

# Dairy Policy

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## Introduction

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The major components of federal dairy policy — the price support program, federal milk marketing orders, and import quotas — have been in place for more than 50 years. These programs have tried to address the market effects which result from a commodity that is highly perishable; bulky (expensive to transport long distances); produced 365 days a year with a limited ability to alter short-run production decisions; and has many more sellers than buyers. These properties have given the industry a history of volatile milk prices and policies that have been addressed with varying degrees of success. This paper will consider the major issues and options for dairy policy in the 2002 Farm Bill.

The last Farm Bill, the 1996 Federal Agriculture Improvement and Reform (FAIR) Act, attempted to move agriculture toward greater market orientation by phasing down the price support level over 4 years from an initial \$10.35 per hundredweight down to \$9.90, and terminating the support program the end of 1999. When the support program was terminated, it would be replaced with a recourse loan program on dairy products for dairy manufacturers. The FAIR Act also directed the Secretary of Agriculture to consolidate the number of federal milk marketing

orders to no less than 10, and no more than 14. The Act also authorized the Secretary to establish a Northeast Dairy Compact until the time that federal order reform was implemented. However, agricultural appropriation bills delayed implementation of federal order reform until January 1, 2000, extended the support price at \$9.90 for both 2000 and 2001, and extended the Northeast Dairy Compact until September 30, 2001. Progress toward a greater degree of market orientation was not as complete as what was envisioned by the authors of the FAIR Act.

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## Major Issues Facing the 2002 Farm Bill

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**Price uncertainty and volatility.** A support price at the current level of \$9.90 offers a relatively low safety net. This level is well below the full cost of production for most dairy producers, and is below the cash cost of many. Market orientation of dairy policy has meant that market forces, rather than the support program, determine farm level milk prices most of the time. Relatively small changes in the quantity of national milk marketings has yielded major changes in dairy product and farm level milk prices. Dairy producers, dairy manufacturers, and marketers

now face price risks of a magnitude reminiscent of the days before dairy policy.

**Loss of dairy farms.** Although demand for dairy products continues to increase from one to two percent annually, genetic gains and improvements in management are yielding increases of two to three percent in milk per cow. This implies fewer total cows needed in the national herd. These efficiency gains are often associated with technologies that require a larger farm size to justify the cost of adoption. Dairy farm numbers continue to decline at an annual rate of four to five percent. The largest segment of decline is among dairy operations with fewer than 200 milk cows. Thus, one issue for federal dairy policy is whether benefits should be targeted toward the smaller “family” dairy farms.

**Butter/powder tilt.** If milk prices continue to be supported via CCC dairy purchases, a sub-issue is the proper relationship (tilt) between the support price for butter versus nonfat dry milk. The 1990 Farm Bill instructed the Secretary of Agriculture to tilt the support price from butter to nonfat dry milk to lessen the burdensome purchases of surplus butter, and to reduce the cost of the dairy price support program. Since the mid-1990s, the price of butter has been above support, but CCC purchases of nonfat dry milk occur throughout the year and are increasing. In fact, the Secretary adjusted the tilt on June 1, 2001, but Congress may choose to provide greater directive to the Secretary to further decrease the powder price, or it could reverse the Secretary’s action.

**Class I mover.** Federal milk marketing order reform implemented January 1, 2000 uses the higher of an advanced Class III or advanced Class IV skim milk price as the mover of Class I (Fluid use). With depressed cheese prices in 2000, the advanced Class III skim milk price was also depressed and well below the Class IV skim milk price. Class I has been moved by Class IV prices for more than the first year of federal order reform. When this happens, dairy producers in relatively high Class I markets do not experience the deterioration in milk prices to the same degree as producers do in the predominantly Class III use markets. This has slowed the milk supply/demand adjustment needed to bring up milk prices from the low levels experienced during 2000 and early 2001. Thus, an issue is whether the Class I

mover should be changed. The change in the butter/powder tilt reduces the mover issue.

**Class III price formula.** A related issue to the price support program and federal orders is the Class III price formula. The price of butter is used in the formula to determine protein prices. For every \$0.10 per pound increase in the butter price, the Class III price decreases \$0.04 per hundredweight through the protein price formula. When cheese prices are near or below the support price, but butter prices are above support and increasing, the Class III is depressed further below the support price on milk. As a result, the support price for Class III milk may not be achieved because of the peculiarity of the Class III formula.

**Imports of ultra-filtered milk and milk proteins.** Imports of ultra-filtered milk proteins have significantly increased. Producers are concerned that these milk protein concentrates, or MPCs, have displaced domestically sourced milk solids, and have kept downward pressure on farm level prices. Producer groups have called for import restrictions on these products, but such an action is contrary to the market orientation of the last farm bill and the WTO. Changing the tilt to lower nonfat dry milk powder prices will help to make domestically sourced milk proteins more competitive with foreign sourced MPCs.

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## Policy Alternatives

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**Elimination of the dairy price support program.** The 1996 Farm Bill called for the elimination of the dairy price support program after 1999. Elimination remains an alternative for the current Farm Bill. 2000 was a year of low class III milk prices, with more than half of the months well below the support goal of \$9.90. During 2000 and into 2001 more than \$700 million was spent supporting milk prices. An abrupt elimination of the support price could substantially lower dairy product prices, farm level prices, and dairy farm income during low price cycles.

Dairy product and farm level milk prices would also experience increased volatility. The smaller, less efficient, and highly leveraged dairy producers would

be the most vulnerable. The adjustment towards fewer and larger dairy farms would accelerate. Efficiency of milk production would improve as dairy producers strive for profitability under lower milk prices. Milk production would continue to shift to the lower cost regions, and the pace of adjustment may be hastened.

Dairy processors and marketers in regions of declining milk production would experience increased operating costs due to greater procurement costs and unused plant capacity. In contrast, dairy processors and marketers experiencing growing milk production from fewer and larger herds would experience lower procurement costs and greater operating plant efficiencies. Consumers would benefit from lower retail prices of milk and dairy products. Taxpayers would benefit from no dairy support program costs.

**Continuation of current dairy purchase support program without supply control.** The 1996 Farm Bill called for termination of the current dairy price support at the end of 1999. However, Congress extended the program through 2001 at \$9.90 per hundredweight. A continuation of the support program at this level offers dairy producers a relatively low safety net. As a result, the basic economic forces leading to volatile milk prices and fewer but larger dairy farms would continue.

If the safety net support level was set considerably higher than \$9.90 per hundredweight, the support price rather than market forces would tend to be the effective price. Volatility and uncertainty of dairy product and farm level milk prices would be substantially reduced. The trend towards fewer smaller dairy farms would slow, as higher and more stable milk prices would delay their eventual exiting. Expansion of already larger dairy operations would likely accelerate as more stable and higher milk prices reduce the financial risk of expansion. The net result would be a potential for serious milk surpluses purchased by the Commodity Credit Corporation at high taxpayer cost. Consumers would experience higher but more stable retail prices.

**Continuation of the support program with voluntary supply control.** A voluntary supply control program could reduce potential milk surpluses under a support program. However, the higher the support level on milk, the less effective a voluntary

supply program will be in preventing a surplus milk situation. The more efficient and larger dairy operations may still view financial returns very acceptable from market milk prices. Regional differences in participation in a voluntary program are also likely. Regions where variable costs are a relatively larger share of total production costs (areas that purchase a larger share of feed inputs and hired labor) may participate to a greater extent than areas with relatively higher fixed costs (more of the traditional dairy areas).

A variety of voluntary programs could be implemented including: 1) direct payments for reduced milk marketings from a historical base, 2) a whole herd buyout program where bids are accepted to slaughter or export dairy cattle, and to keep the dairy facilities idle for a period of time, 3) a heifer slaughter program, 4) assessments on each hundredweight of milk marketed, but refundable to producers who do not increase production, and 5) a two-tier pricing system where a higher price is received for a portion of milk marketings and a lower price for excess marketings. The extent of the effectiveness of any of these programs in maintaining higher and more stable milk prices depends upon how attractive the carrot is to encourage dairy farmers to participate, or how severe the stick. Past experience suggests that voluntary programs are effective only in the short run, and that they cause substantial market distortion.

**Higher support price with mandatory supply management.** A greater safety net to dairy farmers can be established with mandatory supply management. Dairy producers would be restricted to marketing the quantity of milk that would clear the market at the established support level. Each dairy producer would be assigned a historical milk production base (quota). The percentage of base milk that could be marketed would be determined from market needs. Farm level milk prices and farm income would not only be higher but also more stable. The quota could either be assigned to the farm or transferable. Either way, the higher milk prices would likely be capitalized into the value of the farm assets or into the value of the quota itself. This capitalization would be a barrier to new entries or to the expansion of existing facilities.

Higher milk prices but restrictions on increased milk marketings could slow adoption of technologies that increase production efficiency. The traditional dairy regions with smaller and more obsolete dairy farms would have little incentive for new investments to modernize the industry and reduce production costs. The regions that have more recently experienced new dairy investments and dairy expansion would retain an absolute advantage in more efficient milk production facilities. If quotas are freely transferable, the structural change, over time, toward fewer but larger dairy operations would continue, as well as regional shifts in milk production

Without greater import protection, the higher dairy product prices would attract more imports — further limiting growth of the domestic dairy industry. Consumers would experience higher but stable milk and dairy product prices. Taxpayer costs could be eliminated.

#### **Target prices and deficiency payments.**

Target prices and deficiency payments similar to those previously used with feed grains could be applied to dairy. A target price for milk would be established. How high the target price would be depends on whether it was accompanied by a supply management program. However, unlike a milk price supported via CCC purchases of dairy products, dairy product prices would be allowed to seek market-clearing levels. If, at these levels, the farm level milk price were below the target price, dairy producers would receive the difference as a direct deficiency payment. As a means of controlling taxpayer costs and to influence farm structure, deficiency payments could be restricted to a maximum value, or quantity of milk marketed per individual producer. This type of program is often advocated as a means of targeting benefits towards the smaller family farms, but would distort the structure of the industry in favor of higher cost producers.

Dairy product and farm level market prices would continue to be volatile. However, the combination of market prices and any deficiency payment would keep dairy farm income more stable. Without supply management, market level prices could actually average lower, over time, because individual farm limits on deficiency payments would slow the exiting of smaller farms, while the larger more efficient

farms would continue to grow. As a result, more milk would be marketed than would otherwise be the case. Even with an associated supply management program, the incentive to hold back on milk production may not be sufficient.

Agribusinesses will be impacted similar to what was discussed in the previous alternatives, but at the rate that farm structural changes and regional shifts in milk production occur. At times, consumers will experience lower milk and dairy product prices than under the present support program. Taxpayer costs could be significantly higher if the target price is set relatively high, and if not kept in check via supply controls or effective payment limits. By letting dairy product prices seek market levels, dairy exports could increase slightly, and dairy imports may decline.

**Whole farm revenue or margin safety net.** A whole farm revenue program would protect dairy farm revenue as some percentage the farms historical average. Another approach would be to protect a profit margin by some index measure of the relationship between milk prices and feed prices. Either type of protection would slow the trend toward fewer, larger, and more efficient dairy operations. Markets would still determine dairy product and farm level milk prices. Consumer prices would likely experience lower prices as reduced risk stimulates production. Taxpayer costs could be substantial. To offset taxpayer costs, dairy producers who wish to participate in the program could be required to pay some type of insurance premium to cover a portion of the program cost.

**Authorization of dairy compacts.** Dairy compacts allow two or more joining states to establish a price level for Class I milk. All milk buyers selling Class I products must pay at least this Class I milk price. The higher of the minimum federal milk marketing order Class I price or the Class I price established by the compact prevails. Compacts partially de-couple Class I prices from changing milk supply and demand conditions. Dairy producers selling milk to buyers associated with the Class I compact area benefit from higher and more stable milk prices. In the short run, smaller and less efficient dairy producers may remain in business longer than would otherwise be the case. However, in time, the trend towards fewer and larger dairy

farms will prevail in the compact area. Consumers in the compact area pay more for Class I milk products.

Since milk prices to dairy producers in the compact area are higher, milk production in the compact area will also be higher absent any mandatory or voluntary production controls. Any milk production in excess of Class I needs is channeled into the production of manufactured dairy products. The price of manufactured dairy products is reduced. Dairy producers located in primarily manufacturing use areas and/or non-compact areas experience lower milk prices. Compacts place a greater burden of needed supply/demand adjustments on dairy producers selling milk to buyers in non-compact areas. This enhances the problem of regionalism. Regional concerns over nonparticipation in compacts could be reduced by pooling some portion of the compact revenue enhancement nationally.

While consumers pay a higher price for Class I milk products in the compact area, prices for manufactured dairy products may be lower for all consumers. Since the higher Class I prices are passed on to consumers, there are no direct costs of compacts to taxpayers. However, the additional milk supply and lower manufactured dairy product prices could indirectly increase taxpayer costs of CCC purchases of surplus milk or deficiency payments. Compacts may include a supply management program to reduce surplus milk supplies generated from higher producer prices.

#### **Federal milk marketing order provisions.**

Amendments to federal milk marketing order provisions are usually handled through a federal order hearing process. However, since 1985, Congress has directly intervened by legislating changes in federal order provisions. Since the federal dairy price support program impacts dairy product prices and these prices are used in federal order pricing formulas, the 2002 Farm Bill may well include federal order pricing provisions.

If the dairy price supports continue with a CCC purchase program, the CCC purchase price for butter and nonfat dry milk has major implications on the mover of Class I and Class II prices. Changing the tilt towards butter and away from nonfat dry milk prices will drop the market price of nonfat dry milk powder. This will lower the Class IV skim milk price

and move it closer to the advanced Class III skim milk price. With a lower Class IV skim milk value, dairy farmers in the predominately Class I use markets would likely experience lower milk prices and incomes as a result. In periods of milk surpluses and when cheese prices and Class III prices are depressed, the lower advanced Class IV mover and resulting lower Class I and Class II prices would result in a more timely supply/demand adjustment. The Class I markets would be less de-coupled from the manufacturing cheese market. However, lower nonfat dry milk prices could channel more milk into higher value cheese production, thereby lowering cheese prices and Class III prices as well. To the extent that this occurs, all dairy producers could experience some reduction in milk prices over the long term. Consumers may experience lower prices for both beverages and manufactured dairy products. Taxpayer costs would be reduced to the extent that CCC purchases of surplus dairy products are reduced.

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## Summary

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Milk retains its unique properties in that it is highly perishable, bulky, produced 365 days a year with a limited ability to alter short-run production decisions, and has many more sellers than buyers. These attributes gave rise to early market failures and subsequent government intervention. However, dairy farm characteristics of the past were far more homogeneous than they are today. This makes a consensus for a “one size fits all” dairy policy difficult to achieve. Large versus small farms, manufacturing versus fluid regions, growth versus declining regions, producer versus processor — all of these tensions set the stage for a lively debate of the dairy provisions of the 2002 Farm Bill.