

Information Letter Series

The Dairy Subtitle of the Agricultural Act of 2014

Information Letter 14-01

7 February 2014

5 September 2014 (revised)

Marin Bozic, John Newton, Andrew M. Novaković, Mark W. Stephenson, and Cameron S. Thraen

Introduction

The Agricultural Act of 2014 was passed by the House of Representatives on 29 January on a vote of 251 to 166 (14 not voting). The Senate approved the bill on a vote of 68 to 32. With very strong support from both chambers, the President signed the bill on 7 February.¹

Although the Agricultural Act of 2014 is now the "current" farm bill, its various pieces and provisions will begin to take effect over a period of time. Some provisions will take effect immediately; a few may be applied retroactively. Others will phase in over the next few weeks or even year as USDA and other agencies develop necessary rules. The dairy provisions are explained in some depth below. Readers are cautioned that there are many

_

^{*}Marin Bozic is Assistant Professor in the Department of Applied Economics at the University of Minnesota and Associate Director of Midwest Dairy Foods Research Center. John Newton is Assistant Professor in the Department of Agricultural and Consumer Economics at the University of Illinois Urbana Champaign. Andrew M. Novaković is The E.V. Baker Professor of Agricultural Economics in in the Charles H. Dyson School of Applied Economics and Management at Cornell University. Mark W. Stephenson is Director of Dairy Policy Analysis and Director of the Center for Dairy Profitability at the University of Wisconsin. Cameron S. Thraen is Associate Professor in the Department of Agricultural, Environmental and Development Economics at The Ohio State University. The Information Letter series is intended to provide timely information and an interpretation of current events or policy development for Extension educators, industry members and other interested parties.

¹ The full text of the bill can be found at http://www.ag.senate.gov/download/?id=5A49E61C-E2DD-

¹ The full text of the bill can be found at http://www.ag.senate.gov/download/?id=5A49E61C-E2DD 4538-B3E9-72E7F6A6B402

aspects of the new dairy programs that cannot be fully explained until USDA completes the process of writing rules, and there are a few basic items that still require legal interpretation to ascertain their meaning.

The Basic Outline

The dairy provisions of the Agricultural Act are primarily a variation of H.R. 2642. Its primary features are described below.

Existing safety net programs are repealed and replaced with two new programs. The programs that are repealed are those that have represented the milk price and dairy farm income safety net:

- 1. The Dairy Product Price Support Program (DPPSP), effective immediately,
- 2. The Milk Income Loss Contract (MILC), effective once the new Margin Protection Program for Dairy Producers becomes operational or 1 September 2014, whichever is earlier,
- 3. The Dairy Export Incentive Program (DEIP), effective immediately.

Note that the DPPSP, passed in the Food, Conservation and Energy Act of 2008 (i.e. 2008 Farm Bill) is repealed, but the permanent Dairy Price Support Program that is contained in the 1949 Agricultural Act is not. MILC and DEIP do not have underlying permanent authority and are forever gone.

Certain other authorities are continued, including extensions of:

- The Dairy Forward Pricing Program which allows non-Cooperative buyers of milk who are regulated under Federal Milk Marketing Orders to offer farmers forward pricing on Class II, III, or IV milk, instead of paying the minimum Federal order blend price for pooled milk.²
- ^{2.} The Dairy Indemnity Program which provides payments to dairy producers in the unlikely event that a public regulatory agency directs them to remove their raw milk from the commercial market because it has been contaminated by pesticides, nuclear radiation or fallout, or toxic substances and chemical residues other than pesticides. Payments are made to manufacturers of dairy products only for products removed from the market because of pesticide contamination.³

²http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateL&navID=dyfor wardpricingpgmDairyPublications&rightNav1=dyforwardpricingpgmDairyPublications&topNav=& leftNav=&page=DairyForwardPricingProgram&resultType=&acct=dgeninfo

³http://www.fsa.usda.gov/FSA/newsReleases?area=newsroom&subject=landing&topic=pfs&newstype=prfactsheet&type=detail&item=pf_20110425_insup_en_dipp.html

Certain provisions to augment the development of export markets under the National Dairy Promotion and Research Program.⁴

The new programs are:

- 1. The Margin Protection Program for Dairy Producers (MPP) a voluntary program that pays participating farmers an indemnity or benefit when a national benchmark for milk income over feed costs (the actual dairy production margin or ADPM) falls below an insured level that can vary over a \$4 per cwt range.
- 2. The Dairy Product Donation Program (DPDP) a program that requires the Secretary of Agriculture to immediately procure and distribute certain dairy products when the ADPM falls below the lowest margin level specified for the MPP. These products would be targeted for use in domestic, low-income family, food assistance programs, such as, but not limited to, The Emergency Food Assistance Program.

In addition, there is language related to the promulgation of a Federal Milk Marketing Order that covers the State of California. The Act also repeals the authority for a Federal Milk Marketing Order Review Commission. Originally authorized in the Food, Conservation and Energy of 2008, the Commission was never funded and never appointed.

Margin Protection Plan for Dairy Producers (MPP)

The new MPP contains several basic elements that combine to determine how, when and how much in payments dairy farmers can receive in periods of financial stress. The main items are:

- 1. An Actual Dairy Production Margin, which is a national estimate of dairy farm income from the sale of milk less an estimate of an average cost of feed for a hypothetical but nationally representative dairy herd.
- 2. An Actual Dairy Production History (ADPH) for each participant.
- 3. A Coverage Percentage, which is simply a percentage of the ADPH selected by each producer, to determine how much of their eligible milk they wish to cover. The resulting quantity applies to the calculation of total premiums and indemnities.
- 4. A Coverage Level, which is a \$/cwt figure that defines the degree of margin protection desired by a participating farm. It corresponds to a range of outcomes as measured by the new Actual Dairy Production Margin.

Each of these and other program mechanisms are described more fully below.

 $[\]label{lem:linear_substitute} $$ \frac{http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateN&leftNav=IndustryMarketingandPromotion&page=DairyProducerCheckoffPrograms&description=Dairy+Producer+Checkoff+Programs $$$

The Actual Dairy Production Margin

A key feature of the overall plan is that it changes the focus of the safety net from the price of milk to a margin. The margin is formally labeled the Actual Dairy Production Margin (ADPM), but it might more descriptively be called Milk Income Over Feed Costs (IOFC) margin. It determines a margin as the difference between the national average price for all (grades of) milk and the cost of three feeds that represent the bulk of feeds purchased for dairy cattle – corn, soybean meal and alfalfa hay.⁵

The National Milk Producers Federation developed the original formulation for the feed cost component of the calculation. It was intended to represent the dairy ration that would be consistent with recommended nutrition to produce 100 pounds of milk including the dairy cow and the herd complement of dry cows, hospital cows and young stock at average U.S. milk yield per cow.⁶

The methodology boils down to a simple equation that weights the national average prices received for corn and alfalfa hay as determined by the National Agricultural Statistics Service and the Central Illinois soybean meal price as reported by the Market News Service of the Agricultural Marketing Service. The exact formula is as follows:

ADPM in \$/cwt of milk = All Milk Price

Minus the sum of

1.0728 x the price of corn

0.00735 x the price of soybean meal

0.0137 x the price of alfalfa hay

The margin will be calculated monthly. For almost all applications in the Act, triggering events are based on a 2-month average for consecutive pairs of months in the calendar year, i.e. Jan/Feb, Mar/Apr, and so on.

It is important to note that the margin guarantee is relative to this hypothetical or nationally representative calculation. In any month, there is only one price for each item in the formula. And, the ADPM assumes a specific mix of feeds, which defines both which feeds are included and their amount. The MPP does not guarantee an individual producer's margin. It is assumed that each producer's margin will vary in a way that correlates with the

⁵ The feed formulation also includes corn silage, a very common dairy feed. However, the value of corn silage, which is primarily a homegrown feed, is based on the same price as grain corn.

⁶ http://www.marinbozic.info/blog/?p=316

⁷ In contrast, the Livestock Gross Margin for Dairy Cattle (LGM-D) program already offers similar margin insurance, but it allows the producer to select different quantities of two feeds: corn and soybean meal. The milk price that applies to LGM-D is also different. It is the Federal Order Class III price, not the U.S. All Milk Price. The reason for these differences derives from the fact that LGMD establishes its margin protection and premium levels by looking to the future, as indicated by prices for these products on the Chicago Mercantile Exchange futures markets. The ADPM is calculated in the present, after USDA estimates the corresponding prices.

national calculation. If the ADPM is "bad", presumably individual producer margins are similarly bad, but the IOFC for each farm will certainly vary considerably across farms.

Effective Date and Specific Rules

The legislation states that by no later than 1 September 2014, "the Secretary shall establish and administer a margin protection program for dairy producers..." On 28 August 2014, Secretary Vilsack announced the formal release of the MPP-Dairy rules on 29 August and the beginning of the enrollment period on 2 September. Producers are allowed to register for the last four months of a 2014 program year and the full 2015 program year during the enrollment period from 2 September to 28 November 2014. In future years the registration period will run from July through September.

As is typical with any regulatory legislation, USDA's Farm Service Agency must write specific rules on how to conduct this program. The final bill contains various instructions on how to treat new producers, farmers who own more than one farm, farms that are owned by more than one producer, and the like. There are always a host of details that must be determined to implement a new program. The final bill states, "The Secretary shall promulgate regulations to address administrative and enforcement issues involved in carrying out the margin protection program." Rules require an internal, USDA review as well as a review by the Office of Management and Budget. All of this is normal procedure, and it necessarily takes some time. It seems likely that many of the rules on producer requirements for submitting production, ownership and other records would be similar if not identical to those used for the MILC program.

The rules for MPP-Dairy have been published in the Federal Register on 29 August.⁸ The rules are discussed and highlighted in DMAP IL14-02.

Overlap with MILC and LGM-Dairy

The MILC is authorized through the end of August 2014. The extension of the MILC into 2014 is done using the (more generous) program parameters of 2.985 million pounds of milk, \$7.35 feed adjuster, and 45% payment rate, that were in place in early 2012 and extended through August 2013.

Producers who sign up for MPP are ineligible to sign up for a Livestock Gross Margin – Dairy Cattle (LGM-Dairy) policy, offered through the Risk Management Agency of USDA.⁹ Farmers can defer signing up for MPP, but once they register for the program they can no longer participate in LGM-D. The Agricultural Act of 2014 does not change anything with respect to LGM-D, including the possibility for subsidization of premiums. Announcements about the availability of LGM-D will continue to be made on a federal fiscal year basis, beginning on 1 October.

⁸ http://www.ecfr.gov/cgi-bin/text-idx?SID=a20e7362d6350c8960bfc7e21789d201&node=pt7.10.1430&rgn=div5

⁹ http://www.rma.usda.gov/help/faq/lgmdairy.html

Basic Structure

The MPP pays an indemnity to participating farmers when a national benchmark measure of gross returns to milk marketed by farms less a national benchmark cost of basic dairy feeds falls below certain thresholds. This national benchmark is referred to formally as the Actual Dairy Production Margin (ADPM)

Conditions that will trigger a payment are calculated in 2-month intervals, wherein the calendar year is divided into 6 periods consisting of consecutive pairs of months: Jan/Feb, Mar/Apr, May/Jun, Jul/Aug, Sep/Oct, Nov/Dec. When a payment is triggered, farmers will receive a compensating indemnity payment on the qualifying amount of milk. No matter how grim a single month may get, if the 2-month average doesn't hit a trigger, there will be no payment.

The Act does not specify a particular timetable for payment; indeed, FSA is instructed to develop rules for collecting premiums and paying out indemnities. It is reasonable to expect that payment would be as soon as is practicable and relatively prompt, as is currently the case with MILC.

Eligibility

Every farmer, in every State and U.S. territory or possession (e.g. Puerto Rico and Guam) is eligible for the MPP, but any farmer who wants to participate must enroll in the program. Farmers may not participate in both MPP and Livestock Gross Margin for Dairy Cattle.

Participation

Producers may elect to participate, or not participate, in the margin protection program in any calendar year. A year can be skipped without prejudicing enrollment in a future year.

Production History

Every Participating Dairy Operation will be assigned a Production History (PH). For all farmers who have been in business for at least the full 2013 calendar year, the PH will equal the highest annual marketings in the three preceding years: 2011, 2012, or 2013. In subsequent years the Secretary shall adjust the production history of a participating operation to reflect any increase in the national average milk production. A farm that started in 2011 or 2012 would not have a complete three-year history, but their PH would still be the highest of those three years.

New entrants, having less than one year of history, are specifically mentioned in the Act and will be able to choose one of two ways to extrapolate their available production history to a 12-month equivalent. These methods include extrapolating the volume of actual milk marketings for the months the dairy has been in operation to a yearly amount; or using an estimate of their annual milk marketings based on the farm's actual milking herd size and the national average yield data published by USDA.

Coverage Percentage

Every year, producers who want to participate will be allowed to determine how much milk production they want to cover. This quantity will determine their total premium payment and their potential indemnity payment.

The amount is calculated as a percentage applied to the Production History. Producers may choose no less that 25%, no more than 90%, or points in between in 5% intervals.

Administrative Fee

Participants must pay an Administrative Fee of \$100 each time they register. Fee revenue will accrue to USDA and may be used to offset administrative costs incurred by FSA.

Coverage Levels and Premiums

Farmers may elect margin coverage in 50¢/cwt increments from \$4 per cwt. up to \$8 per cwt. If the ADPM (national benchmark margin) for any 2-month period falls below a producer's coverage amount, the difference will be paid on their coverage amount - the elected percentage of their PH.

Premiums are structured at a lower level for the first 4 million pounds per year of covered production history and at a higher level for amounts of PH covered in excess of 4 million pounds. In addition, premiums for the first 4 million pounds, up to but not including the \$8.00 coverage, will be discounted 25% for sign-ups in 2014 and 2015. This is to encourage participation in the program, especially by smaller scale farmers. The rates are provided in the table below.

Coverage Value in \$/cwt of PH marketings	Premium	Discounted Premium	Premium
	≤ 4 M lbs. PH	≤ 4 M lbs. PH	>4 M lbs. PH
	(\$/cwt)	(\$/cwt)	(\$/cwt)
\$4.00	\$0.00	\$0.00	\$0.00
\$4.50	\$0.010	\$0.0075	\$0.020
\$5.00	\$0.025	\$0.01875	\$0.040
\$5.50	\$0.04	\$0.03	\$0.100
\$6.00	\$0.055	\$0.04125	\$0.155
\$6.50	\$0.090	\$0.0675	\$0.290
\$7.00	\$0.217	\$0.1625	\$0.83
\$7.50	\$0.30	\$0.225	\$1.06
\$8.00	\$0.475	\$0.475	\$1.36

The lower tier premiums apply to the first 4 million pounds of milk that is signed up for the program – the Covered Production History. This could be 90% of a farm that has a Production History of 4.4 million pounds or 50% of a farm that has a PH of 8 million pounds.

Any milk covered in excess of 4 million pounds per year is charged the higher rate. Thus, a farm that had a production history of 20 million pounds and who covered 75%, or 15 million pounds, would pay the lower premiums on 4 million pounds and the higher premiums on 11 million pounds of milk.

The timing and manner for premium payments is something that USDA must develop when it promulgates specific rules. The Act simply instructs USDA to provide more than one method and to use methods that "maximizes dairy operation payment flexibility and program integrity".

Payments

When the average ADPM (margin) for a 2-month period falls below the coverage level selected by a producer, that producer would receive a payment on the percentage of his PH for which he contracted.

In previous versions of the bill, passed by both the House and Senate, if actual two-month marketings were less than 1/6 of the PH, then payment would be made using the actual marketings. This provision no longer exists in the 2014 Agricultural Act. After reading the Manager's Report specific to this provision the authors suspect this is an oversight. The FSA rules will eventually clarify this.

Most farms have seasonality in their milk production, most often with more production in the late Winter or early Spring and less production in the late Summer or Fall. Producers who experience seasonal differences in their marketings may well find that PH marketings are used in the high seasonal period and actual marketings are used in the low seasonal period, whenever that may be for them.

The Dairy Product Donation Program

At any time that the ADPH is below \$4 per cwt in each of two successive months, the Secretary of Agriculture must announce and implement a Dairy Product Donation Program. Under this program, the Secretary must

Purchase dairy products for donation to Food Banks or other programs that provide food assistance to individuals in low-income groups.

"Distribute but not store" the dairy products purchased

Do so "immediately and at "market prices"

Consult with "public and private nonprofit organizations organized to feed lowincome populations" to "determine the types and quantities of dairy products to purchase"

Terminate the DPDP whenever one of a set of exit conditions exists.

 $[\]frac{10}{http://www.ag.senate.gov/download/?id=0964D0E5-91A0-4938-9C78-8A48E687B761}$

The program provides an arguably good use for dairy products, but its impact on demand and price is not entirely clear. The fundamental question is whether or not the endusers of donated products would have purchased them on commercial markets anyway.

If these donations are strictly additive to total dairy usage then the amount of dairy products served in Food Banks or other settings is increased. If the donation displaces commercial purchases that would have been made with other cash resources, then total commercial sales of dairy products would actually decline. If the increased availability of dairy products in certain settings, for example, school-feeding programs actually increased consumer preferences for dairy products, total demand could increase over time. Beyond these basic observations, the nature and timing of any of these effects is hard to estimate.

To the extent that these donations are going to programs that have limited resources and continuously unmet needs, it is not unreasonable to speculate that commercial displacement will be minimal.

It should be noted that the purchase of dairy products described in this program is reminiscent of purchases under the old Dairy Price Support Program or its short-lived successor, the Dairy Product Price Support Program. It is quite important to note that, although the mechanics of purchasing dairy products would likely be identical, the terms of the purchase would be very different. Under the old program, USDA was obliged to purchase products at a fixed price, designed to support prices, and without out limit to quantity. The quantities sold to USDA were determined by sellers and hinged on how attractive they found the USDA purchase prices. Under the DPDP, USDA is required to buy an unspecified quantity at "market prices". They are instructed to consult with leaders of food assistance programs about quantities that could be used, but they are not obligated to a particular product or amount." Unlike the earlier programs, these products cannot be stored or stockpiled for later distribution.

It should also be noted that this approach by no means takes USDA into uncharted waters. USDA routinely purchases dairy products for food assistance programs, including Evaporated Milk, Infant Formula, Instant Nonfat Dry Milk, Kosher Process Cheese, Mozzarella Cheese, Natural American Cheese (cheddar types), Processed Cheese, and Ultra High Temperature Milk. Thus, the DPDP does not create a new program so much as it augments existing programs.

¹¹ In the jargon of economics, the old Dairy Price Support Program results in a perfectly elastic demand for bulk, commodity cheddar cheese, butter or nonfat dry milk. The DPDP results in a rightward shift, or increase, in the demands for whatever products USDA specifies. The economics of the supply and demand impacts are quite different.

¹² http://www.fns.usda.gov/child-nutrition-programs

¹³ http://www.fsa.usda.gov/FSA/webapp?area=home&subject=coop&topic=pas-da

Federal Milk Marketing Orders

The Agricultural Act of 2014 is notable for what it does not contain with respect to Federal Milk Marketing Orders, as well as what it does contain. The original proposal prepared by the National Milk Producers Federation envisioned considerable changes to how class prices are established. Those provisions were eliminated early in the history of the Dairy Security Act, which was the basis or structure around which new dairy policy was developed.

In the Senate, additional language pertaining to Federal Orders was proposed and ultimately adopted in its version of a farm bill. These provisions also pertained to how class prices are determined but they directed USDA to engage in a review process, not to legislate or otherwise oblige a specific change.

Beyond these broader Federal Order issues, there has been much speculation of late about producers in the State of California dropping their 50-year old system of classified pricing and pooling under State law and opting instead for a Federal Milk Marketing Order. A Federal Order has always been an option for California producers, but until recently they have preferred the provisions and administrative structure of their State system. Changes in the relationship of prices under the California Order and Federal Orders broadly have caused many California producers to re-evaluate their State system. After a couple years of persistent intransigence by the California Department of Food and Agriculture, it seems that many California producers have decided that they might be better served under a Federal Order. The decision is not an easy one, as there are aspects of a Federal Order that seem very appealing but there are other aspects that are not.

Among the most contentious issues is the ability of a Federal Order to accommodate a unique California system for determining how to divide the combined proceeds of the market among dairy farmers. It is referred to as the Class 1 quota system. Although Federal Orders have had very similar systems in the past, they have not been used in many years and are no longer authorized under Federal law.

Various advocates in California asked Congress to include legislative language that would at least make it legal for them to use their Class 1 quota system in a potential California Federal Order and perhaps direct or require other provisions from the State system that they favor.

In the end, the Agricultural Act of 2014 simply changes a deadline in a 20-year old bill that was written at a time when the Federal Milk Marketing Order system was undergoing a massive reform, including a consolidation of its smaller geographic areas into larger, regional areas. At that time, Congress created legislation that said if California wanted to join the Federal system it could do so. To make it more appealing to join, Congress stipulated that a California Federal Order would have to encompass the entire state, not one county less nor one county more, and the new order could (not shall) use a Class I quota plan to determine individual producer payments. However, this was a limited time offer that expired in 1998. The Agricultural Act of 2014 simply repeals that deadline and thereby puts the offer and geographic restriction back on the table.

The Agricultural Marketing Service of USDA would still have to receive a formal petition from California producers and conduct a promulgation hearing to collect evidence about the market and hear testimony on desired provisions. The basic design of a Federal Order is the same across all geographic Orders, but there are numerous specific variations that are designed to serve the particular characteristics and needs of a marketing area. This would be an extensive and complex process. USDA would adhere to some of the administrative procedure recently mandated to encourage prompt hearings and decisions, but the administrative rules specified in the 2008 farm bill for hearings to amend do not apply to promulgation hearings.

Possible Issues and Challenges

While the new dairy title was designed in good faith and with great attention to detail, some unintended consequences may still occur, as described below.

Although market conditions may rapidly change, MPP premiums never do. The upside of this provision is that the MPP can serve as a protection against protracted low margin periods that cannot be managed using CME futures and options contracts. A possible adverse side effect is the crowding out of private risk markets by subsidized government-provided margin insurance. In other words, if dairy farmers use the MPP heavily and stop participating in CME futures markets, those markets will lose valuable participants and liquidity that could threaten their viability.¹⁴

The MPP provisions may inadvertently result in a policy framework that gives advantage to "lumpy" over "incremental" growth at the farm level. As described earlier, insurable production at any single location is determined by a combination of the historical milk production over 2011-2013 and the subsequent growth in national milk per cow. However, producers who choose to grow their business by building a brand new separate dairy operation at a new location would likely be able to enroll that operation in the program under the provisions governing "new entrants". The Act, as is commonly done for crops programs, includes a Reconstitution provision. This purpose of this provision is to allow USDA to prohibit or control farmers who attempt to gain more benefits by reorganizing their business structure. USDA will clearly specify what producers may and may not do with respect to how they expand their milk production and qualify it for the MPP program. Nevertheless, it is likely that some opportunity will exists for new dairy farm businesses started by people already in dairy farming.

There are several reasons why producers faced with very low margins may find it optimal to reduce milk production by culling. First are the basic economics of milking a cow.

_

¹⁴ This problem may be partially mitigated through innovation in private risk markets that would allow dairy producers to monetize the implied MPP subsidy. Such a product could render MPP and futures and option contracts complements, rather than substitutes. For details see Wolf, C., M. Bozic, J. Newton and C.S. Thraen 2013. "Moove Over: Will New Government-Sponsored Dairy Margin Insurance Crowd Out Private Market Risk Management Tools?" Paper Presented at AAEA 2013 Crop Insurance and the Farm Bill Symposium, Louisville, KY, October 8-9. http://ageconsearch.umn.edu/handle/156713

When a cow's production no longer justifies the cost of feeding and keeping her, she will be culled. Second, even if the cow is carrying her own economic weight, culling of cows on the margin may still be necessary due to cash flow needs on the farm. Third, cows on the margin may be culled or culled early because of very favorable cull cow prices, which is currently the situation due to very tight beef supplies. Because indemnities received under MPP should lessen cash flow challenges, culling that might otherwise have occurred is forestalled. This is consistent with the whole point of the program, but the effect is to maintain milk production and potentially prolong the duration of low margin periods. This is no different than the effect of the MILC program. The extent to which these kinds of countercyclical subsidy programs impact milk supply is subject to debate. Existing research about this effect is inconclusive. Further research will no doubt examine if this effect will or does materialize and to what degree.

Actuarially fair premiums imply that the premium equals the expected long-term indemnity – insured businesses, in total, do not get more than they put in. LGM-D is based on actuarially fair premium calculation methods. Observers of that program know that its premiums vary each month, depending on the outlook for milk and feed prices, and they generally have been high enough to give most farmers pause. We cannot say how heavily subsidized the premiums for MPP are, but it is easy to guess that, over a period of several years, the indemnities paid out will exceed the premiums collected. Indeed, it is quite possible that the level of taxpayer subsidy will be very large. If this is true, it implies that the MPP will reduce, and quite possibly very significantly reduce, market risk in dairy farming. It will not reduce the risks of disease or local weather effects faced more individually or regionally, but it would reduce the risk of price changes that are disadvantageous to all farmers. To the extent this is true, it could give incentives for investments or production decisions that otherwise would be deemed too risky. This means more production than would otherwise occur, which in turn means a lower price structure for milk. These kinds of effects are not unique to MPP. They can and historically did occur with the Dairy Price Support Program. The issue is not the design of the program, per se, but the extent to which a program subsidizes long term risks.

To the extent the DPDP is triggered it could send distorted market signals to various dairy product sectors, in essence inflating the true underlying demand for products that were sold to the government for donations.

The MMP operates from a margin formula that defines income or returns over feed costs. Declines in the MMP margin can come about from any combination of movements in milk prices vs. costs. In 2009, the situation could be described as declining milk prices relative to feed prices. In 2012, this situation might more aptly be described as rising feed prices relative to milk prices. The trigger for the use of DPDP does not distinguish the cause of a low MMP margin. Much of the public discussion of the previous versions of a new dairy program seemed to assume that a low margin necessarily means a low milk price, meaning low relative to historical patterns of milk price. An incremental government demand presumably will increase the milk price relative to feed prices and thereby raise the margin. However, if the margin is low as a result of rising and high feed prices with an already adequate or even high milk price, as was the 2012 drought experience, it is not clear how

effective these purchases will be in boosting the milk price and in turn the MMP margin. It is not clear how much an already high milk price can be further accelerated. Clearly, strengthening dairy product demand will not reduce high feed prices in such situations.

Summary

The dairy subtitle of the new Agricultural Act offers a total revamping of the safety nets that have been in place for the dairy sector going back to the middle of the 20th Century. The MPP might be considered a variation of the countercyclical payments (MILC) that began in 2002, but it is notably different in two important ways. First, it substitutes Milk Income Over Feed Costs for farm price as the measure by which we economically evaluate market conditions and support dairy farms. Second, it does not restrict eligibility for the program by farm size. Larger farms have to pay a higher premium, but they are not categorically limited in participation.

The Dairy Product Donation Program uses the mechanics of the old Dairy Price Support Program to purchase dairy products, but it really does so as an extension of existing programs that allow USDA to purchase dairy products on behalf of a variety of food assistance programs.

Advocates of a new approach argued that the limitations of existing programs were vividly revealed during the horrible economic events of 2009, and repeated in 2012. Hence, they argued, bold new programs are needed. Whether the programs proposed here will prove to be the answer farmers seek is something that will be debated and estimated, but we won't really know unless and until they are tried.