Staff Paper #373 **March 2005**

Dairy Programs Face Difficult Future

Ken Bailey

Department of Agricultural Economics and Rural Sociology
College of Agricultural Sciences
The Pennsylvania State University
Armsby Building
University Park, PA 16802-5600

Introduction

Federal dairy programs face a difficult future due to a combination of current budget cuts, future WTO commitments, and a looming Farm Bill. The Presidents Budget is calling for a two-year extension of the Milk Income Loss Contract (MILC) program, along with a reduction in spending under the Dairy Price Support Program (DPSP). A new WTO agreement will almost certainly call for reduced amber box spending, which will directly target the DPSP. And discussions on the up coming Farm Bill will almost certainly call into question the effectiveness of both the MILC program and the DPSP.

National farm organizations like the American Farm Bureau and the National Milk Producers Federation will struggle to find united positions on these important dairy issues. That will be difficult since regional differences will prevent a consensus of opinions. The analysis below clearly indicates that support for the DPSP and the MILC program is highly regional and in direct opposition to each other.

President's Budget

The President's Budget for Fiscal Year 2006 calls for agricultural program cuts (USDA, February 7, 2005). Surprisingly it also includes new program spending. The MILC program is to be extended an additional two years beyond September 30, 2005. This decision by the White House was based on a campaign promise by the President. It also calls for the following cuts:

- Lowering the payment limit cap on total individual payments from $360,000 per year to $250,000.
- Reducing crop and dairy payments to farmers by 5 percent.

The USDA savings under the DPSP were realized by requiring the Secretary of Agriculture to adjust the butter-nonfat dry milk "tilt" in order realize greater budget savings (more about the tilt below). One can assume these tilts will occur more than just twice a year, as is the current authority. The USDA is hinting that the Congress give them very clear authority to manage the DPSP in such a way as to reduce program costs without the resulting political ramifications.

The Office of Management and Budget (OMB) estimated that the President's Budget will result in new spending of $1.2 billion in FY 2006 and FY 2007 due to the MILC program, and savings from the DPSP of $360 million over 5 years (FY 2006-10).

The President's Budget has since gone to the Congress where the Budget committees have assigned spending target reductions to relevant committees of jurisdiction. In this process the OMB numbers are no longer relevant. Instead, the Congress looks to the Congressional Budget Office (CBO). Interestingly, CBO came up with alternative estimates of savings under the President's Budget. Their estimate, called a "score," had costs of $1.307 billion for extension of the MILC program and savings of just $251 million over 5 years for the DPSP.

This budget exercise raises a number of interesting questions for the U.S. dairy industry. First, who benefits from an extension of the MILC payment program? Since an extension will require savings elsewhere in the budget, could the savings come from the DPSP? Who benefits from the existing DPSP program? Finally, if maintaining the MILC program required a greater tradeoff, would the U.S. dairy industry be willing to suffer a reduction in the milk price support level?

Who Benefits from the MILC Program?

The Milk Income Loss Contract Program (MILC) pays dairy producers monthly when the Boston Class I milk price falls below $16.94 per cwt. Payment rates are determined by multiplying this positive difference by 45 percent. Payments are issued to individual producers up to a maximum of 2.4 million pounds of milk produced and marketed per fiscal year.

The program acts as a counter cyclical payment program since payments rise whenever milk prices fall. It is also a targeted program since payments are limited each fiscal year to 2.4 million pounds per farm operation. A 110-cow farm producing 60 pounds of milk per day from each cow will receive the MILC payments on 100 percent of their milk marketings.

The targeting feature of the program makes is fiscally responsible since it limits program payments. It also makes the program less likely to expand the U.S. milk supply since program benefits are tied to smaller farms, those less likely to expand in the future. But this feature also makes it very political since larger dairy farms will receive payments that are only a fraction of their annual gross milk sales. Thus states with large numbers of small dairy farms will likely support the MILC payment program, whereas larger dairy states with fewer farms will not.

Table 1 indicates the major states that received the bulk of the MILC payments over the period December 1, 2001 and December 28, 2004. The top four states in terms of payments accounted for 47 percent of all MILC payments since the beginning of the program. As the data suggest, these are also major milk producing states. With the except of California, the top five states for MILC payments can be characterized as states with large numbers of small dairy farms. Wisconsin alone has over 15,000 licensed dairy herds. This measure of dairy herds by USDA more accurately reflects individual dairy operations or families that market milk.

Table 1. Milk Income Loss Payment Expenditures by Major State

State	Total MILC Payments 1/ Mil $	2004 Milk Production Mil Lbs	Licenses No. Dairy Farms 2004
Wisconsin	414.0	22,085	15,570
New York	186.7	11,650	6,630
Pennsylvania	180.3	10,062	8,720
Minnesota	163.4	8,102	5,810
California	147.9	36,465	2,030
Idaho	38.8	9,093	755
New Mexico	14.3	6,710	170
Washington	35.9	5,416	620
Texas	45.1	6,009	810
Arizona	9.2	3,646	150

Source: USDA.
1/ Period December 1, 2001 through December 28, 2004.

The data in Table 1 indicates that large dairy states in the Midwest and Northeast received the lions share of MILC payments since program inception. That's because these states have the largest concentrations of small family farms. Western States like Arizona, Idaho, New Mexico, Texas and Washington, while significant in terms of milk production, received much less from the MILC program. That's because these states had small numbers of larger dairy farms.

The MILC program is scheduled to terminate September 30, 2005, prior to the expiration date for the current Farm Bill. There have been legislative proposals to extend this deadline. U.S. Senator Rick Santorum (R-PA) introduced Senate Bill 307 earlier this year to extend the MILC payment program in its current form through September 30, 2007. A similar bill was introduced in the House (H. 859) by U.S. Representative Collin Peterson (D-MN). Both bills did not alter the volume limitation cap of 2.4 million pounds. Other proposals called for an extension of the MILC payment program and expanded the volume of milk eligible for program payments. Many Western legislators, however, are opposed to an MILC extension. In a letter to colleagues dated March 17, 2005, seven U.S. Senators from the West opposed efforts to extend the MILC payment program (Mike Crapo (R-ID), Jeff Bingaman (D-NM), Larry Craig (R-ID), Pete Domenici (R-NM), John Cornyn (R-TX), Dianne Feinstein (D-CA), and Barbara Boxer (D-CA).

Who Benefits from Price Support Program?

The Dairy Price Support Program (DPSP) is managed by the USDA's Farm Service Agency. This program allows dairy processors to sell surplus quantities of butter, cheese, or nonfat dry milk to the Commodity Credit Corporation (CCC) at prices linked to the support price of milk. This program provides a floor for these commodity prices, effectively placing a floor on the manufacturing value for milk. Farmers theoretically indirectly benefit from this program.

The support price for milk has been at $9.90 per cwt for milk testing 3.67 percent milk fat since August 15, 1999 (USDA, FSA July 2004). That price is linked to CCC purchase prices for butter and nonfat dry milk, and cheese. There is one support price formula for butter and nonfat dry milk, and another for cheese. Given a fixed support price for milk, the CCC purchase prices for butter and nonfat dry milk can only be raised or lowered if the price of the other product is changed in the opposite direction (called a "tilt"). Hence the CCC purchase price for nonfat dry milk can be lowered from the current level of $0.80 per pound, but only if the butter price is raised. That would maintain the support price for manufacturing milk.

Figures 1, 2 and 3 show the relationship between wholesale commodity prices for nonfat dry milk, butter and cheese in relation to the respective CCC purchase prices. Two things are clear. First, the market prices for butter and cheese are supported by the market place, not the DPSP. Strong market demand for these products has kept their prices well above support price levels. Second, the market price for nonfat dry milk is determined in most months by the CCC purchase price for nonfat dry milk. In fact, the only reason the Western price of nonfat dry milk is currently above the CCC purchase price is because of strong international prices. Whenever international prices are below the CCC purchase price of nonfat dry milk, there are very few commercial exports of nonfat dry milk and surplus powder is directed to the DPSP.

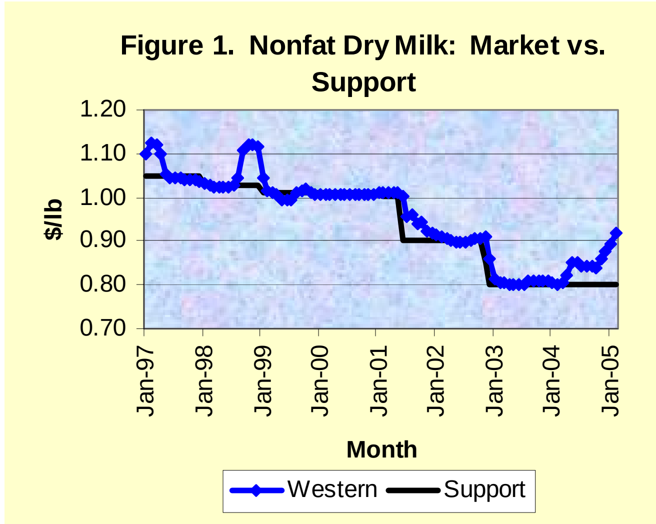
Figure 1. Nonfat Dry Milk: Market vs. Support
$/lb
1.20
1.10
1.00
0.90
0.80
0.70
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Month
Western
Support

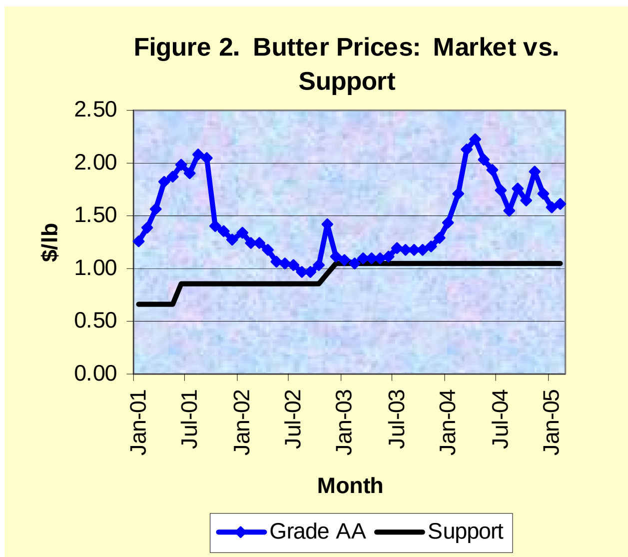
Figure 2. Butter Prices: Market vs. Support
$/lb
2.50
2.00
1.50
1.00
0.50
0.00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Month
Grade AA
Support

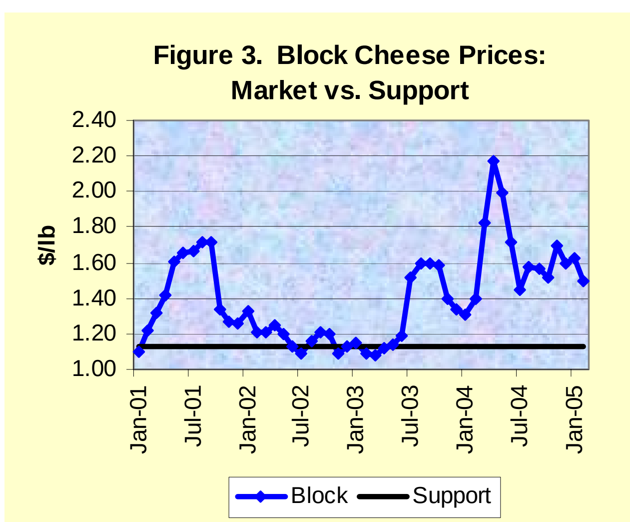
Figure 3. Block Cheese Prices: Market vs. Support
$/lb
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Block
Support

It is clear that the major beneficiaries of the DPSP are those states that produce the bulk of the nonfat dry milk in the U.S. California alone produces nearly half of the nonfat dry milk in the U.S. Unfortunately, outside of Idaho and Utah, we don't know what other states produce nonfat dry milk since USDA does not report data for states with fewer than 3 plants (USDA, Dairy Products 2003 Summary). However, the data in Table 2 indicates which states accounted for the bulk of CCC purchases of nonfat dry milk under the DPSP. California alone averaged 50-60 percent of these purchases over the past 5 fiscal years. The Western states together accounted for around 90 percent of all CCC purchases of nonfat dry milk.

Table 2. U.S. Production of Nonfat Dry Milk and CCC Purchase under the Dairy Price Support Program

	% US Production	CCC Purchases of Nonfat Dry Milk Under the DPSP				
State	NFDM 2003	FY03	FY02	FY01	FY00	FY99
CA	46.50%	319,540	399,212	263,754	287,326	116,091
ID	9.80%	101,320	58,568	43,178	28,425	395
NM	NA	55,416	20,673	8,181	22,282	13,951
WA	NA	47,301	56,163	46,358	77,895	35,992
AZ	NA	46,393	34,594	21,259	12,581	1,313
CO	NA	458				
OR	NA		265		1,587	1,265
PA	NA	33,656	30,928		5,098	91
TX	NA	21,211	25,078	3,671	23,856	6,576
MA	NA	6,133	4,918			
IN	NA	2,332	1,785		2,653	
MI	NA	1,200		83		
LA	NA	977	6,300		4,579	4,768
FL	NA					
IL	NA				88	1,983
IA	NA		2,164	2,923	15,278	3,446
CA as % total		50.2%	62.3%	67.7%	59.7%	62.5%
W as % total		89.7%	88.9%	98.3%	89.3%	90.9%

Western States: California, Idaho, New Mexico, Washington, Arizona, Colorado, and Oregon.

The fact is the Federal Milk Marketing Orders and the California State Order for milk determines what a plant must pay for milk ingredients that go into producing nonfat dry milk (protein and lactose). The price support program places a floor on the wholesale price of nonfat dry milk (the sale price for the plant). Hence these three programs act in concert to fix a gross margin for Western nonfat dry milk processing plants. Without the price support program, wholesale prices for nonfat dry milk would be more volatile and influenced by global prices. That would mean the gross margin for processors would no longer be fixed. This would create greater price risk. If the margins are squeezed, those losses would likely be forwarded to local dairy producers.

One benefit of not having the price support program, however, would be that these large Western powder plants would have an incentive to make greater investments in more value-added protein processing (i.e. milk protein concentrates, casein, caseinate, etc.). They would use good business sense and diversify their portfolio of products made from skim milk. One result would be that the U.S. would likely import less of these high value products.

Conclusions

The current budget restrictions in the President's Budget for Fiscal year 2006 are just the beginning of possible changes to existing dairy programs. Some of these challenges were discussed in a recent paper by Professor Ed Jesse of the University of Wisconsin. Both the MILC program and the DPSP will face renewed challenges. The combination of politics, budget restrictions, global trade agreements, and economic realities will eventually result in new dairy programs in the upcoming Farm Bill.

According to Jess, the MILC program in its current form is not viable long-term. He argues that the production caps and program costs will make it vulnerable. According to Jesse, "The MILC target price is too high relative to average milk prices over the past several years." It's also not clear that the MILC program will survive the current budget cuts imposed in the President's budget.

Maintaining the current DPSP appears to be a safe bet for the existing President's budget and for inclusion in the new Farm Bill. But this program also has serious drawbacks. While it is marketed as a national program, it clearly has defined regional benefits, just like the MILC program.

In the end, somewhere in the legislative process, a compromise may be reached whereby the MILC program is extended for another two years and later added in the Farm Bill (after some adjustments). However, for now, because of the added program costs in the current budget, extension of the MILC program can only be included if some cuts were made to the DPSP. These cuts could be as little as requiring the Secretary of Agriculture to revisit the butter/powder tilt more than just twice a year in order to reduce program costs. But a compromise may require more drastic cuts, such as a reduction in the support price for milk. In the end, regional politics will determine which programs are maintained, and which are cut.

References

Jesse, Ed. "Dairy Policy in the Next Farm Bill: An Early Assessment." Marketing and Policy Briefing Paper No. 89. Department of Agricultural and Applied Economics. University of Wisconsin. March 2005.

USDA. "Johanns Outlines President's FY 2006 Agriculture Budget. News Release No. 0038.05, February 7, 2005, Washington, DC.

USDA, Farm Service Agency. "Milk Price Support Program." Fact Sheet. July 2004.

USDA, Farm Service Agency. "Milk Income Loss Contract Program." Fact Sheet: Electronic Edition. November 2002.

USDA, National Agricultural Statistics Service. "Milk Production." February 2005.

USDA, National Agricultural Statistics Service. "Dairy Products 2003 Summary." April 2004.