



Previewing Dairy Policy Options for the Next Farm Bill

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Summary

Financial stress encountered by dairy farmers in recent years has led Congress and the industry to reconsider how to deal with fluctuations in milk prices and financial prospects for dairy farmers. Some Members have voiced interest in alternatives to current federal programs (which expire in 2012). Alternative policies could either be incorporated into the next omnibus farm bill or enacted separately before expiration.

The dairy industry is currently developing or advocating a variety of policy changes. All of the proposals discussed in this report—loosely categorized as either supply management, market-based, or tiered-pricing—have implications for U.S. dairy farmers, competitiveness of the U.S. dairy industry, and international trade.

Supply management proposals such as H.R. 5288 and S. 3531, introduced in the 111th Congress, are designed to prevent depressed farm milk prices while reducing price volatility through supply management. The National Milk Producers Federation (NMPF) also has proposed a market stabilization component as part of its comprehensive package of suggested reforms to dairy policy. Supporters of price stabilization and supply management say that inherent incentives to overproduce need to be offset by a program to manage supplies in a measured way. Critics of supply management, including dairy processors, contend that such measures could reduce the competitiveness of the U.S. dairy industry, limit its incentive to innovate, and raise consumer prices, because, they argue, a pricing system based on supply control and/or cost of production potentially rewards inefficiency.

The market-based approach, including a separate element of the NMPF package, represents an opposing view on how the federal government should address the problem of farm milk price volatility and periodic financial stress for dairy farmers. This approach contends that, because it is difficult to manage milk supplies and prices administratively, the best approach is to provide a government program that helps farmers manage risk associated with volatile prices of milk and feed. Specifically, a new “safety net” would be established to protect a dairy farmer’s “margin”—that is, the farm price of milk minus feed costs—regardless of current price levels. Critics expect that incentives to overproduce will aggravate the financial woes of the dairy industry indefinitely, and thus argue that controlling potential price variability and combating depressed farm prices with supply management is necessary for the long-term financial health of producers.

The third area of potential policy change is to alter the current pricing approach used in federal milk marketing orders (FMMOs) to directly increase dairy farm revenue. For example, one potential change to base milk pricing in FMMOs on the cost of milk production (i.e., S. 1645, introduced in the 111th Congress) would imply higher prices received by dairy farmers. However, some are concerned that the long-run competitiveness and stability of the U.S. dairy industry could be at risk because of the unknown effectiveness of provisions to discourage overproduction.

On March 3, 2011, the U.S. Department of Agriculture’s Dairy Industry Advisory Committee approved its final report to the Secretary, who established the committee to make recommendations on how USDA can best address dairy farm profitability and milk price volatility. Many of the group’s 23 recommendations fall into the market-based approach, including a recommendation for margin insurance on quantities of milk that exceed the cap for the Milk Income Loss Contract Program (MILC) and a tax-deferred savings accounts for dairy farmers. The committee narrowly passed a recommendation for a supply management program.

Contents

Introduction	1
Dairy Farm Structure.....	1
Brief History of Dairy Marketing and Policy	4
Current Dairy Policy	5
Dairy Product Price Support Program (DPPSP).....	5
Federal Milk Marketing Orders (FMMOs)	5
Milk Income Loss Contract (MILC) Program.....	6
Dairy Export Incentive Program (DEIP).....	7
Import Barriers	7
Privately Run Dairy Herd Buyout.....	8
Livestock Gross Margin Insurance for Dairy	8
Dairy Program Costs.....	8
Dairy Policy Options.....	9
Supply Management	10
Bills in the 111 th Congress (H.R. 5288 and S. 3531).....	10
Dairy Market Stabilization Program (DMSP) and Marginal Milk Pricing (MMP) Program.....	13
Views on Supply Management	15
Market-Based Plans	17
Margin Insurance	17
Farm Savings Account Program	19
Improved Price Discovery.....	19
Tiered Pricing	20
The Federal Milk Marketing Improvement Act of 2009 (S. 1645, 111 th Congress)	20
Cooperative Marketing Initiative.....	21
Ration-all Milk Pricing Program	22
Recommendations by the Dairy Industry Advisory Committee	22
Existing Programs and Authorities	23
Price Protection, Stabilization, and Regulation	23
Income Protection and Stabilization	23
Profitability and Market Improvement.....	24
Concluding Remarks.....	24

Figures

Figure 1. Dairy Farms and Productivity.....	1
Figure 2. Milk Production, Number of Cows, and Productivity.....	2
Figure 3. Average Cost of Milk Production.....	4
Figure 4. Actual and Projected Spending for Dairy Programs.....	9

Tables

Table 1. Trend in Dairy Farm Numbers Depends on Farm Size..... 3
Table 2. Dairy Farm Numbers and Average Size in Selected States, by Farm Size..... 3
Table 3. Comparison of Dairy Supply Management Provisions in Selected Proposals 12

Contacts

Author Contact Information 25

Introduction

Financial stress in the dairy industry in 2009, brought on largely by sharply lower milk prices, activated standing federal programs to support dairy farmers. In calendar year 2009, the federal government spent more than \$1 billion to support the industry through the Milk Income Loss Contract (MILC) Program, the Dairy Product Price Support Program (DPPSP), and the Dairy Export Incentive Program (DEIP). After appeals from dairy farmers for more financial assistance, Congress granted another \$350 million in October 2009 in the form of supplemental payments to dairy farmers and government purchases of dairy products for domestic feeding programs.

Under financial pressure, many dairy farmers sent milk cows to slaughter and some went out of business. The subsequent decline in milk production and a simultaneous rebound in foreign demand have lifted the farm price for milk. Still, financial concerns remain for dairy farmers who lost significant amounts of farm equity during the milk price collapse. According to the U.S. Department of Agriculture (USDA), the number of dairy farms in the United States declined from 67,000 to 65,000 during 2009. The total fell to 62,500 as of December 31, 2010.

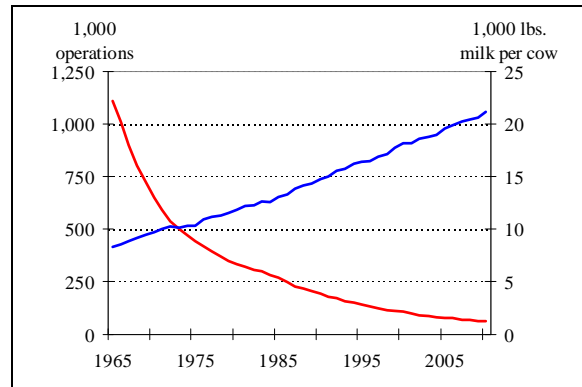
The financial stress of 2009 and similar episodes over the years have led the industry and Congress to reconsider how to handle fluctuations in milk prices and financial prospects for dairy farmers. Some members have voiced interest in developing alternatives to current policies (which expire in 2012) and incorporating them in the next omnibus farm bill in the 112th Congress or enacting the policies separately before then. As part of groundwork for the next farm bill, the House Committee on Agriculture held a hearing on dairy policy on April 20, 2010. Similarly, the Administration has been collecting information through the USDA-established Dairy Industry Advisory Committee (DIAC). On March 3, 2011, the DIAC approved its final report with recommendations to Secretary of Agriculture.

This report provides background on the U.S. dairy industry, including an overview of dairy farm numbers and industry structure, and a brief history of dairy marketing and policy. Next, current dairy policy is reviewed. Finally, the report examines options for federal dairy policy being considered by the industry and/or Congress.

Dairy Farm Structure

Increased dairy cow output and advances in dairy farm technology and management have led to a sharp reduction of the number of dairy farms, particularly during the 1960s and 1970s (**Figure 1**). Larger operations tend to have lower per-unit costs, and as firms reduce their costs, they become more competitive and can increase sales and market share. Firm

Figure 1. Dairy Farms and Productivity



Source: U.S. Department of Agriculture, National Agricultural Statistics Service "Quick Stats."

Notes: Number of dairy operations (any place having one or more head of milk cows on hand) as of December 31.

size is a limiting factor for growth, however, once the gains to economies of scale have been exhausted.¹

For the dairy industry, the number of farms continues on a downward trajectory, though at a much slower pace during the last decade than in the late 1960s and 1970s. Annual losses averaged 96,000 operations in the late 1960s and 37,000 in the 1970s. In recent years, the annual drop in dairy farm operations has slowed to about 2,000 to 5,000 farms per year, with operations totaling 62,500 on December 31, 2010.

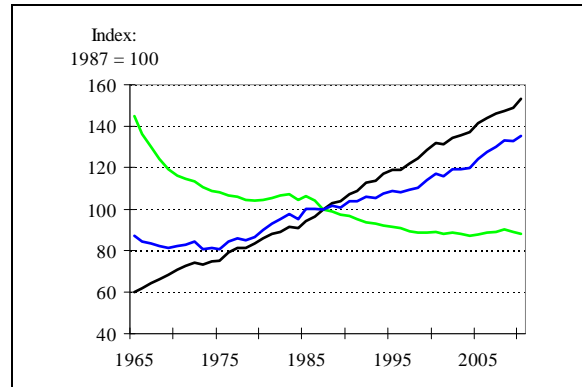
Increases in productivity have more than offset declines in the numbers of dairy farms and cows, resulting in a steady upward trend in total milk production (**Figure 2**). Meanwhile, domestic demand for milk, on a per-capita basis, has grown slowly, at 0.4 % per year since 1990.² Rising consumption of dairy products such as cheese has offset a decline in fluid milk consumption. Exports of dairy products have increased in recent years, reaching record levels in 2008.

The trend in farm numbers depends on farm size. Between 2005 and 2009, farms with fewer than 500 cows registered declines, while farms with 500 to 999 cows held steady (**Table 1**). In contrast, the number of farms with 1,000 or more cows increased 20%, driven by significantly lower costs of production. In 2005, dairy farms with 1,000 cows or more had average costs of production of \$13.59 per cwt, 15% below the average for farms with 400-999 head and 35% below the cost for farms with 100-199 head. Average costs were much higher for even smaller operations.³

The structure of dairy farms also varies by region of the country (**Table 2**). The average farm size in western states (e.g., California, with 850 cows per farm) is well above the U.S. average of 133 cows per farm. In contrast, Wisconsin has many small farms and an average farm size of 88 cows.

Figure 2. Milk Production, Number of Cows, and Productivity

(rising milk production per cow offsets the declining number of milk cows)



Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

¹ For background on milk production and dairy farm structure, see Don P. Blayney, *The Changing Landscape of U.S. Milk Production*, U.S. Department of Agriculture, Economic Research Service, Statistical Bulletin Number 978, Washington, DC, June 2002, <http://www.ers.usda.gov/publications/sb978/sb978.pdf>.

² Jerry Cessna, "Situation and Outlook for the U.S. Dairy Industry," Agricultural Outlook Forum 2010, Arlington, VA, February 19, 2010, http://www.usda.gov/oce/forum/2010_Speeches/Speeches/DairyOutlook2010.pdf.

³ James M. MacDonald and William D. McBride, *The Transformation of U.S. Livestock Agriculture—Scale, Efficiency, and Risks*, U.S. Department of Agriculture, Economic Research Service, Electronic Information Bulletin Number 43, Washington, DC, January 2009, p. 14, <http://www.ers.usda.gov/publications/EIB43/>.

Table 1. Trend in Dairy Farm Numbers Depends on Farm Size
(number of farms by herd size)

	1-49 head	50-99 head	100-499 head	500-999 head	1,000+ head	Total
2005	37,325	23,185	14,717	1,700	1,373	78,300
2006	35,305	22,115	14,327	1,700	1,433	74,880
2007	33,975	19,330	13,370	1,720	1,600	69,995
2008	33,200	17,800	12,650	1,720	1,630	67,000
2009	31,900	17,300	12,450	1,700	1,650	65,000
2010	31,000	15,500	12,600	1,720	1,680	62,500
Change 2005-2010	- 17%	-33%	-14%	+1%	+22%	-20%

Source: U.S. Department of Agriculture, National Agricultural Statistics Service “Quick Stats.”

Notes: Number of dairy operations (having one or more head of milk cows on hand) as of December 31 of each year.

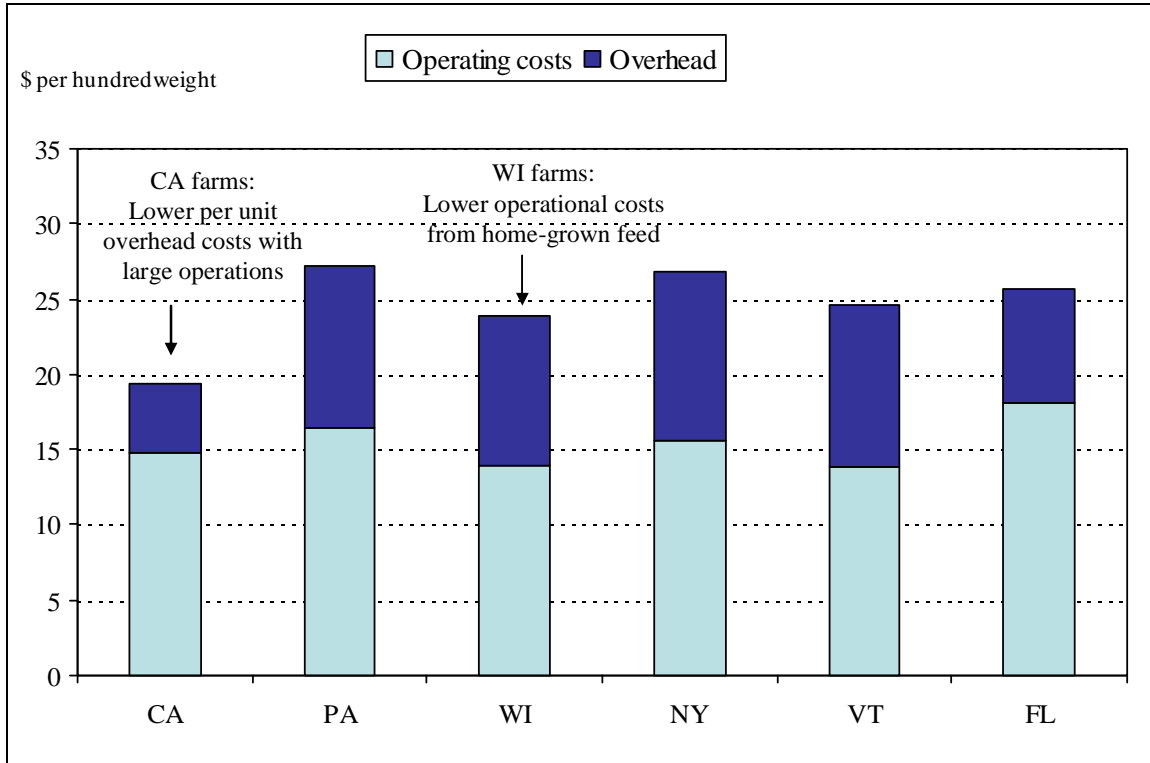
Table 2. Dairy Farm Numbers and Average Size in Selected States, by Farm Size

Selected state	Number of farms	Number of cows (1,000)	Cows per farm
California	2,165	1,841	850
Idaho	811	536	661
Texas	1,293	404	313
Florida	422	120	284
Michigan	2,647	344	130
New York	5,683	626	110
Vermont	1,219	140	115
Wisconsin	14,159	1,249	88
Pennsylvania	8,333	553	66
U.S.	69,890	9,267	133

Source: 2007 Census of Agriculture.

Cost structure varies by state (**Figure 3**). In the western states, where large dairy farms dominate the industry, operating costs have been affected by high feed costs in recent years because these farms purchase much of their feed (alfalfa and grain prices reached record levels in 2008). However, per-unit overhead costs tend to be relatively low for these operations because fixed costs (e.g., buildings/equipment) can be spread over a large number of animals. In other parts of the country, such as Wisconsin, where producers feed more grain and hay that is produced on the farm, operating costs tend to be lower when grain and feed prices rise. However, these farms tend to have fewer dairy cows, so per-unit overhead costs are relatively high.

Figure 3. Average Cost of Milk Production



Source: U.S. Department of Agriculture, Economic Research Service.

Notes: Estimates for the month of December 2010.

Brief History of Dairy Marketing and Policy

In the mid-1850s, most milk was consumed on farms by the family or fed to livestock; some was sold for very local use. As urban areas grew, milk was sent to processors to supply these areas with both fluid and manufactured products. By the turn of the century, producers banded together into cooperative associations to bargain with milk handlers (fluid milk processors) as a way to offset handler market power stemming from a large number of producers facing a small number of processors. In the early 1900s, dairy farmers increasingly looked toward cooperatives as a means of marketing their milk, specifically by negotiating with milk buyers using collective bargaining. By 1925, handlers were paying farmers for milk according to its use (fluid or manufactured products). This concept is known as “classified pricing” and is still in use today. Milk for fluid use has the highest value, reflecting higher transportation and handling costs.⁴

When the Great Depression hit, demand dropped sharply and the voluntary classified pricing system broke down. Federal milk marketing orders were established (and continue to function

⁴ Material for this section is drawn from (1) Andrew M. Novakovic, “Economic History of Dairy Markets,” presentations at the 16th Annual National Workshop for Dairy Economists and Policy Analysts, Washington, DC, April 24, 2009, <http://www.cpdmp.cornell.edu/CPDMP/Pages/Workshops/Washington09/PDFs/Novakovic.pdf>; and (2) Alden C. Manchester, *The Public Role in the Dairy Economy—Why and How Governments Intervene in the Milk Business* (Boulder, CO: Westview Press, Inc., 1983).

today) to stabilize the market and help equalize the market power of dairy farmers with dairy processors (see “Federal Milk Marketing Orders (FMMOs),” below). Another motivation for establishing FMMOs was to ensure that consumers had adequate and dependable supplies of milk at reasonable prices. During this same period, legislators enacted import quotas on dairy products to protect producers from foreign competition. Eventually, during World War II, demand increased for farm commodities, including milk. In the late 1940s, the government began supporting the price of milk (and other commodities) to protect against price declines through a price support program for milk, now called the Dairy Product Price Support Program (DPPSP).

Current Dairy Policy

Current federal dairy policy has essentially five components: (1) dairy product price support (through the DPPSP), (2) federal milk marketing orders (FMMOs), (3) direct payments under the Milk Income Loss Contract (MILC) Program, (4) the Dairy Export Incentive Program (DEIP), and (5) tariff-rate quotas on dairy imports.⁵ A nongovernment program that has been used in recent years and can affect milk production (called Cooperatives Working Together or CWT) is also described below. This section concludes with the Livestock Gross Margin for Dairy Cattle, an insurance policy that the federal government recently began subsidizing, which has lowered the cost of purchase for producers.

Dairy Product Price Support Program (DPPSP)

Under the DPPSP, the federal government stands ready to purchase butter, American cheese, and nonfat dry milk from dairy manufacturers at specified minimum prices. Purchases under the DPPSP, which occurred during FY2009 when demand declined, essentially prevent market prices for dairy products from dropping below support levels, which indirectly supports the farm price of milk. In contrast, when product prices are above support levels, the DPPSP is not a factor in the market and farm milk prices reflect prevailing supply and demand conditions. Year-to-year changes in farm milk prices have increased since the mid-1990s because price support levels have been reduced below typical market-average prices through legislation.⁶ USDA’s Farm Service Agency administers the DPPSP. Section 1501 of the enacted 2008 farm bill (P.L. 110-246) extended the program through December 31, 2012.

Federal Milk Marketing Orders (FMMOs)

Marketing orders were created in the 1930s to balance market power between farmers and milk handlers while reducing “destructive competition” between milk producers that can drive down prices to their mutual detriment.⁷ FMMOs mandate minimum prices that processors in milk

⁵ For more on the interaction between the price support program and federal milk marketing orders, as well as dairy pricing issues in general, see CRS Report R40903, *Dairy Pricing Issues*, by Dennis A. Shields. For information on federal dairy policy, see CRS Report R40205, *Dairy Market and Policy Issues*, by Dennis A. Shields.

⁶ Current law provides price support for specific dairy products. Under previous law, the support price for farm milk was statutorily set at \$9.90 per hundredweight, and USDA was given the administrative authority to establish a combination of dairy product purchase prices that indirectly supported the farm price of milk at \$9.90.

⁷ See testimony by Andrew M. Novakovic, Cornell University, at the hearing conducted by the Senate Committee on Agriculture, Nutrition, and Forestry, *Legislative Responses to the Dairy Crisis: Reforming the Pricing Structure*, 111th (continued...)

marketing areas must pay producers or their agents (like the dairy cooperatives) for delivered milk depending on its end use. Under FMMOs, the farm price of approximately two-thirds of the nation's fluid milk is regulated in 10 geographic marketing areas. Some states, California being the largest, have their own milk marketing regulations instead of federal rules.

Unlike other dairy programs, FMMOs are permanently authorized under the Agricultural Marketing Agreement Act of 1937, as amended, (7 U.S.C. § 601-674), and therefore do not require periodic reauthorization by Congress. The authorizing statute requires USDA to use formal rulemaking procedures to make changes to orders. Congress also makes periodic revisions (e.g., the 2008 farm bill streamlined the rulemaking process). Any interested party can petition USDA to create a new order or amend an existing one. USDA's Agricultural Marketing Service administers the federal order system.

Minimum FMMO milk prices are based on current wholesale dairy product prices collected by USDA's National Agricultural Statistics Service in a weekly survey of manufacturers.⁸ As such, FMMO minimum prices rise and fall each month with overall changes in the wholesale dairy product market. Under marketing orders, the price farmers receive for their milk is calculated based on these minimum prices and on how milk is utilized (fluid vs. manufacturing) in the marketing order, which collectively is called "classified pricing." The classified pricing system requires handlers to pay a higher price for milk used for fluid consumption (Class I products) than for milk used in manufactured dairy products such as yogurt, ice cream, and sour cream (Class II), cheese (Class III), and butter and dry milk products (Class IV).

FMMOs also address how market proceeds are distributed among the producers delivering milk to federal marketing order areas—called "pooling"—whereby all farmers receive a "blend price" each month based on order-wide revenue. The blend price is the weighted average price in a marketing order, with the weights being the volume of milk sold in each class of utilization.

Milk prices actually received at the farm level reflect the minimum prices paid by handlers under the marketing orders, plus any premiums generated from local supply/demand factors, such as a seasonal mismatch between supply and demand or special retail promotions, minus costs such as transport and marketing charges. FMMO regulations do not apply to retail product prices. Instead, retail prices reflect prices at the wholesale (manufacturer) level and the amount of competition among retailers in local markets.

Milk Income Loss Contract (MILC) Program

Section 1506 of the 2008 farm bill (P.L. 110-246) extended authority for the Milk Income Loss Contract (MILC) Program until September 30, 2012. Under the MILC Program, participating dairy farmers nationwide are eligible for a federal payment whenever the minimum monthly price for farm milk used for fluid consumption (called "Class I") in Boston falls below \$16.94 per cwt. Eligible farmers then receive a payment equal to 45% of the difference between the \$16.94 target price and the lower monthly price. The payment percentage rate declines to the 34% for the final

(...continued)

Cong., 1st sess., August 27, 2009, <http://ag.senate.gov/site/calendar.html>.

⁸ Many buyers and sellers of manufactured dairy products (e.g., cheese, butter, nonfat dry milk) look to prices established in the spot and futures markets on the Chicago Mercantile Exchange as benchmark price levels for the industry.

month of program authority (September 2012). The payment quantity is limited to 2.985 million pounds of annual production (equivalent to about a 160-cow operation). The eligible production limit declines to 2.4 million pounds for the last month of program authority. USDA's Farm Service Agency administers the MILC Program.

Since the inception of the MILC Program, large dairy farm operators have expressed concern that the payment limit has negatively affected their income. For larger farm operations, their annual production is well in excess of the limit, and any production in excess of that receives no federal payments.

Dairy Export Incentive Program (DEIP)

First authorized in 1985, the Dairy Export Incentive Program (DEIP) provides cash bonus payments to U.S. dairy exporters, subject to limits on both quantity and value. The program was initially intended to counter foreign—mostly European Union—dairy subsidies (while removing surplus dairy products from the market), but subsequent farm bill reauthorizations have added market development to the role of DEIP. Payments since the program's inception have totaled more than \$1 billion. The program was active throughout the 1990s, peaking in 1993 with \$162 million in bonuses. The program had not been used since FY2004 until USDA announced its reactivation on May 22, 2009.⁹ Bonuses worth \$19 million were awarded in FY2009. Section 1503 of the 2008 farm bill (P.L. 110-246) extended the authority for the DEIP until December 31, 2012.

Import Barriers

Until 1995, imports of almost all dairy products (butter, cheese, dry milk) were subject to Section 22 import quotas. Section 22 of the Agricultural Adjustment Act of 1933 (7 U.S.C. 624(f)) requires the President to impose quantitative limitations or fees on imports that the President finds are being, or are practically certain to be, imported under such conditions and in such quantities as to render or tend to render ineffective, or materially interfere with, any USDA domestic support or stabilization program. Dairy products that were not covered by Section 22 quotas included casein, caseinates, whey, and soft-ripened cow's milk cheese (e.g., brie).

Legislation to implement the World Trade Organization (WTO) Uruguay Round Agriculture Agreement (P.L. 103-465) amended Section 22 to prohibit the application of quantitative import limitations or fees on products from other WTO members. Tariff rate quotas (TRQs) for dairy products were established in the U.S. tariff schedule.¹⁰ Importers of dairy products under the low tariff in a TRQ must apply for a license from USDA. No license is required for over-quota (higher) imports, which are subject to a higher tariff.

⁹ CRS Report R40584, *Implications of Reactivating the Dairy Export Incentive Program (DEIP)*, by Dennis A. Shields and Charles E. Hanrahan.

¹⁰ A tariff rate quota or TRQ imposes a low import duty on quantities within a quota, while quantities above the quota are charged higher duty rates. See CRS Report R40839, *Proposed Import Restrictions on Milk Protein Concentrates (MPCs)*, by Dennis A. Shields and Charles E. Hanrahan.

Privately Run Dairy Herd Buyout

The National Milk Producers Federation (NMPF), the largest trade association representing milk producer cooperatives, currently operates its own, producer-funded dairy program called Cooperatives Working Together (CWT). The program has two facets: herd buyouts and dairy product export assistance. During 2008 and 2009, five installments of the program retired a total of 276,000 cows and 5,700 bred heifers, representing 5.4 billion pounds of annual milk production.¹¹ (USDA estimated annual milk production in 2009 at 189 billion pounds.) According to CWT, the organization conducted its final herd buyout in May/June 2010 after determining that export assistance would be more helpful than additional buyouts. The program is funded by assessments on dairy producers from 35 dairy cooperatives (as well as individual producers), representing nearly 70% of the total milk supply in the United States. No federal funding is involved.

Livestock Gross Margin Insurance for Dairy

The Livestock Gross Margin for Dairy Cattle insurance policy (LGM for Dairy Cattle) is available in many states to help dairy producers manage price risk. LGM and a large array of crop insurance products are administered by USDA's Risk Management Agency (RMA). The policy provides protection against a loss in gross margin (market value of milk minus feed costs). At the end of an 11-month insurance period, producers receive an indemnity if the actual gross margin is less than the guarantee. The policy uses futures prices for corn, soybean meal, and milk to determine the actual and guaranteed margins (local milk prices are not used for the calculations). LGM for Dairy Cattle became available in 2008. Observers have commented that participation has been low because (1) producers are still learning how to use it, and (2) the policy premium has not been subsidized historically (unlike most other RMA products).

In 2010, USDA announced it would begin subsidizing policy premiums and make other changes to the dairy insurance product to encourage its use, such as shifting the due date for the premium paid by the producer from the beginning of the policy period to the end (approximately one year later). Policies are now subsidized at approximately 40% of the total premium (compared with about 60% overall for the crop insurance program).

The Federal Crop Insurance Act, as amended (7 U.S.C. 1501 *et seq.*), limits expenditures on livestock policies to \$20 million per year (7 U.S.C. 1523). According to observers, USDA's changes to the dairy insurance policy have increased demand for the product, and Department officials have indicated that the spending limit likely will be reached in FY2011, at which point the subsidy would not longer be offered for the remainder of the fiscal year.

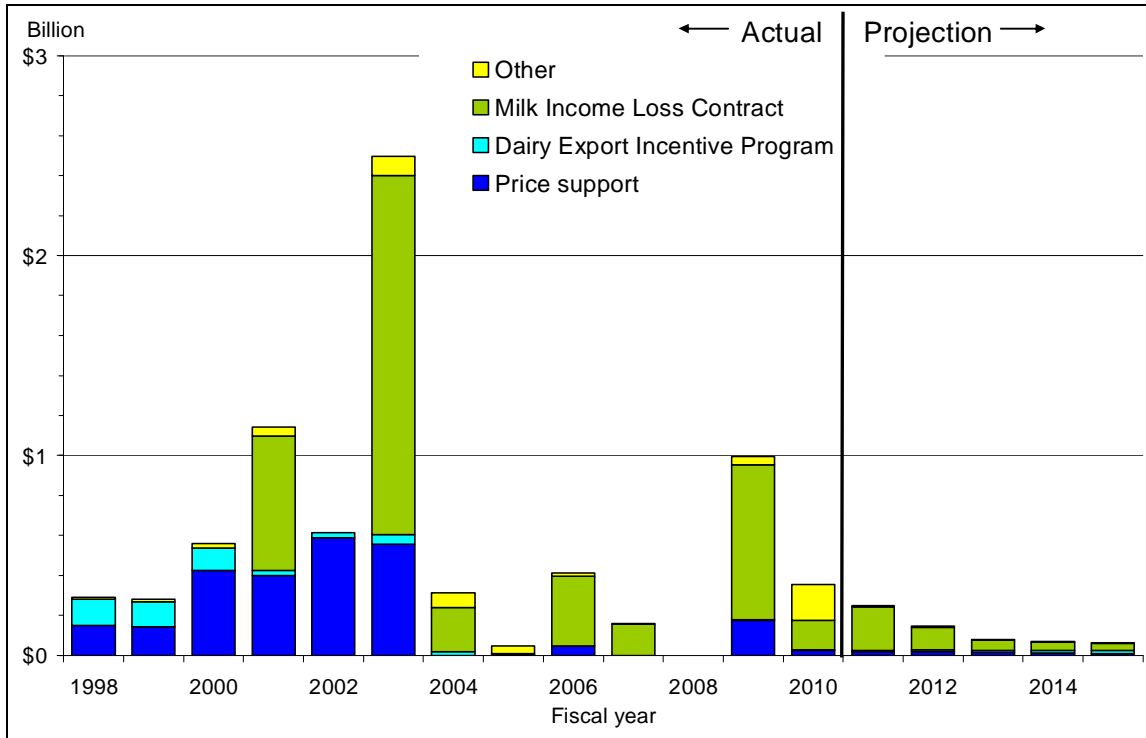
Dairy Program Costs

The federal cost of dairy programs varies widely from year to year, depending on market conditions. In recent years, total costs ranged from zero in fiscal 2008, when prices were high, to nearly \$1 billion in fiscal 2009, when prices fell sharply (**Figure 4**). The largest component of total outlays has been the MILC program. The price support program typically is the next largest

¹¹ CWT News, December 2009, p. 1, <http://www.cwt.coop/sites/default/files/newsletters/CWTNewsDecember2009.pdf>.

component, but its role is smaller than it was a decade ago, as prices have remained generally above support levels. The federal milk marketing order system does not require federal outlays (i.e., no direct payments or product purchases).

Figure 4. Actual and Projected Spending for Dairy Programs



Source: Congressional Budget Office, January 2011 baseline.

Notes: “Other” includes storage and handling of dairy products, and, for 2010, emergency funding. The green segment in 2001 was for Market Loss Assistance.

Projected spending for dairy programs, assuming no change in law and based on expected market conditions, is approximately \$100 million per year, according to the Congressional Budget Office. Options to change federal dairy policy and the associated costs/savings may be affected by these projected costs of continuing the current programs, since that “baseline” determines how much funding is “automatically” available within the dairy program without needing additional funds or offsets for any new dairy approaches. If a proposal costs more than the baseline projected for current programs, the difference in funding would need to come from another source. See “Dairy Policy Options,” below, for a discussion of policy options.

Dairy Policy Options

The dairy industry and members of Congress are currently developing or advocating a variety of policy changes in response to the difficult financial situation that began affecting dairy farmers in late 2008. Current proposals can be categorized as either supply management, market-based, or tiered-pricing approaches.

- Supply management attempts to prevent depressed farm milk prices while reducing price volatility by affecting the level of milk production. Current milk marketing orders regulate the pricing of milk but not the volume produced.
- Under market-based plans, advocates argue that the best approach is one that helps farmers manage risk associated with volatile prices of milk and feed, because it is difficult to administratively manage milk prices and supplies.
- The third area would enhance producer revenue and stabilize the market through changes in “tiered pricing,” which allow producers to receive a higher price for a portion of their milk while receiving a lower price for the remainder.

Each approach has implications for U.S. dairy farmers, competitiveness of the U.S. dairy industry, and international trade.

The National Milk Producers Federation (NMPF) advocates using a combination of the supply management and market-based approaches, plus a continuation of the group’s Cooperatives Working Together Program.

The section concludes with a summary of recommendations by the U.S. Department of Agriculture’s Dairy Industry Advisory Committee, which released its final report on March 3, 2011. Many of the group’s 23 recommendations fall into the market-based approach. The committee narrowly passed a recommendation for a supply management program.

Supply Management

Two types of supply management proposals are currently under consideration. The first was introduced in the 111th Congress by Representative Costa as the Dairy Price Stabilization Program Act of 2010 (H.R. 5288), on May 12, 2010; and by Senator Sanders and others as the Dairy Market Stabilization Act of 2010 (S. 3531), on June 24, 2010. The second type has been proposed as part of the NMPF’s comprehensive package of dairy policy reforms and, with some alternative provisions, by the Agri-Mark Dairy Cooperative. **Table 3** compares the two types of proposals, as embodied by the NMPF plan and H.R. 5288.

Bills in the 111th Congress (H.R. 5288 and S. 3531)

The Dairy Price Stabilization Program Act of 2010 (H.R. 5288) and the Dairy Market Stabilization Act of 2010 (S. 3531) would create a mandatory, nationwide program designed to manage the U.S. milk supply so that milk producers could avoid low and volatile farm milk prices.¹² The program would attempt to stabilize farm milk prices by assessing producers who increase production over specified levels. Both the market access fee and the production growth rate would be determined based on market indicators. The program would operate alongside existing dairy programs, including marketing orders, price support, and the MILC program.¹³

¹² Office of Representative Jim Costa, “Rep. Costa Introduces Legislation to Strengthen Dairy Industry,” press release, May 12, 2010, http://www.costa.house.gov/index.php?option=com_content&task=view&id=631&Itemid=82. Additional background information is available from the Milk Producers Council, at <http://www.milkproducerscouncil.org>; and from Holstein Association USA, Inc., at http://www.holsteinusa.com/pdf/DSPP/DPSP_plan_v18_01152010.pdf.

¹³ For background on dairy programs and pricing, see CRS Report R40205, *Dairy Market and Policy Issues*; and CRS (continued...)

Under H.R. 5288, each dairy producer would be assigned an initial base raw milk marketing quantity using the highest annual marketings among calendar years 2007, 2008, or 2009. The base would be adjusted to an “allowable milk marketings” amount for each farm, depending on the level of the national milk-feed price ratio (a measure of the farm milk price relative to feed costs), as specified in the bill (see **Table 3**). Producers who sell more than their allowable milk marketing or expand their operations would pay a “market access fee” into a pool that would be redistributed to producers who do not exceed their allowable milk marketings. The program would not be a rigid quota system; producers could sell as much milk as they want, provided they pay any applicable fees. Producers could transfer (sell) their marketing base to another individual or entity who purchases the dairy facility.

Under H.R. 5288, the Secretary of Agriculture would consult with a 30-member board consisting of 24 dairy producers (with diverse geographic representation) and six other members, two each representing consumers, fluid milk bottlers, and dairy product manufacturers. (A dairy economist would be an adviser to the board.) Every three months the Secretary of Agriculture, in conjunction with the board, would announce the allowable annual growth in marketings (a national rate applied at the farm level) and the market access fee for excessive milk marketings. See **Table 3** for the growth rate and fee schedule contained in the bill. Some discretion for deviating from the schedules would be allowed, but only if at least two-thirds of the board approved. Proponents expected that the growth rate and fee would be set at levels to exact the necessary change in milk production and prevent a sharp decline in farm milk prices.

S. 3531 was also introduced in the 111th Congress and is very similar to H.R. 5288. Importantly, the parameters for determining allowable milk marketings (production growth) and the fee schedule were the same. The major difference between H.R. 5288 and S. 3531 is that the Senate bill mandates the supply management program, while H.R. 5288 requires producer approval before its implementation. The remaining differences deal mostly with voting procedures, producer board composition, and establishing the initial marketing base.

- Both bills require a producer referendum within three years to continue the program. Members would be allowed to vote separately from their cooperative.
- The producer board consists of only 15 members in S. 3531, compared with 30 in the House bill, but the proportions of producers and various representatives are the same in both bills. Also, the Secretary appoints the members in H.R. 5288, while dairy producers elect the board members in S. 3531.
- When establishing the initial marketing base, during the first quarter of program operation, S. 3531 contains provisions for producers to select either (1) the corresponding quarterly average of 2007, 2008, and 2009; or (2) the corresponding quarter of 2009. In contrast, H.R. 5288 uses the highest annual total among calendar years 2007, 2008 and 2009. S. 3531 includes several additional factors (e.g., costs of feed, labor, and machinery) for the Secretary to consider when deviating from the specified schedules for the allowable milk marketing growth rate and market access fee.

(...continued)

Report R40903, *Dairy Pricing Issues*.

Table 3. Comparison of Dairy Supply Management Provisions in Selected Proposals

	Dairy Supply Management Bills in the 111th Congress (H.R. 5288 and S. 3531)	Dairy Market Stabilization Program (DMSP)	Comments																						
Concept and key economic provision	Discourages milk production by requiring a farm to pay a market access fee when the national milk-feed price ratio is low and the farm's output is above "allowable marketings." A small fee is assessed on <i>all</i> production or a higher fee is assessed on " <i>marginal production</i> " (i.e., above allowable level). These funds go to farms who do not exceed their allowance.	Discourages production and encourages consumption when national margin (milk price minus feed costs) is low by redirecting farm revenue on a portion of <i>all</i> milk production to dairy product purchases and promotion activities. Major penalty is assessed on " <i>marginal production</i> "; i.e., farmers do not receive income for certain amounts of base when program is activated.	H.R. 5288 and S. 3531 affect supply only. DMSP affects both supply and demand. The penalty for excess production appears to be more severe for DMSP than for H.R. 5288 and S. 3531.																						
Control mechanism	Market access fee rises when milk price falls and/or feed costs rise (as measured by milk price divided by feed price). Assessment on <i>all</i> production: <table border="0"> <tr> <td>Milk-feed price ratio</td> <td>Fee per cwt.</td> </tr> <tr> <td>> or = 3.00</td> <td>\$0.03</td> </tr> <tr> <td>2.50 – 2.99</td> <td>\$0.13</td> </tr> <tr> <td>2.00 – 2.49</td> <td>\$0.25</td> </tr> <tr> <td>< or = 1.99</td> <td>\$0.50</td> </tr> </table> Alternative schedule: producer pays five times the fee on production in excess of allowable milk marketings.	Milk-feed price ratio	Fee per cwt.	> or = 3.00	\$0.03	2.50 – 2.99	\$0.13	2.00 – 2.49	\$0.25	< or = 1.99	\$0.50	Producers are paid for only a portion of their production when the margin (milk price minus feed costs, \$ per cwt.) is low: <table border="0"> <tr> <td>Margin</td> <td>% of base paid</td> <td>Max share*</td> </tr> <tr> <td>< \$6 (2 consecutive mos.)</td> <td>98%</td> <td>6%</td> </tr> <tr> <td>< \$5 (2 consecutive mos.)</td> <td>97%</td> <td>7%</td> </tr> <tr> <td>< \$4 (1 month)</td> <td>96%</td> <td>8%</td> </tr> </table> *Maximum share of monthly marketings for which the producer does not receive income.	Margin	% of base paid	Max share*	< \$6 (2 consecutive mos.)	98%	6%	< \$5 (2 consecutive mos.)	97%	7%	< \$4 (1 month)	96%	8%	H.R. 5288 and S. 3531 could be activated for longer periods than DMSP and at potentially lower supply impact levels than DMSP.
Milk-feed price ratio	Fee per cwt.																								
> or = 3.00	\$0.03																								
2.50 – 2.99	\$0.13																								
2.00 – 2.49	\$0.25																								
< or = 1.99	\$0.50																								
Margin	% of base paid	Max share*																							
< \$6 (2 consecutive mos.)	98%	6%																							
< \$5 (2 consecutive mos.)	97%	7%																							
< \$4 (1 month)	96%	8%																							
Approving referendum	Yes for H.R. 5288; no for S. 3531. Both bills require producer referendum within three years to continue the program.	No initial producer referendum. However, USDA may hold referendum one year after program has been fully implemented.																							
USDA agency	Farm Service Agency collects fees from handlers who deduct appropriate amounts from farm checks. A protected account is used for distributing market access fee dividends to farmers.	Agricultural Marketing Service collects funds using same framework for collecting promotion funds (i.e., farmer sees a reduction in milk check).	More administrative setup costs for H.R. 5288 and S. 3531 because framework is not in place.																						
Program timing	Quarterly activation.	Monthly activation; reduction in milk check occurs 30 days after program is activated.	DMSP would be activated and deactivated more quickly.																						
Producer board	Yes; provides input on program operation, particularly on the fee schedule and growth factor.	No; a margin trigger would be established and USDA would have limited discretion to alter it.	DMSP appears to have less discretion to make program adjustments.																						
Base amount	"Allowable milk marketings" is a farm's quantity produced in the corresponding quarter during the previous year, adjusted by a growth rate.	Producer chooses either the three-month rolling average of the most recent milk marketings or the amount from the same month in previous year.	Base would be an asset (i.e., would have value).																						
Growth factor for base	After consulting the producer board, USDA adjusts allowable milk marketings based on: <table border="0"> <tr> <td>Milk-feed price ratio</td> <td>% growth</td> </tr> <tr> <td>> or = 2.00</td> <td>3.00</td> </tr> <tr> <td>1.75-1.99</td> <td>0.00</td> </tr> <tr> <td>< or = 1.74</td> <td>-3.00</td> </tr> </table>	Milk-feed price ratio	% growth	> or = 2.00	3.00	1.75-1.99	0.00	< or = 1.74	-3.00	According to NMPF, rolling average would result in a continuously updated base and provide for expansion.	Discretion for growth factor provides flexibility for H.R. 5288 and S. 3531. DMSP base and trigger combination appears to eliminate the need for mechanism to adjust base.														
Milk-feed price ratio	% growth																								
> or = 2.00	3.00																								
1.75-1.99	0.00																								
< or = 1.74	-3.00																								

Source: Congressional Research Service.

Note: H.R. 5288 was introduced in the 111th Congress on May 12, 2010. S. 3531 was introduced on June 24, 2010. As of mid-January 2011, the Dairy Market Stabilization Plan by the National Milk Producers Federation had not been introduced as legislation in Congress.

Under both H.R. 5288 and S. 3531, the program would be self-financed, with payments to producers who limit their production funded by assessments on producers who do not. Although existing dairy programs would continue to operate, the federal cost of DPPSP and MILC would likely be minimal if the new program effectively constrains excess milk production and keeps the farm milk price above the target price.

At the farm level, current dairy farmers who expanded in 2007, 2008, or 2009 could benefit more than other producers because the base calculation is determined by production in those years. New farmers or those wishing to expand production would be discouraged to the extent that (1) a market access fee is relatively high at the time, and/or (2) the cost of buying a milk base from another dairy producer is too high.

As for market impacts, analysis by university researchers indicates that the proposed legislation would reduce farm milk price volatility under a variety of scenarios.¹⁴ In addition, by some measures of volatility, the proposed legislation, assuming a modified set of program parameters to minimize volatility, would result in the least amount of farm price variation among current supply management proposals. However, under the same modified set of parameters, average farm prices would be below baseline prices (i.e., projected prices assuming continuation of current policy). Higher farm prices were generated under separate model runs using more restrictive production growth parameters and higher access fees.

Potential dairy trade impacts include the possibility that the United States, assuming more stable prices, could become a more consistent supplier to the world dairy market. However, depending on the restrictiveness of the growth parameter as well as the level of access fee, higher prices associated with the plan's effective implementation could reduce U.S. price competitiveness in global markets while potentially attracting more dairy imports.

Dairy Market Stabilization Program (DMSP) and Marginal Milk Pricing (MMP) Program

The National Milk Producers Federation (NMPF) has proposed the Dairy Market Stabilization Program (DMSP).¹⁵ The program is designed to slow milk production and boost prices during times of low margins (milk prices minus feed costs). When activated, it would redirect farm revenue on a portion of all milk production from farmers to activities designed to increase demand for dairy products. For example, when the national margin drops below \$6 per hundredweight for two consecutive months, milk producers would receive payment on only 98% of their base production. The remaining 2% of farm revenue would be used for dairy product purchases and promotion activities. A larger share of revenue is redirected when margins are even lower (see **Table 3** for complete schedule). USDA's Agricultural Marketing Service would collect funds, with a dollar reduction appearing in a producer's milk check.

The program would operate on a monthly basis, activating as soon as margins decline to relatively low levels. According to NMPF analysis (and using a feed cost calculation that differs from USDA's method), the margin during the last 10 years dropped below the \$6 level on

¹⁴ Charles F. Nicholson and Mark W. Stephenson, "Analysis of Proposed Programs to Mitigate Price Volatility in the U.S. Dairy Industry," September 2010, http://dairy.wisc.edu/Volatility/Analyses_of_Volatility_Programs.pdf.

¹⁵ National Milk Producers Federation, *Foundation for the Future*, Arlington, VA, http://www.nmpf.org/washington_watch/ordersandpolicies/foundation_for_the_future.

multiple occasions, including several months in 2002, 2003, 2006, 2008, and 2009. The NMPF expects that the disincentive to produce additional milk—because producers receive no revenue on that portion of production—would have a larger and more immediate impact on milk production than simply assessing a fee on all or a portion of the production. The program would deactivate once the national margin rises to at least \$6 per hundredweight.

When the program is activated, producers would be paid on the base amount of milk produced, which is defined as either the three-month rolling average of the most recent milk marketings or the amount from the same month in the previous year to account for seasonality in milk output. The base can be transferred only with the farm. The base would be an asset for the farm because production would have no value when margins drop below trigger levels. According to proponents, the rapidly updating nature of the base is expected to help reduce the constraining aspects of the base on actual production levels.

Analysis of DMSP

Analysis by the Food and Agricultural Policy Research Institute (FAPRI) indicates that dairy market conditions (milk and feed prices) over the next 10 years are expected to remain, on average, above levels needed to trigger DMSP.¹⁶ However, DMSP would be triggered under low margin scenarios to help correct a surplus milk production situation while allowing supply growth to match growth in domestic and international markets. As a result, the DMSP (working in tandem with a margin insurance payment plan—see “Margin Insurance” below) is expected to reduce high price periods that result after the loss of producers during the low margin period. FAPRI concludes that the DMSP will help reduce federal expenditures associated with a margin insurance payment plan by the NMPF by limiting milk production when margins decline and trigger payments to producers.

A second analysis by FAPRI estimates the market outcome if DMSP had been in place during the severe marketing downturn of 2009.¹⁷ Under specific assumptions, the research results indicate the program would have raised dairy farm margins significantly during the March-December 2009 period. More of the production adjustment, at least during the early stages of program implementation, would have occurred in states where production had increased from year-earlier levels (e.g., Texas, New Mexico, Michigan, Wisconsin) rather than in states where production was mostly unchanged or had declined from year-earlier levels (e.g., California, Washington, Pennsylvania).

Separately, a report supported by the International Dairy Foods Association (IDFA), a group representing dairy manufacturers, estimated the amount of money that would have been withheld from producer checks if DMSP had been in place between 2000 and 2009.¹⁸ The report states that proportionally more withholdings would have come from states in the Midwest and East,

¹⁶ Scott Brown, *Analysis of NMPF's Foundation for the Future Program*, Food and Agricultural Policy Research Institute, FAPRI-MU Report #05-10, Columbia, MO, June 2010, http://www.fapri.missouri.edu/outreach/publications/2010/FAPRI_MU_Report_05_10.pdf.

¹⁷ Scott Brown, *The Economic Impact of the Dairy Market Stabilization Program on 2009 Dairy Markets*, Food and Agricultural Policy Research Institute, FAPRI-MU Report #04-11, Columbia, MO, March 2011, http://www.fapri.missouri.edu/outreach/publications/2011/FAPRI_MU_Report_04_11.pdf.

¹⁸ “Regional and Farm Level Impacts of the Foundation for the Future’s Dairy Market Stabilization Program,” report prepared for the International Dairy Foods Association by Informa Economics, Inc., January 2011, http://www.idfa.org/files/State_and_Regional_Impacts_of_DMSP_012511.pdf.

implying that the proposed program would have a proportionately smaller impact on producers in the Western and Southwestern regions. Critics of the analysis, including the National Milk Producers Federation (NMPF), contend that withholdings under DMSP would be proportional to regional production and therefore regionally “fair.”¹⁹ Moreover, NMPF says the analysis ignores the expected positive impact on overall producer margins stemming from the expected decline in production and increase in consumption that together would drive up milk prices.

Marginal Milk Pricing (MMP) Program

Compared with the DMSP, the Marginal Milk Pricing (MMP) Program, as proposed by Agri-Mark, is designed to be more attractive to smaller dairy farms and farmers in higher-cost regions, according to Agri-Mark officials.²⁰ The program’s structure and operation is similar to the DMSP, but several aspects of the program are different:

- The base would be fixed at a predetermined level while the program is in operation. Supporters are concerned that, with a continuously updated base as provided under the DMSP, some operations, particularly large ones, might be encouraged to produce more milk in order to build base and profit from the expected higher prices once other producers reduce their output.
- The trigger for MMP would activate the program more quickly as margins decline; the national margin trigger is \$7 per cwt, with farm revenue paid on 99% of base. DMSP parameters are \$6 and 98%.
- For milk produced above base amounts, farmers would receive the average (blend) price minus the Class III price (nationally determined), or approximately 10% of the expected value (compared with 0% under the DMSP). This provision is designed to make the “penalty” for overproduction the same for all farmers nationwide (i.e., the Class III price) rather than a variable penalty depending on regional milk prices. For example, under DMSP, the implied penalty for farmers in the northeastern or southeastern United States—where production costs and milk prices are higher than in other parts of the country—would be greater than the Class III price.

Agri-Mark also advocates retaining the MILC program, which benefits many of its cooperative members with small or medium-sized herds. It supports allowing producers to choose between MILC and the NMPF’s proposed margin insurance payment plan.

Views on Supply Management

Supporters of price stabilization and supply control say that inherent incentives to overproduce need to be offset by a program to control supplies in a more measured way. The concern for overproduction could be and has been applied to commodities such as corn and wheat. But dairy generally is more susceptible to overproduction, some dairy producers and market observers say,

¹⁹ National Milk Producers Federation, *Economic Impact of the Dairy Market Stabilization Program – Foundation for the Future*, March 2011, <http://nmpf.org/files/file/Economic-Impact-of-the-Dairy-Market-Stabilization-Program-Report-March-2011.pdf>.

²⁰ Agri-Mark is a dairy cooperative with 1,200 farmer-members in New England and New York. For more information on the MMP, see <http://www.agrimark.net/>.

because current policy encourages producers to maximize production and they tend to add cows even when prices are low to improve cash flow. Advocates also expect market volatility to continue and possibly increase as the United States becomes a larger player in the international markets. Supporters say a system to moderate some of the market shocks in the years ahead would benefit the dairy industry and reduce the number of farms that go out of business when profitability drops sharply.

Analysis by university researchers indicates that the supply management proposals described above would reduce milk price volatility and generally reduce government expenditures on dairy programs.²¹ According to the research results, the MMP Program (Agri-Mark) and the DMSP (National Milk Producers Federation) also would marginally enhance average milk prices, primarily because the programs would increase demand by purchasing dairy products for domestic assistance programs. As analyzed, the program established under the Costa and Sanders bills introduced in the 111th Congress would result in slightly lower average prices, but researchers say this hinges on the level of program parameters.

While volatility is reduced upon implementation of any of the programs, the study results indicate that substantial volatility would remain in the market, implying that producers will still need to manage price risk for the indefinite future. In addition, large shocks from changes in either demand or supply have the potential to overwhelm any of the proposed programs, according to industry experts.

Critics of supply management, including dairy processors, contend that supply control could reduce the competitiveness of the U.S. dairy industry, limit its incentive to innovate, raise consumer prices, and decrease demand for dairy products because, they argue, a pricing system based on supply control and/or cost of production potentially rewards inefficiency. Critics also argue that administratively matching supply and demand can be difficult because these factors can change quickly.

In general, as members of an industry competing in a global market, U.S. dairy farms would have less incentive to reduce their cost of production because their individual shares of national production would be protected when profitability declines below certain levels. In this case, production would be reduced on all farms to avoid economic penalties. Currently, the production adjustment is generally made by farmers who can no longer continue operating because their costs are too high or they no longer have farm equity or bank credit to continue operating. In a related issue for dairy processors, prospective constraints on the growth of milk production by region would have impacts on processors interested in expanding or locating new processing plants. Moreover, critics of supply management say it will change how processors invest in manufacturing plants and new markets and products because, they say, processors will not know when program triggers will reduce milk production and drive up prices.

Economists note several unintended consequences of supply management, including the incorporation of program benefits (i.e., higher and less volatile milk prices) into farm asset values such as prices that farmers or investors would be willing to pay for land, cows, dairy facilities, and the associated farm milk base. This development would likely drive up costs of producing milk. Higher milk prices could also diminish the development and use of dairy ingredients in

²¹ Charles F. Nicholson and Mark W. Stephenson, "Analysis of Proposed Programs to Mitigate Price Volatility in the U.S. Dairy Industry," September 2010, http://dairy.wisc.edu/Volatility/Analyses_of_Volatility_Programs.pdf.

manufactured products and encourage the use of lower-priced imported substitutes (e.g., milk protein concentrates).

Market-Based Plans

In contrast to a supply management approach, market-based plans focus on managing price risk rather than trying to influence prices. Other proposals that fall under this broad category would address market transparency issues or make changes in the federal milk marketing order system to improve dairy pricing.

Promoters of market-based approaches say that price volatility will remain a part of the dairy industry, as it is for other commodities. As such, they claim, the best approach to address that volatility is to find ways for producers to manage price risks without limiting the industry's ability to capitalize on domestic and international demand opportunities.

Critics of a policy such as the NMPF margin proposal (described below) expect that incentives to overproduce (e.g., maintain or boost production as prices fall in an attempt to maintain revenue) will aggravate the financial woes of the dairy industry indefinitely; thus, controlling potential price variability and combating depressed farm prices with supply management is necessary, they say, for the long-term financial health of producers. The NMPF initially proposed the margin program by itself but later added a supply management component due to interest by some of its members.

Margin Insurance

The NMPF claims that the price targets in current dairy programs are too low to be effective and do not adequately protect dairy farmers at today's levels of input (feed) costs. They also contend that the price support program creates artificial demand for a particular product (nonfat dry milk) by guaranteeing a minimum purchase price, and that the production limit in the MILC program discriminates against large farms. The NMPF recommends eliminating these two programs and replacing them with the "Dairy Producer Margin Protection Program (DPMPP)" (and the Dairy Market Stabilization Program (DMSP) described above).

The DPMPP would be a new safety net that protects a dairy farmer's "margin," that is, the national farm price of milk minus feed costs. The DPMPP program is designed to be a margin insurance program, with no payment limits, to address both catastrophic conditions and periods of low margins, providing producers with additional income until markets improve.

A prospective move from program support at specified price levels (i.e., the MILC target price of \$16.94 per hundredweight and minimum purchase prices for dairy products) to margin insurance is designed to protect dairy farmers regardless of current price levels. Market prices would continue to fluctuate, rising or falling as far as necessary in order for milk to continue moving through existing marketing channels. However, under certain market conditions, milk prices could be affected by a supply management program, which is also part of the NMPF policy package.

Under the DPMPP, producers would receive a base level of coverage with a margin guarantee (fixed at 50% of the projected annual national margin) on 90% of a producer's historical base production. Producers would receive a payment when the actual margin, calculated quarterly, drops below the guarantee. The base coverage would be completely subsidized by the

government. Additional coverage at higher margin guarantees would be available at subsidized rates.

Potential Impacts

When margins are low, it would be possible for both of the NMPF proposed programs to be in operation, with the DPMPP supporting farm revenue while the DMSP reduces farm revenue. Government outlays would increase during times of low milk prices and/or high feed prices, with the overall spending level depending on final program parameters and the price-supporting feature of any supply management program that might be in effect. Elimination of the current income and price support programs would result in some cost savings. Costs for current dairy programs are projected to average \$92 million per year during 2011-2020, according to the Congressional Budget Office's January 2011 baseline.

The program would be scale-neutral, with farms of all sizes participating without payment limits. Small-farm advocates might argue that such a program could still encourage expansion of large dairies at the expense of smaller dairies.

Analysis by the Food and Agricultural Policy Research Institute (FAPRI) indicates that the DPMPP could provide producers with more protection in times of low margins than current dairy programs because the program would cover a greater share of production (and have no payment limits).²² Also, the DPMPP in combination with the DMSP would provide larger payments when margins are exceptionally low and as the margin situation deteriorates. However, the current program might provide more support when margins are somewhat higher than the trigger levels in the NMPF's plan. According to FAPRI, the overall market effect is expected to be small given current expectations for average margins over the next 10 years, which are forecast above trigger levels specified in the NMPF's proposal.

Supporters of the margin insurance proposal include the International Dairy Foods Association (IDFA), a group representing dairy manufacturers that has been at odds with dairy producers in the past. According to IDFA, the concept promoted by NMPF, as embodied in better risk management tools for farmers and changes to the marketing order systems, would improve market transparency and help farms and companies to better manage responses to market changes.²³ IDFA supports NMPF's proposal for margin insurance because it is expected to result in a "more reliable income" for dairy producers and replaces "outdated programs." In contrast, to NMPF, however, IDFA strongly opposes any form of supply management that could result in higher costs for processors and possibly limit demand for their products.²⁴

²² Scott Brown, *Analysis of NMPF's Foundation for the Future Program*, Food and Agricultural Policy Research Institute, FAPRI-MU Report #05-10, Columbia, MO, June 2010, http://www.fapri.missouri.edu/outreach/publications/2010/FAPRI_MU_Report_05_10.pdf.

²³ Connie Tipton, "Unleashing Our Potential: Creating Certainty in Uncertain Times," Dairy Forum Breakfast Keynote Speech, Phoenix, AZ, January 18, 2010, <http://www.idfa.org/files/2010%20Dairy%20Forum%20CET%20Speech%20FINAL.pdf>.

²⁴ International Dairy Foods Association, "IDFA Commends Proposals for Dairy Policy Reform, But Opposes Supply Management Plan," press release, June 10, 2010, <http://www.idfa.org/news—views/news-releases/details/4826/>.

Farm Savings Account Program

Another “market-based” option to help dairy farmers manage risk is a farm savings account program. The concept is a voluntary program that allows producers to shift income during profitable years into a savings account for withdrawal during less profitable years. Farmers could reduce their tax liability, and depending upon program design to encourage participation, the government could provide matching funds. Potential impacts on stabilizing dairy farm income would depend on program design and how producers respond to the program.

Improved Price Discovery

Efforts to improve price discovery include changes to price reporting, dairy product stocks data, and the federal milk marketing orders (FMMOs).

Price Reporting

The Dairy Policy Action Coalition (DPAC), a producer organization based in Pennsylvania, advocates improved price discovery and market transparency.²⁵ DPAC contends that current USDA price reporting of dairy products—which is used for setting minimum milk prices in FMMOs—does not reflect broad supply and demand factors, and that mandatory price reporting should be expanded to include more products, with its frequency increased from weekly to daily reporting. According to USDA, the department has authority under the 2008 farm bill to expand dairy price reporting, but Congress has not provided sufficient funding. DPAC says that expanded reporting would pave the way for simplifying the FMMO system, including a reduction in the number of milk classes from four to two.

In September 2010, mandatory price reporting of dairy products was reauthorized through September 30, 2015 (P.L. 111-239). The legislation requires an “electronic” price reporting system for dairy products (a change from the somewhat manual process that has been employed). Prices for the preceding week are to be published each Wednesday, two days earlier than the previous schedule. Daily price reporting is not required, as some had advocated, apparently owing to the cost of implementation and cost to the industry. However, a new electronic system (as is currently employed for livestock and meat) might facilitate in the future more frequent dairy price reporting or a different mix of products.

Pricing in Federal Milk Marketing Orders

To develop a more dynamic and transparent pricing system that “compensates producers fairly,” the National Milk Producers Federation (NMPF) proposes to reform FMMOs by eliminating the use of current product pricing formulas (except Class IV—milk used for butter and powder). The NMPF and others argue that the current product pricing mechanism and revenue pooling system of FMMOs compensates handlers for lower-valued products and encourages overproduction. Also, the pricing formulas set fixed margins (“make allowances”) for dairy manufacturers which, according to the NMPF, unfairly creates winners and losers within the dairy industry.

²⁵ Rob Barley and Dennis C Wolff, Presentation to the Dairy Industry Advisory Committee, Washington, DC, June 3-4, 2010, http://www.fsa.usda.gov/Internet/FSA_File/4_barley_wolff_dpac_diac_jun.pdf.

Instead of product pricing, the NMPF recommends using a competitive pay price (prices of raw/producer milk paid in actual market transactions) for establishing minimum prices for Class I (fluid consumption) and Class II (soft products). The competitive pay price would be based on regional surveys of both regulated and unregulated cheese plants. Importantly, a minimum price would no longer be established for Class III (milk used for cheese). The NMPF expects the FMMO changes to improve price discovery for the dairy industry and reduce price volatility compared with the current system of product price formulas.

The Dairy Policy Action Coalition (DPAC) also supports simplification of the federal order pricing system by reducing four milk classes to two, establishing competitive pay pricing, and moving away from end-product-pricing formulas.

Some producers support retaining the current method of calculating minimum prices. The Dairy Cooperative Marketing Association (DCMA), a group of dairy cooperatives based primarily in the south, cites several advantages it sees in the current pricing system, which uses “the higher of” Class III or Class IV (milk used for dry milk products and butter) to establish Class I prices. DCMA says switching away from using “the higher of” method could lower farm prices.²⁶

Tiered Pricing

Tiered pricing is a term used to describe a pricing system that sets a higher price for a portion of production (sales) and a lower price for the remaining portion. Sellers of agricultural commodities can benefit from such an arrangement because consumers, at times, may be little affected by the price of the product (e.g., in buying milk for children). Because consumers tend to be reluctant to give up consumption of important products when small price increases occur, overall producer revenue can increase if higher prices are charged for this portion of demand, more than offsetting reduced revenue from lower prices charged on remaining sales. The FMMO system is built on this concept, ensuring that higher minimum prices are paid by processors for raw milk used for fluid consumption and lower minimum prices are paid for milk used in manufactured products.

The Federal Milk Marketing Improvement Act of 2009 (S. 1645, 111th Congress)

Some believe a change in federal milk marketing orders could be used to stabilize the milk market and boost dairy farm returns. One bill in the 111th Congress, the Federal Milk Marketing Improvement Act of 2009 (S. 1645, first introduced as S. 889), is designed to “help farmers get a fair price for their milk” and provide relief and assistance to dairy farmers by using the cost of milk production as the basis for pricing milk.²⁷ The bill would move current FMMO pricing from a market-based system to a production-cost-based system. The bill also contains provisions for USDA to administratively reduce prices received by farmers in an effort to limit milk production if the Secretary of Agriculture determines that an excess amount is being produced for the national domestic market.

²⁶ Dairy Cooperative Marketing Association, “Advantages of the Current Method of Calculating the Class I Mover,” comments submitted to the Dairy Industry Advisory Committee, December 10, 2011, <http://www.milkproducerscouncil.org/121010DCMA.pdf>.

²⁷ Office of Senator Arlen Specter, “Specter, Casey Work to Help Dairy Farmers,” press release, April 24, 2009, http://specter.senate.gov/public/index.cfm?FuseAction=NewsRoom.NewsReleases&ContentRecord_id=D92E3B27-A176-F0A0-E68C-40B249E3492E.

To set minimum federal order prices, S. 1645 would replace the use of current market prices with quarterly estimates of the national average cost of production for milk used for manufactured products. The bill would allow USDA to administratively reduce prices received by producers on up to 5% of all milk produced in the 48 contiguous states should the Secretary of Agriculture determine that there is excess milk production. Adjustments would be allowed only if there is a positive trade balance (exports greater than imports) for dairy products.

The bill also allows for an additional price reduction if the basic reduction is not sufficient to reduce excess supplies. This reduction would apply only to farms that increased their production from the previous year. Federal and state milk marketing order administrators would collect the value associated with price reductions from producers and remit it to the federal government to help offset the cost of purchasing excess milk products. The Secretary of Agriculture would collect amounts in all unregulated areas.

The change in the FMMO system to a cost-of-production basis for pricing implies higher prices received by dairy farmers, at least initially. These price gains would likely help more farms cover a greater share of their costs.

During periods of oversupply, when USDA may need to reduce the price received by farmers, the bulk of the adjustment (i.e., lower prices received by farmers) would fall on all farmers. Any additional price reductions needed to reduce excess supplies would apply only to farms that had increased their production from the previous year. To the extent that small farms are generally thought to not increase their production, the bill would favor small farmers.

Also, provisions in the bill are expected to assist new farmers by exempting them from price reductions that may be required in the event of excess milk production.

Potential Impacts

While producers would likely see higher prices initially as minimum federal order prices are adjusted upward, some analysts say that the long-run competitiveness and stability of the U.S. dairy industry could be at risk because of the unknown effectiveness of provisions to discourage overproduction, given limitations on USDA to make adjustments. For example, if the trade balance in dairy products is negative, USDA could not reduce prices received by farmers, possibly resulting in price levels that would continue to encourage excess milk production. Similarly, the potential impact of the “additional” price reduction could be limited because it would apply only to farms that have increased production from the previous year. Reducing prices received by these farms may result in only a portion of the supply adjustment needed to bring the market back into balance. Farms with steady production would have no incentive to cut back.

Cooperative Marketing Initiative

The National Farmers Organization, a farm group that negotiates prices and sales terms with commodity buyers for farmer-members, is promoting a Cooperative Marketing Initiative (CMI) to improve farm milk prices.²⁸ It would be a private industry approach, working alongside the

²⁸ National Farmers Organization, “National Farmers Promotes Cooperative Marketing Initiative at Convention ’10,” press release, January 21, 2010, http://www.nfo.org/Newsfolder/nr_1-21-2010b.html.

National Milk Producers Federation's Cooperatives Working Together (CWT) program (see "Privately Run Dairy Herd Buyout"). The CMI would set national production levels consistent with national usage and assign each cooperative a production level consistent with their share of usage (and further distributed to the producer level). The CMI would also set target prices at values necessary for members to produce milk profitably. Farmers would receive the target price (minus marketing expenses) on their assigned milk volume. Excess milk production would be assessed a penalty, which would be redistributed to producers who did not exceed their allocation, or used to cover any losses incurred by the cooperative.

Supporters say the plan would effectively deal with changes in the dairy industry. Opponents point out that, while cooperatives represent the majority of those producing milk in the United States, a voluntary program such as this would be difficult to implement because any price enhancement resulting from the program could be quickly offset by actions of non-cooperative producers or by lax enforcement by the cooperatives themselves.

Ration-all Milk Pricing Program

The "Ration-all Milk Pricing Program" has been developed by a dairy nutrition consultant and is supported by some farmers in Pennsylvania and Ohio.²⁹ The concept is to set the farm milk price for a quantity representing 90% of historical milk production at a five-year moving average price. The remaining amount of milk would be priced using bids received from processors in each FMMO. The program would be mandatory in all states and would require legislation.

Supporters of the plan expect that prices received by producers would be considerably less volatile because only about 10% of a producer's output would be based on current prices. Supporters also expect that the market signal provided by the blend price (weighted average of the historical and current prices) would be sufficient to bring about the necessary change in supply to match current or expected demand for milk.

Opponents point out that such a blend price would do little to encourage the necessary supply adjustments in times of falling prices. For example, if the five-year average price for Class III milk was \$17.47 per hundredweight in February 2009, the blend price to the farmer would have been at least \$15.72 per hundredweight (0.9 times \$17.47). This price, dairy economists say, would likely have resulted in increased production in 2009, further exacerbating the oversupply situation and slowing the recovery in prices that occurred in the second half of 2009.

Recommendations by the Dairy Industry Advisory Committee

On March 3, 2011, the Dairy Industry Advisory Committee (DIAC) voted to approve its final report to the Secretary of Agriculture.³⁰ The Secretary established the committee in August 2009 to make recommendations on how USDA can best address dairy farm profitability and milk price volatility issues. Members were selected from a cross section of the dairy industry representing: producers and producer organizations, processors and processor organizations, handlers,

²⁹ "Ration-all Milk Pricing Program," <http://ration-allmilk.com/>.

³⁰ Dairy Industry Advisory Committee, U.S. Department of Agriculture, *Recommendations for Public Policy to Improve Dairy Farm Profitability and Reduce Milk Price Volatility*, Washington, DC, March 3, 2011, http://www.fsa.usda.gov/Internet/FSA_File/diac_final_rpt_0302.pdf.

academia, retailers, consumers, and state agencies involved in dairy at the local, regional, national and international levels.

The report offers 23 specific recommendations grouped by four major topic areas. An asterisk (*) following the item number denotes that there was at least one dissenting vote among the 17 committee members.

Existing Programs and Authorities

1* – Develop an information system and index to accurately assess the general level of profitability at the farm level based on the milk-feed cost margin.

2 – Review federal milk marketing orders, particularly with respect to the impact of end-product pricing on milk price volatility and the impact of classified pricing and pooling on processing investment, competition and dairy product innovation.

3 – Simplify and improve risk management products (including the Livestock Gross Margin for Dairy Cattle insurance policy) so that they are more accessible and easier for dairy farmers to use.

4 – Promote a more efficient and effective use of USDA’s Farm Loan Program and the Guaranteed Loan Program for dairy farmers because some state make better use of the programs than others.

5 – Develop a system of triggers and actions to guide the Secretary’s choices for special and emergency interventions.

Price Protection, Stabilization, and Regulation

6 – Explore the elimination of the Dairy Product Price Support Program and the Dairy Export Incentive Program and use budget savings to enhance the safety net for producers.

7 – Strongly consider the elimination of end-product pricing in the federal milk marketing order system and explore alternative measures such as competitive pricing.

8* – Collect and publish price data on alternative measures of a competitive pay price.

9* – Adopt a federal growth management program that allows new producers to enter and allows producers to expand production. The committee was sharply divided over this recommendation (9 votes in favor, 8 votes opposed).

Income Protection and Stabilization

10 – Develop a USDA-sponsored credit mechanism (direct lending or credit guarantee) for first buyers of milk (cooperative or proprietary) to cover the margin deposits required on contracts for risk management between first buyers and producers of raw milk.

11* – Continue the Milk Income Loss Contract Program but modify it by incorporating an all-milk income/feed cost margin trigger and a margin insurance option for production above the cap.

12 – Allow dairy farm operators to create special tax-deferred savings accounts with no matching government contributions, no limit on dollars deferred per year, and no restriction on withdrawals.

Profitability and Market Improvement

13 – Continue federal monitoring and support of competitive marketing structures throughout the supply and marketing chain of the dairy industry.

14 – Continue and expand programs like the Market Access Program and the Foreign Market Development Program.

15 – Support the adoption of a maximum somatic cell count of Grade A milk in the amount of 400,000 cells per milliliter at the farm level at the Interstate Milk Shippers Conference.

16 – Explore the impacts of California-type fortification (milk solids) standards for U.S. beverage milk.

17 – Support the use of dairy descriptors (including terms such as milk, cheese, yogurt, butter) only on products made from milk.

18 – Support programs that enhance value-added opportunities for dairy farms, including educational training programs and technical assistance for farms, inspectors, and regulatory personnel.

19* – Increase incentive payments to dairy farmers for environmental practices that address social, economic and environmental issues.

20* – Continue the Environmental Quality Incentives Program and give dairy farmers preference in grant programs for implementation of energy audits and infrastructure development for value-added facilities.

21* – Phase out the blender's credit and tariff on imported ethanol.

22 – Create a program to rapidly eradicate bovine tuberculosis and Johne's disease from the U.S. dairy herd.

23* – Support efforts to provide the means for dairy farms to employ year-round long-term immigrant labor.

Concluding Remarks

Authorization for dairy programs will expire in 2012, with the exception of federal milk marketing orders, which are permanently authorized. The financial stress experienced by dairy farmers in 2009, and since then to a lesser degree, has generated congressional and industry interest in addressing price volatility and federal dairy programs in general.

Proposals reviewed in this report might be considered as discussions on dairy policy continue and the farm bill debate unfolds. The fate of these and other future proposals will likely depend on

economic conditions in the dairy sector, the ability of various dairy interests to form a consensus, and budget constraints.

The status quo—that is, continuing programs for price support, direct payments, federal milk marketing orders, export subsidies, import barriers, and periodic ad hoc emergency assistance—is also a potential option. For example, a bill (S. 459) was introduced March 2, 2011, to maintain certain parameters used in the MILC or countercyclical dairy program that are scheduled to decline in September 2012 (see “Milk Income Loss Contract (MILC) Program”).

This report will be updated as additional proposals are introduced.

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