

Analysis of the Dairy Price Stabilization Act of 2010

HR 5288 and SB3531

This plan was originally developed by the California Milk Producers Council and was backed by the National Holstein Association and the Dairy Farmers Working Together.

The potential for the Dairy Price Stabilization Act of 2010 to substantially reduce price volatility based on the triggers as set in the bill is near zero. The triggers do supply some certainty as to what the program will do in the situations described for the triggers instead of depending on a board of dairymen and industry people to try to evaluate the near term supply and demand potentials and then apply an arbitrary level of access fee and allowable growth level.

When I look at what the milk/feed ratios would have triggered for allowable growth and access fees over the last 10 years or 40 quarters, it becomes a concern that the program has enough incentive to control growth, which is its main objective. Of the 40 quarters 34 of them would have allowed a 3% growth. 3 quarters would have allowed 0% and only 3 would have allowed -3%. For the 34 quarters at 3% growth the market access fee would have been only 3 cents 14 of the quarters, with eleven quarter at 13 cents and just 9 quarters at the 25 cent level. The average growth for this period was just over 2% annually for the entire country.

But because of the way the triggers are set in motion, the effect on the supply could be up to 6 months or more after the market begins to show signs of a supply and demand imbalance. Here is an example. Let's say we are in the period in early 2008 when the milk/feed ratio dropped below 2 in April. The allowable growth and access fees are announced at least 30 days before the start of a quarter based on the most recent 3 months milk feed ratio which would have been 2.58 for the 2nd Q based on the months of Nov. Dec. and Jan. The 2.58 milk feed ratio would have generated an allowable growth of 3% and an access fee of just \$.13. The 3rd quarter allowable growth and access fee will be announced in May and would be based on the milk feed ratio of the 3 most recent months of Feb. March and April and was 2.09. The 2.09 would still allow a growth of 3% with an access fee of \$.25. I don't believe these numbers would have reduced production at all during the 3rd Q. The \$.25 or \$1.25 alternate fee would not be enough to encourage the dairies that are in an expansion mode to not continue their expansion and the majority of the dairy producers will be within the 3% growth. The 4th quarter allowable growth and access fee will be announced in August and would be based on the milk feed ratio of the 3 most recent months of May, June and July and was 1.87. The 1.87 would trigger the allowable growth to be 0% and raise the access fee to \$.50. I still believe these numbers will still have a minimal effect on production. Most dairyman who have not expanded and are producing about the same amount of milk are not going to do anything to make sure they do not go over their allowable growth until the very end of the quarter or approximately the end of December. The dairymen that have expanded their facilities, are not likely to reduce production because they will likely just pay one of the fees as a cost to buy base for future years. The milk feed ratio did not cause the allowable growth to go to the -3% level until the 2nd, 3rd and 4th quarter of 2009. That is a full year after the first market signal to reduce production. I believe that this plan will be much to slow to respond to changing market conditions. The market began to signal excess production in April 2008 and this program would likely have a minimal effect even by December. Since this program does not change how milk is priced or that milk products will still be purchased and stored by the government support programs, the stocks will have built up enough by this time to continue the price decline. This plan does not deal with the main reason for the volatility. The average increase in production from 1998 to 2008 was 2.07% per year with only 3 years over a 3% increase. The largest was 3.62%, but the two previous years were only .33% and .29%. The plan does not address the root of the volatile pricing which is **end product pricing** using CME and NASS prices which are plugged into outdated formulas for each federal order. It also does not address the problem caused by government buying of excess product and storing it. This causes production to not retract as when it needs to and then extends the down period to the point that production is eventually over corrected. When there is a demand shock as we had at the end of 2008 and early 2009 the Cornell model still predicts extreme volatility even with this plan in place. When the plan calls for a negative growth, I believe it fails even worse

than their charts show. If it is announced that everyone will need to cut back the next quarter 3% to avoid paying the access fee, the plan would cause major problems in the beef markets if most of it is to be accomplished by culling. Ex. If you run the numbers to achieve a 3% reduction, the dairyman will likely have to cull at least 5% to 6% of his herd because he is not going to cull the top or even the average cow. Also he needs to do it quickly because if he waits a month then to avoid the fee he will have to reduce production by 4.5% in the last two months of the quarter. There are about 9 million cows so even a 5% reduction is 450,000 cows that will need to be culled immediately. This would destroy the cull cow price and the beef price making it unlikely to happen. Also at this point cattle dealers who have standing orders for cows will likely be able to buy up very cheap cows and sell them to the dairy's that have committed to building base and paying the fee. This may even be an advantage for those expanding farms because of the very low price they will be able to buy cows for. The alternative to culling to reduce production is drying off cows early. But it will take a lot of early dry offs to accomplish the reduction and then these cows will be coming back sometime in the next quarters causing production to snap right back and likely causing additional quarters to be restricted for production. I believe that when the -3% allowable growth is in effect that many dairymen who have not expanded will wait until the end of the quarter because of the variability in day to day production. At some point he may cull some extra low profit cows when it becomes clear that he is likely to exceed his allowable growth, but then when it comes down to the last week of the quarter he may just ship the milk and pay the alternate fee on the excess production. By this point in the quarter the allowable growth and access fee would have been announced for the next quarter which would have some effect on the decisions to reduce production or continue to ship and pay the fee. When there are multiple quarters of the negative 3% allowable growth, I believe we will see this program having the effect of moving cows from the herds trying to stay under the fee to the herds that have expanded and are already committed to paying the fee which maxes out at \$.50 per cwt. The program calls for the fees collected to be split up between the dairymen that have not shipped more than the allowable growth as an extra incentive. There is no way to project what this amount will be, but it surely will be a very small amount providing minimal incentive. When the access fees are at the maximum and the allowable growth at the negative 3% level there is a chance of a more significant amount of money to be returned to the dairymen that qualify. But it is actually a sign that the program is not having the desired effect of reducing production. With the current system for pricing milk still in place, the price of milk will drop many times more than what the incentive will cover.

Here is a chart of what the allowable growth would have been since the year 2000 using the milk / feed ratio triggers in the plan. Finally, this program, as with all the other programs being proposed, except the Rational Milk Pricing plan, treat the entire country as one large market and do not recognize any regional differences in supply and demand. When signals are sent to reduce production, if it were to be effective, it would cause areas of the country that are already deficient in milk to become more deficient and require the added cost of trucking milk and milk products from the excess areas back to the deficient areas.

	1st Q	2nd Q	3rd Q	4th Q	
2000			3%	3%	3%
2001	3%	3%	3%	3%	3%
2002	3%	3%	3%	3%	3%
2003	3%	3%	3%	3%	3%
2004	3%	3%	3%	3%	3%
2005	3%	3%	3%	3%	3%
2006	3%	3%	3%	3%	3%
2007	3%	3%	3%	3%	3%
2008	3%	3%	3%	0%	
2009	0%	-3%	-3%	-3%	
2010	0%	3%	3%	3%	

I have built a spreadsheet to calculate what the fees paid would be and what the fees distributed would be for what might be typical scenarios based on recent history for production growth. I am using information published in Progressive Dairy Magazine that breaks down the U. S. production by herd size. For 2009 the dairy industry had 54,942 licensed herds. There were 3350 herds of 500 cows or more that produced 59.5% of the total production. There were 3850 herds with 200 – 499 cows that produced another 12.5% of total milk. So combining the two shows that there are 7200 herds or 13% of the total have 200 cows or more and produce 72% of our milk. There are another 8600 herds with 100 – 199 cows that produce 16.4% of our total. That leaves us with 39,142 herds with less than 100 cows that produced 11.6% of the U.S. total. Since the year 2000 there are 22960 fewer of these herds when they produced 34% of the U.S. total. During this period, 2000 to 2009 U.S. milk production increased about 20% or about 2% per year on average. These statistics will be the basis for the scenarios analyzed to do the calculations of the fees.

The first scenario looks at the 3350 herds that produce 59.5% of our milk. Scenario 1 assumes these herds averaged just 3.5% increase over their base and all but one paying the alternate fee of \$.15 to \$2.50 per cwt. on the milk they produced over the base depending on the milk/feed ratio trigger. This 3.5% increase by these herds would equal the average of just over 2% for the total production for all producers assuming all the other herds did not increase at all compared their base period. Scenario 1 has just one herd that increased at 27% and likely pay the regular fee of \$.03 to \$.50 on all their milk production. Based on the milk/feed ratios of the last 10 years or 40 quarters the fees paid would have been \$.03/cwt. in 14 quarters, \$.13/cwt. in 11 quarters, \$.25/cwt. in 9 quarters and just 6 quarters at the \$.50/cwt. level. The alternate fee of 5x these amounts could be paid on just the amount of milk produced over their allowable growth base. For this scenario the fees distributed to the herds that produced less than their allowable growth would have been less than \$.01/cwt. in 14 quarters, \$.032/cwt. in 14 quarters, \$.062/cwt. in 9 quarters, \$.124/cwt. in 3 quarters and \$.23/cwt. in 3 quarters. I do not believe the amount of fees paid or distributed are high enough to discourage production over the allowable growth.

The second scenario looks at the same 3350 herds, but increases the number of herds that increased production 27% to 84 with the rest of **these** herds increasing 2.9% while all the other herds produce at zero growth. The same production increase could come from 42 herds increasing 54% or any other combination that produces the same amount of production increase. The total increased production is still at the 10 year average of 2%. Based on the last 40 quarters the fees distributed would now be \$.005/cwt. or less in 34 quarters, \$.123/cwt. in 3 quarters and \$.226/cwt. in 3 quarters.

The third scenario looks at the same 3350 herds, but increases the number of herds that increased production 27% to 436 or 13% of these herds with the rest of these herds decreasing production on average .01% and all other herds at zero growth. The same production increase could come from any other combination that produces the same amount of production increase. The total production increase is still at the 10 year average of 2%. Based on the last 40 quarters the fees distributed would now be \$.026/cwt. or less in 34 quarters, \$.05/cwt. in 3 quarters and \$.21/cwt. in 3 quarters.

The fourth scenario looks at the 7200 herds produce 72% of our milk. It assumes these herds averaged just 2.9 % average growth with the other 47,742 herds at zero growth for a total increase of 2% for all herds. It has just one herd with a 27% increase paying the regular fee with the rest paying the alternate fee. The fees distributed based on the last 40 quarters would be less than \$0.01/cwt. in 34 quarters, \$0.18/cwt. in 3 quarters and \$0.37/cwt. in 3 quarters.

I have more scenarios, but it is obvious based on the milk/feed ratio triggers in the bill, the incentives are too weak to work as a supply management plan. The plan is especially poor at discouraging the excuse me type growth as its founders claim.

The purpose of this analysis is not to pit the large herds against the small herds or one region over another. It is to illustrate how weak the plan's incentives are to discourage growth when it is not needed. But it does illustrate at the same time that for any plan to be effective at controlling supply, when it is not needed, must provide strong incentives to the larger herds. The effectiveness of any plan will be determined by them because they control such a large percentage of the milk production.