THE OHIO STATE UNIVERSITY

AEDE Agricultural, Environmental, and Development Economics

Ohio State University Extension
Ohio Agricultural Research and Development Center

Cameron Thraen
Thraen.1@osu.edu

Agricultural, Environmental & Development Economics
December 2006

Make Allowance and Class 3 & 4 pricing rules: A short exposition…

These two charts on page three show two very different pictures. The top chart shows the margin available to a cheddar cheese plant which earns revenue from the sale of cheese, butter and whey at NASS announced prices and yields. The bottom chart shows the revenue earned by a cheddar cheese plant that sells only cheese at NASS announced prices. Both charts show the gross margin for 100 pounds of milk. Both charts show the approximated gross margin prior to Federal Order reform using reported Dairy Market News USDA prices for the dairy products. The blue line in each chart shows the 12 month moving average gross margin.

Comparing the two charts you can see why there is significant controversy about the current Federal Order cheese milk (Class 3) pricing rules. The obvious variability in the calculated margin during the pre-Federal Order reform, as depicted in these two charts, requires explanation. Recall, that during this period, the class 3 price was reflected first in the 'M-W' price series and then in the 'BFP' or basis formula price series. Below is the USDA/AMS definition of the BFP price series:

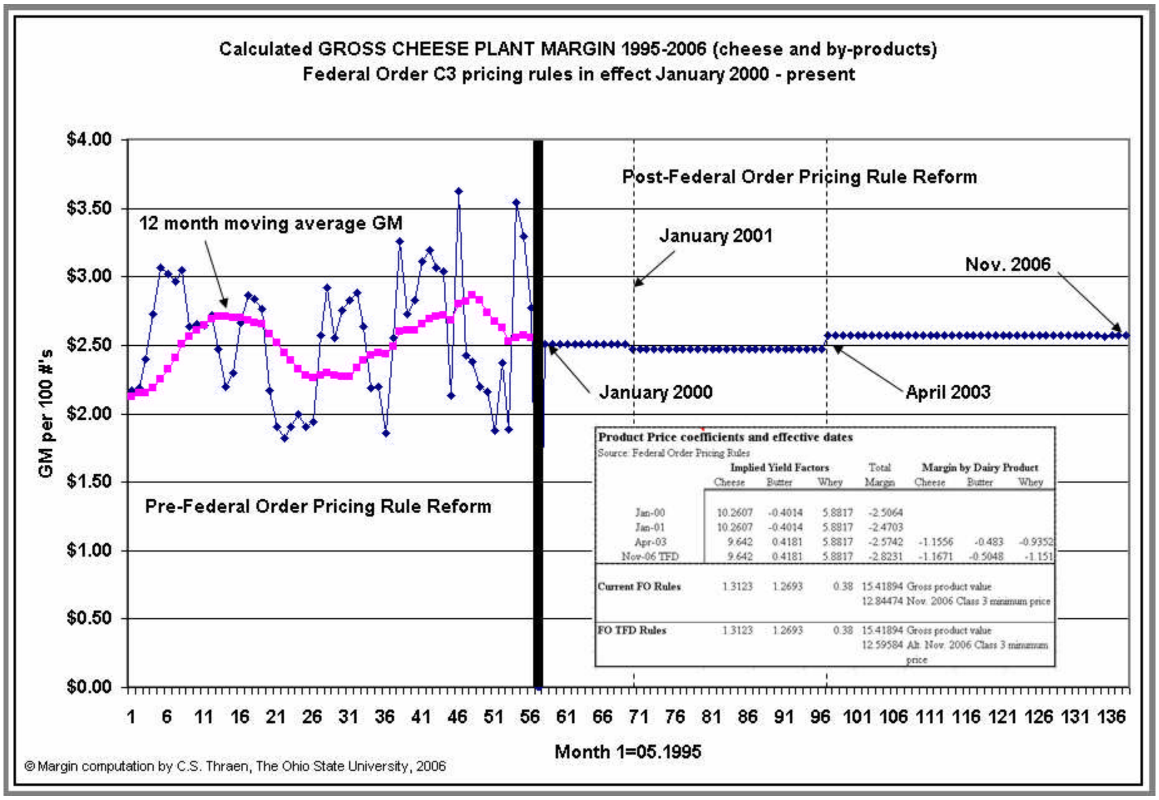
"The base month M-W price estimate was the average price for all milk of manufacturing grade delivered f.o.b. plant or receiving station, before hauling costs and producer assessments under the National Dairy Promotion and Research Program were deducted. It included quantity, quality, component, or other premiums paid to producers, but excluded hauling subsides. The estimates related only to manufacturing grade milk purchased from farmers and did not include Grade A milk diverted to manufacturing uses. The base-month price and test were determined using reports from about 90 plants in Wisconsin and 50 in Minnesota. These plants were distributed geographically over both States and represented all of the major types of processing plants using manufacturing grade milk. The plants purchased about 80 percent of all manufacturing-grade milk sold in the two States. Data needed for the preparation of the base month M-W price were collected by the offices of the NASS Federal-State Agricultural Statisticians in Minnesota and Wisconsin. After the data were summarized and analyzed by the Federal-State Statisticians, they were forwarded to Washington, DC, for final review by the NASS Agricultural Statistics Board and consolidation into the two-State average price and test."

As the price discovery mechanism for the class 3 price, the M-W or BFP price reflects a market level transaction between those buying the milk (processors) and those selling the milk (producers and cooperatives). This price would be adjusted each month to reflect local supply and demand conditions and market prices for the processed products (cheese and butter/nfdm). This adjustment would reflect any changes in plant cost of processing that could be pushed backed to milk sellers in the form or lower milk price or forward to consumers in the form of higher cheese prices. The observed variability reflects the seasonal rise in the cheddar cheese price relative to the price of milk. As cheese prices increased during the calendar year, the higher values are captured by the processing plants.

The current debate is over the fact that the current Federal Order pricing rules lock the processing margin in at 16.5 cents per pound of cheddar cheese, and locks in product yields. This does not recognize that changing relative prices will change these yields. Changes in cheese price brought about by the new Federal Order reform pricing rules also brought about another, less recognized change. The consumer is now completely insulated from increases (or declines) in the processing margin. This was not true of pre-order reform but is now the case. Any increase (decrease) to the reported sales price for the NASS dairy commodities as a result of changes in non-milk processing margin cost, is passed directly back to milk producers in the form of increased (decreased) component values. Unless we find a way to bring the consumer back into the pricing rules, this will be a very difficult problem to address within the Federal Order pricing rules. As I see it, the Agricultural Marketing Service, Federal Order Branch, has three alternatives. None of these are very good.

First they can make only minor adjustments to the make allowance values. This will accomplish nothing. Second they can replace the fixed make allowance values with a make allowance indexed to changing input costs. This will also not be workable over the long-term. Third, they can implement a process of biannual or annual review and make changes on a scheduled basis. This too will not work. What they should do is rule that they made a mistake in adopting administrative rules over markets, and scrap the current system. They should then replace the current system with a NASS based competitive market survey, similar to the old Minnesota-Wisconsin price survey. There would not be a Federal Order minimum Class 3 or Class 4 price. This of course will not sit well with many, producers and processors alike, in the industry. However, I see no other way out of this dilemma.

What do you think? Email me at thraen.1@osu.edu.



Product Price coefficients and effective dates
Source: Federal Order Pricing Rules

	Implied Yield Factors			Total	Margin by Dairy Product		
	Cheese	Butter	Whey	Margin	Cheese	Butter	Whey
Jan-00	10.2607	-0.4014	5.8817	-2.5064			
Jan-01	10.2607	-0.4014	5.8817	-2.4703			
Apr-03	9.642	0.4181	5.8817	-2.5742	-1.1556	-0.483	-0.9352
Nov-06 TFD	9.642	0.4181	5.8817	-2.8231	-1.1671	-0.5048	-1.151
Current FO Rules	1.3123	1.2693	0.38	15.41894 Gross product value 12.84474 Nov. 2006 Class 3 minimum price			
FO TFD Rules	1.3123	1.2693	0.38	15.41894 Gross product value 12.59584 Alt. Nov. 2006 Class 3 minimum price			

Chart 1. Gross Cheese Plant Margin (with by-product values)

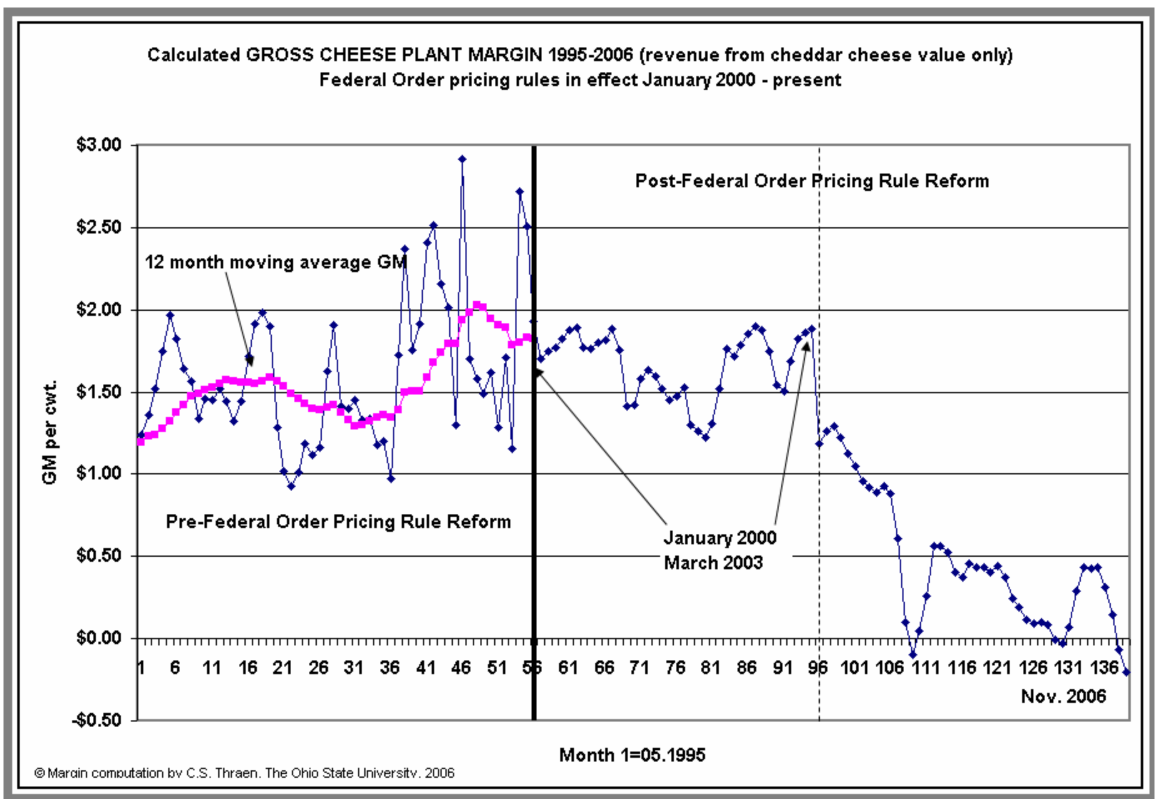


Chart 2. Gross Cheese Plant Margin (without by-product values)