

Impacts of Eliminating Federal Milk Marketing Orders on Federal Nutrition Programs:
A Study of Taxpayer Cost Savings and Program Purchasing Power

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Introduction

Pricing, at the farm level, of most of the milk produced in the United States is governed by a complex federal regulatory system known as Federal Milk Marketing Orders (FMMOs). One of the primary impacts of the FMMOs, through the creation of separate classes of milk according to their end uses, is the pricing of Class I or beverage milk, artificially high relative to the price that would prevail in an unregulated market.

Numerous studies have been conducted over the years to estimate the impact of FMMO ‘classified’ pricing rules on the U.S. economy.¹ The current study represents the first attempt to apply the impact on prices estimated in the previous literature to the federal nutrition assistance programs, which purchase directly and subsidize low-income consumers’ purchases of milk and other dairy products, especially cheese.² It builds on the methodology and data from a study that this author released in September 2011.³ Given the size and scope of the federal nutrition programs and the role of milk and dairy products in those programs, it is reasonable to expect that any federal program that affects the pricing of milk and dairy products will have a significant impact on both taxpayer costs and the purchasing power of the programs.

Purpose of the Paper and Major Findings

For decades, FMMOs have been subject of extensive scrutiny and numerous policy reform proposals, ranging from finessing the price determination formulas to elimination of the orders altogether. This paper analyzes how the elimination of FMMOs would affect the federal nutrition assistance programs, from the taxpayer and program-purchasing power perspectives.

The analysis in this report examines FMMO elimination in two time frames: a look backward to what would have happened had FMMOs been eliminated in 2009; and a look forward to the impacts of program elimination for the ten-year period between 2012 and 2021.

¹ Two recent articles summarize a number of those studies: 1) Chouinard, Hayley et al. “Milk marketing Order Winners and Losers,” Washington State U. School of Economic Sciences Working Paper 2009-03. February, 2009. <http://faculty.ses.wsu.edu/WorkingPapers/LaFrance/WP2009-03-CDLP-RAE-2-2009.pdf> ; 2) Balagtas, Joseph. “Milking Consumers and Taxpayers: The Folly of U.S. Dairy Policy,” American Enterprise Institute report. July, 2011. (The author is an associate professor of agricultural economics at Purdue University.) <http://www.aei.org/docLib/Final-Balagtas.pdf>

² This paper was commissioned by the International Dairy Foods Association. The analysis and production of the report represent the original work of the author, an agricultural economist, who retained complete editorial control over the report.

³ Rosenfeld, Allen. “Impact of NMPF’s Price-Enhancing Dairy Policy Proposals on Federal Nutrition Programs: How the Recommendations Would Increase Taxpayers Costs and Reduce Program Access.” Unpublished Manuscript. October, 2011. http://www.idfa.org/files/resources/dmsp_nutrition_programs_rev_102011.pdf

The study found that elimination of FMMOs would have resulted in more than \$400 million in cost savings for taxpayers and nutrition program participants in 2009. According to the analysis, increases in taxpayer costs required by law to account for the higher prices would have equaled more than 85% of the total cost or about \$340 million. The net increase in the purchasing power of the programs resulting from lower beverage milk prices accounted for more than \$67 million.

For the ten-year period between 2012 and 2021, total costs to the nutrition programs would be reduced by nearly \$5 billion if the FMMOs did not exist during that time frame. Taxpayer costs would be reduced by just under \$3.2 billion while net program purchasing power would be enhanced by just under \$1.5 billion.

In summary, this report demonstrates that elimination of the FMMOs would provide substantial benefits to taxpayers and the nutrition assistance programs by reducing program costs and stretching program dollars for those most in need.

How FMMOs Can Affect Costs of the Federal Nutrition Assistance Program

Milk and other dairy products are essential components of numerous federal nutrition assistance programs. For example, more than six billion half pint servings of milk are provided by the nation's child nutrition programs each year. In fiscal year 2009, the federal government purchased more than \$360 million in dairy products for distribution through the nutrition assistance programs.⁴ In addition, milk and other dairy products remain important components of the diets for many of the country's 40 million SNAP participants and the more than six million participants in the Special Supplemental Nutrition Program for Women Infants and Children (WIC).⁵

When the wholesale and retail prices of milk and other dairy products are affected by federal dairy policies, taxpayer costs and program purchasing power can be affected in numerous ways. In the case of FMMOs, those impacts can take the following forms:

- Lower taxpayer costs for entitlement programs, such as the National School Lunch Program (NSLP), would result as automatic reductions in federal reimbursement are triggered by lower milk prices;
- Lower taxpayer costs for WIC would result as the price of milk was reduced by FMMO elimination;

⁴ FNS. "Group B Procurements by Program and Fiscal Year, FY 2009." August, 2011.

⁵ Food and Nutrition Service (FNS), U.S. Department of Agriculture (USDA). "WIC Program Participation and Costs." <http://www.fns.usda.gov/pd/wisummary.htm>. FNS, USDA. "Supplemental Nutrition Assistance Program Participation and Costs." <http://www.fns.usda.gov/pd/SNAPsummary.htm>

- Increases in the purchasing power of participants in entitlement programs, such as the Supplemental Nutrition Assistance Program (SNAP),⁶ would occur to the extent that automatic decreases in benefits are less than the decreases in milk prices that triggered the benefit decreases;⁷ and
- Reductions in the purchasing power of the non-entitlement, fixed budget, nutrition assistance programs that rely on manufactured dairy products, such as the Commodity Food Distribution Program, would occur due to higher prices for cheese and other manufactured dairy products.

Scope of the Paper

The report covers a wide range of nutrition assistance programs that would be most affected by FMMO pricing regulations. These programs fall into three general categories -- child nutrition programs, direct food consumption subsidies, and commodity distribution programs – and include:

- National School Lunch Program;
- National School Breakfast Program;
- Special Milk Program;
- Child and Adult Care Feeding Program;
- Summer Food Service Program;
- Commodity Supplemental Food Program;
- Temporary Emergency Food Assistance Program;
- Food Distribution Program on Indian Reservations;
- Supplemental Nutrition Assistance Program (SNAP); and
- Special Supplemental Nutrition Program for Women Infants and Children (WIC).

Methodologies and Sources of Data

As discussed in the previous subsection, the price impacts of federal dairy programs can affect federal nutrition assistance programs and their beneficiaries in a number of important ways. The methods and data sets used to estimate the impact of a specific price-reducing or price-enhancing impact of a federal dairy program on the federal nutrition assistance programs are discussed at length in my recent paper on the impacts of the proposed Dairy Market Stabilization Program.

⁶ SNAP was formerly known as the Food Stamp Program.

⁷ The direction of the purchasing power effect is in part dependent on the balance between the value of price decreases for milk and the value of price increases for cheese. In this case, the value of milk price declines is greater than the value of cheese price increases. The same holds for the net cost impact for the WIC program.

(See footnote 1 above for access to that paper and the extensive footnotes concerning federal data used to estimate the impacts of higher dairy prices on the nutrition programs.)

Findings of the Analysis

1. Milk and Dairy Product Price Impacts Resulting from Elimination of FMMOs

The impact of FMMO elimination on milk and dairy product prices was obtained from a 2001 study conducted by University of Wisconsin agricultural economists, Thomas Cox and Jean-Paul Chavas.⁸ Cox and Chavas estimated the impacts of FMMO elimination on wholesale prices for beverage milk and a number of manufactured dairy prices. Although a number of other studies have estimated the price impacts of FMMOs, the Cox-Chavas study was chosen because of the experience of the modelers in dairy policy simulations and the availability of price impacts at the wholesale level in their study.

The percentage price changes for milk and cheese obtained by Cox and Chavas as a result of FMMO elimination were used in the current study to estimate the taxpayer savings and purchasing power improvements for federal nutrition assistance programs. Other manufactured dairy products than cheese were not included in the current study since their impacts on the nutrition programs are very small.

The price impacts of FMMO elimination, derived from the Cox-Chavas study, are presented in Tables 1 through 4. Tables 1 and 2 present the estimated price impacts for the year 2009. Tables 3 and 4 capture the price effects for the 2012-to-2021 period.

⁸ Thomas Cox and Jean-Paul Chavas, "An Interregional Analysis of Price Discrimination and Domestic Policy Reform in the US Dairy Sector," *American Journal of Agricultural Economics*. February, 2001.

Table 1. Impacts of FMMO Elimination on 2009 Beverage Milk Prices

Class I price/gal⁹	1.21
Wholesale price/gal¹⁰	2.73
% wholesale price decrease	13.6%
Wholesale price decrease/gal	0.37
Retail price/gal¹¹	3.14
Retail price decrease/gal¹²	0.37
% retail price decrease	12.0%

Table 2. Effects of FMMO Elimination on 2009 Cheese Prices

Wholesale price/lb.¹³	1.30
% wholesale price increase	4.4%
Wholesale price increase	0.06
Retail price/lb.	4.67
Retail price increase/lb.	0.06
% retail price increase	1.2%

Table 3. Average Annual Effects of FMMO Elimination on 2012-2021 Milk Prices

Class I price/gal¹⁴	1.79
Wholesale price/gal	3.43
% wholesale price decrease	13.6%
Wholesale price decrease/ gal	0.47
Retail price/gal	3.90
Retail price decrease/gal	0.47
% retail price decrease	12.0%

⁹ The Class I farm-level price was obtained from the baseline provided in: Food and Agricultural Policy Research Institute. "The Economic Impact of the Dairy Market Stabilization Program on 2009 Dairy Markets," FAPRI-MU Report #04-11. March, 2011.

¹⁰ Wholesale prices in Tables 1 and 3 were estimated by dividing retail prices by 0.88 as per the cumulative share of retail prices received, on average, by milk processors according to the December 2004 GAO study.

¹¹ Retail prices in Tables 1 and 3 were estimated by dividing the Class I farm price by 0.46. The U.S. General Accountability Office found that farmers received, on average, 46% of retail beverage milk prices. U.S. GAO. "Dairy Industry: Information on Milk Prices, Factors Affecting Prices, and Dairy Policy Options," GAO 05-50. December 2004.

¹² The amount of the retail price decrease for milk was set at the same amount as the wholesale price decrease to reflect the observed asymmetry in milk price change transmission. As the GAO discovered in its 2004 review of studies of milk price transmission, the extent of transmission of farm price decreases through to the retail level tends to lag behind farm price increases. This assumption leads to a more-conservative estimate of the impact of the milk price reductions caused by FMMO elimination.

¹³ The 2009 baseline wholesale price was also obtained from the March 2011 FAPRI report.

¹⁴ 2012-to-2021 baseline prices for Class I milk and cheese were obtained from: Food and Agriculture Policy Research Institute. "U.S. Baseline Briefing Book," FAPRI-MU Report #02-11. March 2011.

http://www.fapri.missouri.edu/outreach/publications/2011/FAPRI_MU_Report_02_11.pdf

Table 4. Average Annual Effects of FMMO Elimination on 2012-2021 Cheese Prices

Wholesale price/lb.	2.31
% wholesale price increase/lb.	4.4%
Wholesale price increase/lb.	0.10
Retail price/lb.	4.22
Retail P increase/lb.	0.10
% retail P increase	2.4%

2. Effects of FMMO Elimination on Specific Nutrition Assistance Programs and Total Impacts

Table 5 below reports the dollar impacts of the elimination of FMMOs on federal nutrition assistance programs for the year 2009. Based on the approach discussed in the third section of this paper, three aspects of those impacts are reported:

- the direct cost savings for taxpayers as a result of mandatory adjustments in benefits and reimbursement for those nutrition assistance programs that are entitlements (i.e., child nutrition and SNAP) and for reduced costs to the WIC program;
- the net changes in purchasing power of the programs and their participants after accounting for any mandatory adjustments that apply to those programs;¹⁵ and
- the total cost reductions represented by the sum of taxpayer savings and net improvement in purchasing power.

¹⁵ Non-entitlement programs with fixed budgets, such the commodity distribution programs, do not have such adjustment mechanisms. The effect of the FMMO elimination on these programs is defined strictly in terms of the increase or decrease in purchasing power due to price decreases or increases. In the case of the distribution programs, purchasing power would be reduced since cheese prices would rise if FMMOs were eliminated.

Table. 5 Cost Savings from Elimination of FMMOs Associated with Federal Nutrition Programs, 2009

	Taxpayer Cost Savings	Net Increase in Program Purchasing Power	TOTAL Cost Savings Due To FMMO Elimination
	(Millions of Dollars)		
School Meals and Summer Food Service Programs	43.0	55.1	98.1
Child and Adult Care Feeding Program	8.8	29.6	38.4
Special Supplemental Nutrition Program for Women Infants and Children (WIC)	93.1	0	93.1
Supplemental Nutrition Assistance Program (formerly Food Stamps)	195.7	(3.5)	192.2
Commodity Distribution Programs	N/A	(13.9)	(13.9)
Total, All Programs	340.8	67.3	408.1

The following key conclusions can be drawn from the results reported in Table 5:

- The total annual cost savings from FMMO elimination would be substantial, totaling more than \$400 billion.
- The annual taxpayer cost savings from FMMO elimination associated with the nutrition programs add up to more than one-third of a billion dollars.
- The purchasing power of the nutrition programs would also be significantly enhanced.

Findings of the analysis for the 2012-2021 period are reported below in Table 6. Key conclusions drawn from the table include the following:

- The cost savings for the ten-year period if FMMOs were eliminated add up quickly to a substantial amount of nearly \$5 billion.
- The direct taxpayer relief associated with the impact of FMMO elimination on the nutrition programs also accumulates substantially, totaling more than \$3 billion for the ten-year period.
- Taxpayers would also see a substantial improvement in the efficiency of their investment as the net purchasing power of the programs would improve by just under \$1.5 billion as a result of FMMO elimination.

Table 6. Federal Nutrition Program Cost Savings from Elimination of FMMOs, 2012-to-2021

	Taxpayer Cost Savings	Net Increase in Program Purchasing Power	TOTAL Cost Savings Due To FMMO Elimination
	(Millions of Dollars)		
School Meals and Summer Food Service Programs	413.0	735.2	1,148.2
Child and Adult Care Feeding Program	79.0	405.0	484.0
Special Supplemental Nutrition Program for Women Infants and Children (WIC)	927.7	0	927.7
Supplemental Nutrition Assistance Program (formerly Food Stamps)	1,749.1	471.7	2,220.8
Commodity Distribution Programs	0	(139.2)	139.2
Total, All Programs	3,168.8	1,472.7	4,641.5

Summary and Conclusions

This paper utilized federal data on nutrition assistance program-related consumption of milk and cheese products and university studies of milk and dairy product pricing to estimate the taxpayer and purchasing power impacts of the elimination of FMMOs on the nutrition programs. The study found that the elimination of FMMOs would result in substantial cost savings, including reductions in federal spending, and net increases in the effectiveness of the programs and the food purchasing power of their participants. If the FMMOs were eliminated in 2011, for example, the total costs savings for the ten year period following elimination would amount to nearly \$5 billion.

At a time when enrollment in the nutrition programs has been growing as the economy has stalled and more Americans have been falling out of the middle class, examination of the impacts of dairy policy on the feeding programs could not be more relevant. This year, enrollment in the SNAP program reached a record level of more than 45 million people, or about 15% of the U.S. population. At a minimum, as the 2012 farm bill looms and Congress grapples with formidable budget issues, the cost-savings revealed in this report can help inform the ongoing debate about the future of federal dairy policy.