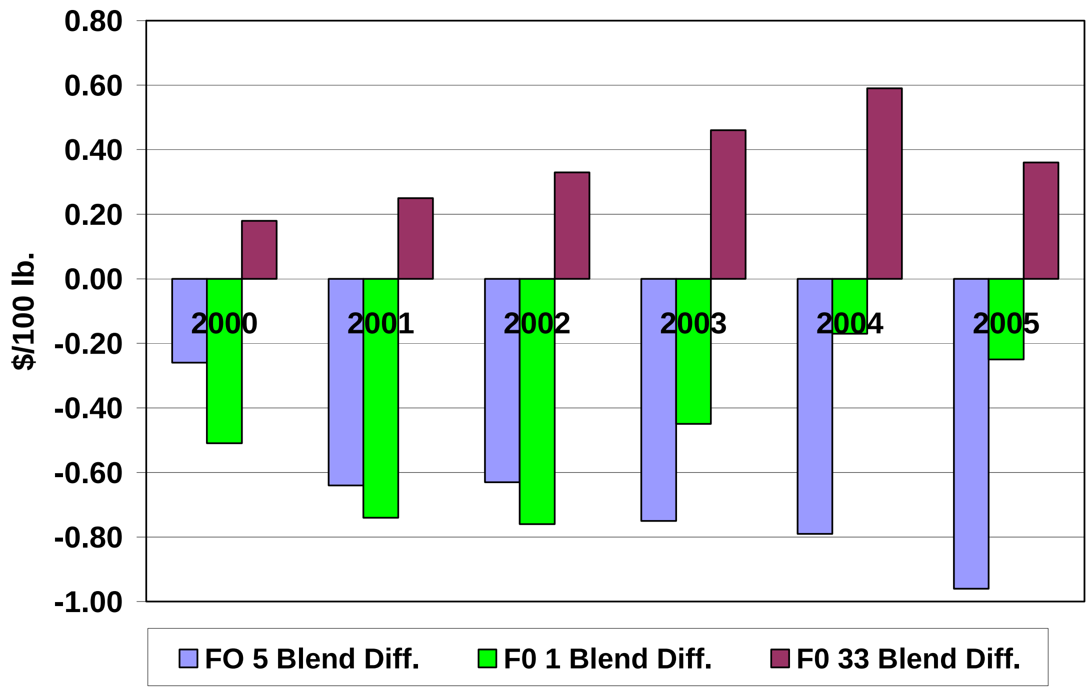
There seems to be no clear trend in coop over order premiums, as reported by "Market News." The size of these premiums appears to be affected by the national supply-demand balance for milk. Announced premiums are identical for FO 5 and 7. However, if market balancing costs are increasing, these data suggest the cooperatives have not recouped additional market balancing costs.

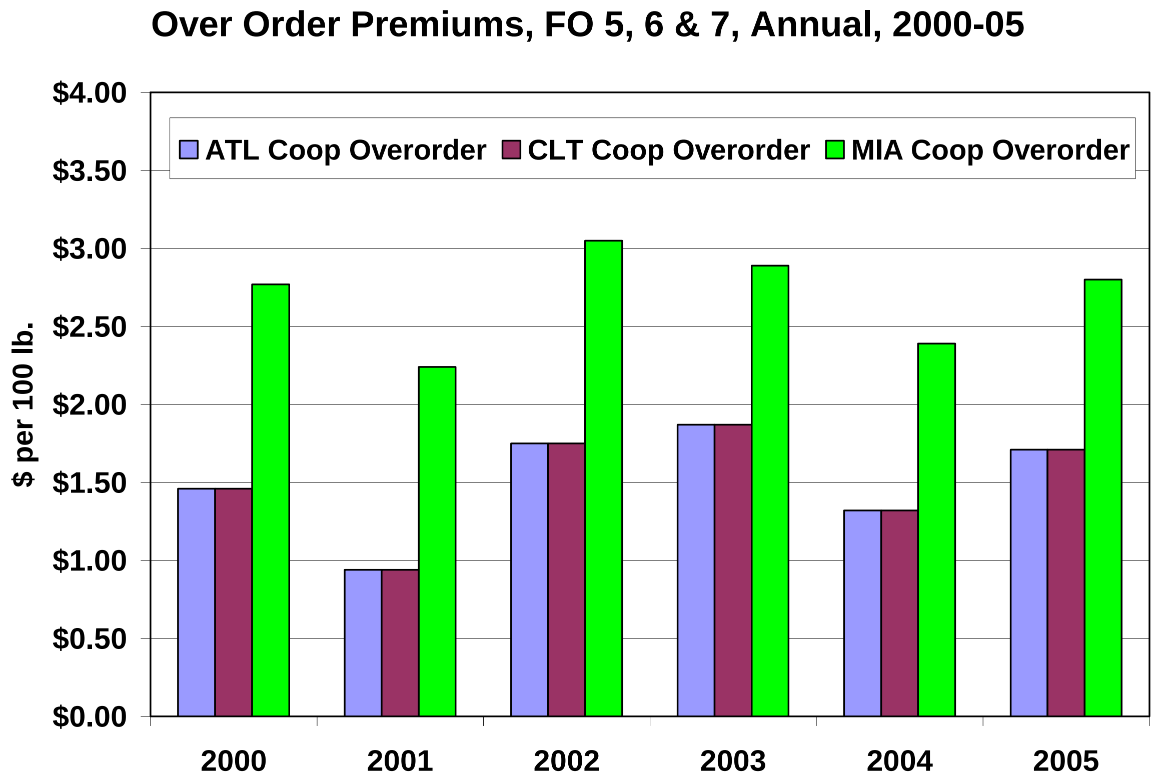


Mailbox Price Differences, FO 5, 6 & 7, Monthly, 2000-05



Mailbox - Blend Price, FO 5, 1 & 33, Annual, 2000-05





5. The Need for Further Study

The information presented above raises several important questions regarding the impact of Federal Milk Marketing Orders in the southeast on regional milk prices, producer income, and production. The overarching question is perhaps whether or not federal orders are achieving their stated goal of insuring orderly marketing. On the surface, increasingly replacing local supplies of milk with supplies from more distant areas does not appear to be orderly. Such substitution may indeed be orderly if it is the direct result of natural economic forces in the marketplace, but disorderly if it is induced by unintended consequences of federal order provisions. A comprehensive study of the impact of the 2000 order reforms on federal orders could address several specific provisions which have the potential to place southeast producers at a disadvantage relative to producers outside the area by providing incentives to ship milk into the region and pool additional manufacturing milk on the orders.

One specific question is the nature of the impact of pooling provisions which allow milk produced and utilized outside Orders 5, 6 and 7 to be pooled on these orders, thus lowering Class I utilization and blend prices. Although some reserve supplies are well understood to be necessary for seasonal balancing, milk pooled as reserves should be tied to actual or anticipated deficits in a systematic way. There is no evidence of systematic pooling relative to actual deficits in the data presented above. It would be helpful to know if there are significant numbers of producers who divert maximum amounts of milk to manufacturing rather than supplying the Class I needs of the market on a regular basis. Data on farms regularly supplying these orders and farms which may only meet minimum pooling qualifications for the purpose of pooling manufacturing milk on higher priced markets could prove useful in developing pooling rules that encourage efficient seasonal balancing while achieving higher Class I utilization and uniform prices.

The enlarged orders that resulted from the 2000 Federal Order reforms require uniform prices to be blended (averaged) over more “utilization diverse” geographic areas. Order boundaries are generally accepted to be based, to a great extent, on areas in which Class I plants compete for sales. Analysis of more localized Class I volume, premiums, and corresponding localized mailbox prices could prove useful in determining the extent, if any, to which larger orders have selectively lowered some producer’s pay prices and reduced local production while raising it for others. These results for orders 5 and 7 could be contrasted with those of order 6, which retains its smaller, pre-reform configuration and higher class I utilization.

Transportation credit assessments represent additional monies paid by Class I handlers to provide the additional milk needed during the most deficit times of the year. A comprehensive analysis of federal order impacts on the southeast should consider the impact of this provision and whether it results in duplication of balancing incentives already built into the current touch base/diversion mechanism or subsidizes the pooling of additional milk in excess of that required as a reserve balance. A related issue is whether the current regional structure of Class I location differentials provides the appropriate incentive to move milk in an efficient manner.

In summary, an in-depth analysis of the relationship between post-2000 reform federal orders and milk prices and production in the southeast should focus on the issues raised by the data presented here. In addition, there may be other issues that have been the subject of considerable speculation with regards to cause and effect within the industry. Any analysis should strive to determine whether declining production is the result of natural economic forces at work or an unintended consequence of Federal Order reform. Publication of data used in such a study, to the extent allowed, would provide a degree of transparency which is currently unavailable from the aggregated information available from USDA’s Dairy Programs division and would provide producers with an increased degree of confidence that federal orders are working as they were intended.