Statement by Scott Brown

Dairy Economist for the

Food and Agricultural Policy Research Institute (FAPRI) at the

University of Missouri

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Mr. Chairman and Members of the Committee, thank you for the opportunity to be here today to discuss the current state of the dairy industry. My remarks will focus on how policy, trade, and supply and demand factors have been important in determining today's market situation for the dairy industry. In my remarks today, I will not condone nor condemn any of the current policies in place in the dairy industry. The institute that I am a part of, the Food and Agricultural Policy Research Institute (FAPRI) strives to remain an unbiased, objective unit that stands ready to provide Congress with a quantitative assessment of any agricultural policy alternative.

The dairy industry is experiencing some of the lowest milk prices since the late 1970s. USDA's preliminary estimate of the April all milk price is $10.90 per cwt. This is a decline of over $1.50 per cwt relative to the year earlier level, and more than $2.00 per cwt relative to the past five-year or ten-year average for April. Many factors are responsible for the current milk price situation. Demand for dairy products has been soft since late 2001 due in part to weaker general economic outlook than many experts had expected. Commercial disappearance on a milkfat basis grew only 0.5 percent in 2002 while on a skim solids basis disappearance actually fell by 0.3 percent. Although there may be some signs that demand for dairy products is starting to turn around, commercial stocks of dairy products will need to be drawn down before prices can rise.

The supply side of the picture has also contributed to low milk prices. Milk production expanded by 2.7 percent in 2002 in response to the $15 per cwt annual average milk price

received in 2001. Thus far in 2003, milk cows have remained near 9.15 million head and have yet to contract in response to the current low milk prices.

Although dairy product trade has caught the attention of many in the dairy industry, changes in the trade picture are not a major factor in the current outlook situation. Imports of milk protein concentrates probably have displaced some domestic nonfat dry milk use but it has not had a large negative impact on milk prices. Further research is needed to understand some of the functionality issues that result in the use of milk protein concentrates instead of nonfat dry milk in some food products.

Current FAPRI projections would suggest that milk prices will rebound in the second half of 2003 but will remain low by historical standards. Recent increases in dairy cow slaughter should begin to impact milk supplies in the coming months and allow for some strength in milk prices. Sustained growth in dairy product demand would also provide a boost for milk prices.

With respect to some of the longer-term market and policy issues, FAPRI has recently completed a broad examination of current federal dairy policy in a report attached to my testimony. The research examines the Milk Income Loss Contract (MILC) program, the dairy price support program, the Dairy Export Incentive Program (DEIP) and Federal Milk Market Orders (FMMOs). The "corners" approach taken in this research helps to frame the debate about the impact of federal dairy policies.

The MILC program has received considerable attention in the wake of recent low milk prices. Some have argued that the MILC program is responsible for the current milk price declines. It is clear that the MILC program does lower milk prices as producers respond to the additional payments made under the program. However, the current FAPRI estimate shows the all milk price would be only $0.25 per cwt higher in 2003 in the absence of the MILC program suggesting that much of the current decline in milk prices is due to factors other than the MILC program. In terms of the current outlook, the MILC program likely prolongs adjustment in milk supplies to the current low milk prices.

To date, over $1.3 billion has been sent to milk producers under the MILC program. Current FAPRI estimates suggest that during the life of the MILC program outlays will reach $4.8 billion. With the 2.4 million pound marketings cap on payments, the MILC program benefits small dairy producers. This benefit can be seen in the state-by-state MILC outlays, as nearly 20 percent of total MILC outlays have gone to Wisconsin producers whose milk production represents 13 percent of the nation's milk supply. Alternatively, California producers have received 8 percent of total MILC outlays while producing 21 percent of the nation's milk supply. Current NASS estimates show that the average dairy herd in Wisconsin has just over 70 cows while in California the average dairy herd is over 650 cows.

The MILC program has offsetting effects on producer income. On one hand, producers benefit from the direct government payments they receive on up to 2.4 million pounds of milk marketed when Boston class I prices fall below $16.94 per cwt. On the other hand,

producers are hurt as increased milk supplies caused by the MILC program reduce milk prices. For large producers, the decline in the market price for milk outweighs the MILC payment they receive on their first 2.4 million pounds while for smaller producers the MILC program payment more than offsets the decline in the market price of milk. Using the FAPRI aggregate analysis of the MILC program, Agriculture Food and Policy Center (AFPC) researchers at Texas A&M University suggest that until a dairy operation reaches about 600 head, the benefits of the MILC program exceed the loss from lower milk prices that result from the MILC program.

The FAPRI analysis of an expanded MILC program that covers every pound of milk produced shows that the market effects of such a program could be quite large. Milk prices could decline by over $1 per cwt under such a program and government outlays under the program could top $2.5 billion annually. The analysis of this this program alternative suggests that the parameters under which the MILC program operates are critical. Perhaps even more important is the compatibility of different aspects of federal dairy policy. The MILC program and price support program can create a chronic problem for the dairy industry if parameters of these programs are set at levels that encourage long term surplus production of milk.

The dairy price support program has been a key component of dairy policy for many years. If the price support program is eliminated, FAPRI analysis suggests that in the short run milk prices would decline by nearly $0.40 per cwt. Longer term milk prices return to baseline levels as milk production adjusts to elimination of the program. The analysis results of this feature of federal dairy policy rest on how the Secretary of Agriculture chooses to eliminate government owned dairy products and the level of world market prices of dairy products.

Although FAPRI analysis shows only small effects of eliminating the price support program after the first two years, it is important to note that the current price support program does provide a safety net in circumstances where milk supplies exceed demand needs. This can be critical in a market where demand for the product is rather inelastic.

Changes in the federal milk marketing order system dominated much of the dairy policy debate of the late 1990s. Further modifications to the federal order system continue to be debated by the industry. These debates focus on both the number of orders and classes of milk needed in the federal order system. Any quantitative analysis that looks at large changes in the federal order system remains difficult to conduct. Data limitations require large assumptions to be made in an attempt to quantify the impact of the change in federal orders. FAPRI analysis that looks at complete elimination of the federal order system highlights the regional battles that will unfold as federal order changes are made.

Thank you for the opportunity to address these critical issues for the dairy industry. I look forward to answering your questions.

The Effect on the United States Dairy Industry of Removing Current Federal Regulations

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of Removing Current Federal Regulations

Scott Brown
FAPRI – University of Missouri

The Food and Agricultural Policy Research Institute (FAPRI) has provided Congress quantitative analysis of policy alternatives since the 1980s. The majority of the FAPRI analysis has been conducted on a particular policy alternative under consideration as Congress debate farm policy change. Focusing on the quantitative effect of one policy alternative does not allow for a broader view of the effect that an entire set of policies has on an agricultural sector.

The objective of this work is to provide a layer-by-layer dissection of the effect that each current major federal dairy policies has on the dairy industry. This approach allows for the measurement of both the effect of one piece of current policy and the effect that combinations of current policy have on the dairy industry. The major features of dairy policy analyzed are the Milk Income Loss Contract (MILC) program, the dairy price support program, the Dairy Export Incentive Program (DEIP), and Federal Milk Market Orders (FMMOs). This analysis does not cover any changes in state-level dairy regulations that are currently in place.

The scenarios shown in this analysis should not be interpreted as likely outcomes for dairy policy change. In many cases, these scenarios represent "end points" or "corners" of policy choices. They are meant to frame the debate for a particular policy option.

These policy alternatives are run with the FAPRI dairy model that is documented in FAPRI-UMC TDR # 01-03. The FAPRI dairy model is a set of over 350 structural equations that attempt to capture the important economic relationships that exist in the U.S. dairy sector. The supply side of the model is handled at the state-level while the demand portion of the model is national.

FAPRI Dairy Baseline

The analysis will be a forward-looking examination (2003-2012) of what the dairy industry may look like if each of the regulations that are the focus of this work is removed. The yardstick that will be used to measure the effect of eliminating these policies is the March 2003 FAPRI baseline. A full description of the domestic baseline covering many agricultural commodities can be found in the "FAPRI 2003 U.S. Baseline Briefing Book," FAPRI-UMC Technical Data Report 04-03, March 2003. This report can be found on the FAPRI website at www.fapri.missouri.edu.

The domestic dairy baseline is driven in part by expected feed prices and information about the general economic outlook. Equally important to the baseline for the domestic dairy industry are assumptions related to current policy. The March baseline assumes that the price support program and FMMOs remain in place for the life of the baseline. The MILC program expires September 30, 2005, as legislated in the 2002 farm bill, and is capped at a producer's first 2.4 million pounds of marketings. The baseline assumes that producers do not reorganize their operations to qualify more of their milk for the MILC program. This leads to a baseline

assumption that 58.5 percent of the milk produced in the U.S. is eligible for MILC payments. The percentage of milk eligible for MILC payments varies greatly on a state-level basis. This baseline assumes full use of the DEIP for nonfat dry milk but no DEIP use in cheese or butter markets. Current import trade restrictions remain in place throughout the baseline. This baseline assumes no butter/non fat dry milk tilts will occur in support prices for these products.

An overview of the dairy baseline is shown in Table 1. This baseline projects that U.S. all milk prices remain at or below $13 per cwt. during the baseline. The baseline shows that milk prices increase at a faster pace after the MILC program ends. Milk prices are projected to grow slower than previous baselines primarily as a result of the slower growth in domestic cheese consumption projected in this baseline. Nonfat dry milk prices remain at the government purchase price throughout the baseline as government stocks of nonfat dry milk remain burdensome. Both butter and cheese prices increase over the baseline as growth in demand for those products remains slightly ahead of the growth in supply. Government outlays for the dairy industry are expected to top $2.5 billion in fiscal year 2003 as retroactive payments under the MILC program and many of the 2003 MILC payments fall in fiscal 2003. The annual cost of the MILC program is expected to average $1.5 billion.

Table 1. Summary of the FAPRI March 2003 Dairy Baseline

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Dairy Cows (thou. head)	9,067	9,011	8,965	8,896	8,841	8,801	8,768	8,741	8,718	8,700
Milk Yield (lbs.)	18,884	19,179	19,462	19,714	19,991	20,268	20,534	20,791	21,043	21,291
Milk Production (bil. lbs.)	171.2	172.8	174.5	175.4	176.7	178.4	180.0	181.7	183.5	185.2
All Milk Price ($/cwt.)	12.19	12.24	12.27	12.52	12.58	12.71	12.73	12.81	12.91	13.00
MILC Payment ($/cwt.)	1.22	1.18	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Class III Price ($/cwt.)	10.98	11.07	11.11	11.37	11.45	11.59	11.63	11.73	11.85	11.96
Class IV Price ($/cwt.)	10.49	10.50	10.55	10.85	10.91	11.06	11.06	11.12	11.20	11.26
Cheese Price ($/lb.)	1.25	1.25	1.26	1.28	1.29	1.30	1.30	1.31	1.33	1.34
Butter Price ($/lb.)	1.19	1.25	1.26	1.33	1.35	1.38	1.39	1.40	1.42	1.43
Nonfat Dry Milk Price ($/lb.)	0.84	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Per Capita Consumption (lbs.)										
Cheese	30.1	30.5	30.8	31.0	31.2	31.4	31.7	32.0	32.3	32.5
Butter	4.7	4.6	4.6	4.5	4.5	4.4	4.4	4.4	4.3	4.3
Nonfat Dry Milk	3.3	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.6	3.6
Fluid	207.8	207.9	207.5	206.4	205.3	204.3	203.7	203.2	202.9	202.5
Net Removals (mil. lbs.)										
Nonfat Dry Milk	457	367	341	292	267	268	250	228	206	187
Gov't Outlays (mil. $, fiscal year)	2,586.4	1,524.4	1,501.3	579.9	268.0	271.9	259.9	244.1	226.5	210.0
MILC Program	2,205.8	1,200.9	1,188.4	296.6	-	-	-	-	-	-
Other	380.6	323.5	313.0	283.2	268.0	271.9	259.9	244.1	226.5	210.0

MILC Program

The first piece of dairy policy examined is the MILC program. To provide a broader view of the impacts of the MILC program, three separate scenarios are included. The first scenario (MILC) extends the MILC program for the life of the baseline. The second scenario (MILC+) extends the MILC program for the life of the baseline and removes the 2.4 million pound cap on producer marketings eligible for the payment. The final scenario (No MILC) is elimination of the MILC program.

It is important to recognize that the assumed participation rates used in the baseline are crucial in determining how states fare under the alternatives shown here. The actual level of participation in each state remains unclear. Although some data is beginning to surface regarding state-level MILC program payments, it is by no means final. For example, some potential participants have not signed up yet recognizing they will still be eligible for retroactive payments under the program. The assumption that 58.5 percent of milk marketed in the United States is eligible for a direct payment results from summing eligible milk in each of the major states. The early data recently available would suggest U.S. participation to date is less than assumed in the baseline. The amount of eligible milk in each state was calculated by looking at the size of operation information contained in milk production reports. This approach in determining participation is not exact. The assumption of the percent of milk eligible for a direct payment in each state is: California, 17; Wisconsin, 85; New York, 77; Pennsylvania, 90; Minnesota, 85; Idaho, 24; New Mexico, 8; Michigan, 70; Washington, 29; and Texas, 47. The baseline assumes no reduction in each states eligible milk percentage over time even though continued structural change would suggest a reduction should occur. On the other side of the equation is the notion that over time additional leakage around the 2.4 million pound cap could occur.

The three scenarios chosen to examine the MILC program provide a broad examination of the program's effects. The MILC scenario provides an examination of the longer run impact of the current program since the baseline only has the MILC program in place through September 30, 2005. The MILC+ scenario allows analysis of a program that behaves quite differently from the current MILC program since there is no cap on eligible milk. In addition, this scenario provides information on how the MILC program would affect the dairy industry if the 2.4 million pound marketings cap could be worked around through reorganization of producers' operations. The remaining scenario, NoMILC, shows how the industry would fare without the direct payment program.

The aggregate results shown in Table 2 suggest that each of these scenarios has tradeoffs that occur depending on how much of producer revenue is derived from the market versus direct payments from the government. Not surprisingly, the largest level of milk supplies occurs under the MILC+ scenario. This result occurs because the government is making direct payments on all milk marketed which gives the largest net revenue increase. In addition, the MILC+ run shows the largest level of government outlays, averaging $2.8 billion per year over the 2008 to 2012 period.

At the other end of the spectrum is the NoMILC scenario. This scenario results in the lowest level of milk production and the lowest level of government outlays. Over the 2008 to 2012 period, government outlays under this option average only $0.2 billion per year. This cost is associated with running the price support program and the DEIP. Milk production averages 200 million pounds below the baseline over the 2008 to 2012 period.

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Table 2. Summary of the Impacts of Alternative MILC Program Options on the U.S. Dairy Sector

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	03-07 Ave.	08-12 Ave.
Milk Production (bil. lbs.)												
Baseline	171.2	172.8	174.5	175.4	176.7	178.4	180.0	181.7	183.5	185.2	174.1	181.8
MILC	171.2	172.8	174.5	176.2	177.9	179.7	181.5	183.2	185.0	186.7	174.5	183.2
Δ From Base	0.0	0.0	0.0	0.8	1.1	1.3	1.4	1.5	1.5	1.5	0.4	1.4
MILC+	172.0	173.9	175.8	177.6	179.4	181.3	183.2	184.9	186.6	188.3	175.8	184.9
Δ From Base	0.8	1.1	1.3	2.3	2.7	2.9	3.1	3.2	3.2	3.1	1.6	3.1
Δ From MILC	0.8	1.1	1.3	1.5	1.6	1.6	1.7	1.7	1.7	1.6	1.2	1.7
No MILC	170.3	171.7	173.1	174.7	176.3	178.1	179.8	181.6	183.4	185.2	173.2	181.6
Δ From Base	-0.9	-1.2	-1.3	-0.7	-0.4	-0.3	-0.2	-0.1	-0.1	-0.1	-0.9	-0.2
Δ From MILC	-0.9	-1.2	-1.3	-1.5	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.3	-1.6
Δ From MILC+	-1.7	-2.2	-2.6	-2.9	-3.1	-3.2	-3.3	-3.3	-3.3	-3.2	-2.5	-3.3
All Milk Price ($/cwt.)												
Baseline	12.19	12.24	12.27	12.52	12.58	12.71	12.73	12.81	12.91	13.00	12.36	12.83
MILC	12.19	12.24	12.27	12.28	12.22	12.28	12.26	12.32	12.41	12.50	12.24	12.36
Δ From Base	0.00	0.00	0.00	-0.24	-0.36	-0.43	-0.47	-0.50	-0.50	-0.50	-0.12	-0.48
MILC+	11.96	11.89	11.85	11.80	11.71	11.74	11.71	11.75	11.85	11.95	11.84	11.80
Δ From Base	-0.23	-0.35	-0.42	-0.72	-0.88	-0.97	-1.03	-1.06	-1.06	-1.05	-0.52	-1.04
Δ From MILC	-0.23	-0.35	-0.42	-0.48	-0.52	-0.54	-0.56	-0.56	-0.56	-0.55	-0.40	-0.56
No MILC	12.45	12.61	12.71	12.75	12.73	12.81	12.80	12.86	12.95	13.02	12.65	12.89
Δ From Base	0.25	0.37	0.44	0.23	0.15	0.10	0.07	0.04	0.03	0.02	0.29	0.05
Δ From MILC	0.25	0.37	0.44	0.48	0.51	0.53	0.54	0.54	0.53	0.52	0.41	0.53
Δ From MILC+	0.49	0.72	0.86	0.95	1.02	1.07	1.09	1.10	1.10	1.08	0.81	1.09
MILC Payment ($/cwt.) a/												
Baseline	1.22	1.18	1.16	0	0	0	0	0	0	0	0.71	0.00
MILC	1.22	1.18	1.16	1.15	1.17	1.13	1.13	1.10	1.05	1.00	1.18	1.08
Δ From Base	0.00	0.00	0.00	1.15	1.17	1.13	1.13	1.10	1.05	1.00	0.46	1.08
MILC+	1.32	1.33	1.34	1.35	1.39	1.36	1.37	1.34	1.29	1.23	1.35	1.32
Δ From Base	0.10	0.15	0.18	1.35	1.39	1.36	1.37	1.34	1.29	1.23	0.63	1.32
Δ From MILC	0.10	0.15	0.18	0.20	0.22	0.23	0.24	0.24	0.24	0.24	0.17	0.24
No MILC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Δ From Base	-1.22	-1.18	-1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.71	0.00
Δ From MILC	-1.22	-1.18	-1.16	-1.15	-1.17	-1.13	-1.13	-1.10	-1.05	-1.00	-1.18	-1.08
Δ From MILC+	-1.32	-1.33	-1.34	-1.35	-1.39	-1.36	-1.37	-1.34	-1.29	-1.23	-1.35	-1.32
Net Revenue ($/cwt.) b/												
Baseline	12.91	12.93	12.95	12.52	12.58	12.71	12.73	12.81	12.91	13.00	12.78	12.83
MILC	12.91	12.93	12.95	12.95	12.90	12.95	12.92	12.96	13.02	13.08	12.93	12.99
Δ From Base	0.00	0.00	0.00	0.43	0.32	0.23	0.19	0.15	0.11	0.08	0.15	0.15
MILC+	13.28	13.22	13.19	13.15	13.09	13.10	13.07	13.09	13.13	13.18	13.19	13.12
Δ From Base	0.37	0.29	0.24	0.63	0.51	0.39	0.34	0.28	0.22	0.18	0.41	0.28
Δ From MILC	0.37	0.29	0.24	0.20	0.19	0.16	0.15	0.13	0.11	0.10	0.26	0.13
No MILC	12.45	12.61	12.71	12.75	12.73	12.81	12.80	12.86	12.95	13.02	12.65	12.89
Δ From Base	-0.46	-0.32	-0.24	0.23	0.15	0.10	0.07	0.04	0.03	0.02	-0.13	0.05
Δ From MILC	-0.46	-0.32	-0.24	-0.20	-0.17	-0.14	-0.13	-0.10	-0.08	-0.06	-0.28	-0.10
Δ From MILC+	-0.83	-0.61	-0.48	-0.40	-0.36	-0.30	-0.27	-0.23	-0.19	-0.16	-0.54	-0.23
Government Outlays (mil $, fiscal year)												
Baseline	2,586	1,524	1,501	580	268	272	260	244	226	210	1,292	242
MILC	2,586	1,524	1,501	1,498	1,516	1,515	1,512	1,483	1,427	1,366	1,725	1,461
Δ From Base	0	0	0	919	1,247	1,243	1,252	1,239	1,200	1,156	433	1,218
MILC+	3,399	2,664	2,709	2,758	2,831	2,852	2,871	2,844	2,761	2,665	2,872	2,799
Δ From Base	813	1,140	1,207	2,178	2,563	2,580	2,612	2,600	2,535	2,455	1,580	2,556
Δ From MILC	813	1,140	1,207	1,259	1,316	1,337	1,359	1,360	1,335	1,299	1,147	1,338
No MILC	1,639	281	264	257	249	258	251	237	222	207	538	235
Δ From Base	-947	-1,243	-1,237	-323	-19	-14	-9	-7	-5	-3	-754	-8
Δ From MILC	-947	-1,243	-1,237	-1,242	-1,266	-1,257	-1,261	-1,246	-1,205	-1,159	-1,187	-1,226
Δ From MILC+	-1,760	-2,383	-2,444	-2,501	-2,582	-2,594	-2,620	-2,606	-2,540	-2,458	-2,334	-2,564

Baseline - FAPRI March 2003 Baseline, **MILC** - Extend current MILC program through 2012, **MILC+** - Extend MILC program through 2012 and pay on all milk marketed, **No MILC** - Eliminate the current MILC program 1/1/2003

a/ - Payment rate on eligible milk

b/ - Net revenue on all milk produced

In between the MILC+ and NoMILC scenarios lies the MILC scenario. The MILC scenario assumes that on a nationwide basis 58.5 percent of milk marketed is eligible for the MILC payment. Government outlays under the MILC scenario average $1.5 billion per year over the 2008 to 2012 period. All milk prices average $0.50 per cwt. less under the MILC scenario than the baseline. Over the 2008 to 2012 period, total average revenue under the MILC scenario is $0.15 higher than the baseline.

Further examination of Table 2 shows that the short and long run effects of these alternative MILC program scenarios are different. In 2003, the lowest net revenue occurs under the NoMILC scenario at $11.94 per cwt. while net revenue is the highest under the MILC+ scenario at $13.32 per cwt. That is a difference of $1.38 per cwt. However, examination of the last year of the analysis shows that the net revenue difference between the highest and lowest is only $0.18 per cwt. Although the MILC+ scenario shows the highest revenue, the baseline now has the lowest level of net revenue. This reinforces the fact that in the short run, these kinds of programs can have markedly different aggregate impacts. However, once milk supplies have had time to adjust, the aggregate impacts become muted.

Perhaps more interesting than the aggregate results are the state-level impacts of the MILC program alternatives shown in Table 3. The option that is most attractive to a particular state depends entirely on that state's herd size. Small herd states prefer a MILC option that caps direct payments while large-herd states like the option that does not have a production cap on direct payments or the option of no direct payments. The first section of Table 3 presents the level of revenue for the baseline (the all milk price in the state plus any direct payment averaged across all milk marketed in the state). The remaining three sections of Table 3 provide the change in net revenue relative to the baseline. In 2012, California net revenue is highest under the MILC+ scenario and lowest under the MILC scenario while Wisconsin revenue is highest under the MILC scenario and lowest under the baseline.

The regional effect of these MILC scenarios is further illustrated in Figures 1 and 2. These graphics provide the short (2003-2007) and long (2008-2012) run effect of each MILC program scenario on Wisconsin, California, and U.S. net revenue. It is clear that California enjoys the highest revenue under the MILC+ scenario in both the short and long run. Even in the long run, however, the higher direct payments are being eroded away by lower milk prices. In the short run, Wisconsin is only slightly better off under the MILC scenario relative to the MILC+ scenario but is clearly better off in the long run under the MILC scenario relative to any of the other scenarios. At the U.S. level, the highest revenue in the short run is found in the MILC+ scenario. However, in the long run, the difference between scenarios is narrowing, although the MILC+ scenario is still showing the highest net revenue.

It is informative to note that even when the MILC program is extended to cover all milk, the market, as measured by all milk prices, is responsible for 90 percent of revenue while the MILC direct payment makes up the remaining 10 percent. The fact that the direct payment formula returns only 40 percent of the difference between $16.94 per cwt. and the Boston class I price keeps the amount of revenue provided by the government at a much lower level than if the full difference was paid.

Table 3. The Regional Impacts on Revenue of Alternative MILC Program Options

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	03-07 Ave.	08-12 Ave.
						($/cwt.)						
Baseline (Revenue Level)												
California	11.09	11.13	11.17	11.24	11.30	11.44	11.47	11.55	11.65	11.73	11.19	11.57
Wisconsin	13.45	13.50	13.52	12.80	12.88	13.02	13.06	13.16	13.28	13.38	13.23	13.18
New York	13.80	13.83	13.86	13.23	13.31	13.45	13.49	13.58	13.69	13.78	13.61	13.60
Pennsylvania	14.89	14.92	14.94	14.17	14.24	14.39	14.42	14.51	14.62	14.72	14.63	14.53
Minnesota	13.52	13.57	13.60	12.87	12.95	13.10	13.14	13.23	13.35	13.46	13.30	13.25
Idaho	11.74	11.79	11.83	11.82	11.90	12.04	12.08	12.17	12.28	12.38	11.82	12.19
New Mexico	11.92	11.99	12.03	12.21	12.29	12.43	12.47	12.56	12.68	12.78	12.09	12.59
Michigan	13.13	13.18	13.21	12.66	12.73	12.88	12.91	13.01	13.12	13.22	12.98	13.03
Washington	12.48	12.53	12.56	12.50	12.57	12.72	12.74	12.83	12.94	13.03	12.53	12.85
Texas	13.45	13.50	13.54	13.26	13.34	13.48	13.52	13.61	13.72	13.82	13.42	13.63
Other States	13.45	13.50	13.52	12.98	13.06	13.20	13.24	13.33	13.44	13.54	13.30	13.35
MILC (Δ in Revenue relative to Baseline)												
California	0.00	0.00	0.00	-0.05	-0.17	-0.24	-0.28	-0.32	-0.33	-0.34	-0.04	-0.30
Wisconsin	0.00	0.00	0.00	0.74	0.63	0.54	0.49	0.44	0.39	0.35	0.27	0.44
New York	0.00	0.00	0.00	0.64	0.53	0.43	0.39	0.34	0.29	0.25	0.23	0.34
Pennsylvania	0.00	0.00	0.00	0.79	0.68	0.58	0.53	0.48	0.42	0.38	0.29	0.48
Minnesota	0.00	0.00	0.00	0.74	0.63	0.54	0.49	0.44	0.39	0.35	0.27	0.44
Idaho	0.00	0.00	0.00	0.02	-0.09	-0.17	-0.21	-0.25	-0.27	-0.28	-0.01	-0.24
New Mexico	0.00	0.00	0.00	-0.16	-0.28	-0.35	-0.39	-0.42	-0.43	-0.43	-0.09	-0.40
Michigan	0.00	0.00	0.00	0.56	0.45	0.36	0.32	0.27	0.22	0.19	0.20	0.27
Washington	0.00	0.00	0.00	0.08	-0.04	-0.12	-0.17	-0.21	-0.23	-0.24	0.01	-0.19
Texas	0.00	0.00	0.00	0.29	0.18	0.10	0.05	0.01	-0.02	-0.04	0.10	0.02
Other States	0.00	0.00	0.00	0.56	0.45	0.35	0.31	0.26	0.22	0.18	0.20	0.26
MILC+ (Δ in Revenue relative to Baseline)												
California	0.89	0.79	0.74	0.64	0.52	0.41	0.35	0.29	0.23	0.19	0.72	0.30
Wisconsin	0.06	-0.01	-0.05	0.65	0.53	0.41	0.36	0.30	0.24	0.20	0.24	0.30
New York	0.14	0.06	0.02	0.62	0.50	0.38	0.32	0.26	0.20	0.16	0.27	0.26
Pennsylvania	-0.01	-0.08	-0.13	0.62	0.50	0.38	0.32	0.26	0.20	0.16	0.18	0.27
Minnesota	0.06	-0.01	-0.05	0.66	0.53	0.42	0.37	0.30	0.25	0.20	0.24	0.31
Idaho	0.79	0.70	0.64	0.63	0.50	0.38	0.33	0.26	0.21	0.16	0.65	0.27
New Mexico	1.00	0.90	0.84	0.64	0.51	0.40	0.34	0.28	0.22	0.18	0.78	0.29
Michigan	0.23	0.16	0.11	0.64	0.51	0.40	0.34	0.28	0.22	0.18	0.33	0.28
Washington	0.72	0.62	0.57	0.60	0.47	0.35	0.29	0.23	0.17	0.13	0.60	0.23
Texas	0.52	0.43	0.38	0.64	0.51	0.40	0.34	0.28	0.22	0.18	0.50	0.28
Other States	0.24	0.16	0.11	0.63	0.51	0.39	0.34	0.27	0.22	0.17	0.33	0.28
No MILC (Δ in Revenue relative to Baseline)												
California	0.05	0.17	0.24	0.23	0.15	0.10	0.07	0.05	0.03	0.02	0.17	0.05
Wisconsin	-0.78	-0.64	-0.55	0.23	0.15	0.10	0.07	0.05	0.03	0.02	-0.32	0.05
New York	-0.68	-0.53	-0.45	0.24	0.15	0.10	0.07	0.05	0.03	0.02	-0.25	0.06
Pennsylvania	-0.84	-0.69	-0.60	0.24	0.15	0.10	0.07	0.05	0.03	0.02	-0.35	0.06
Minnesota	-0.78	-0.64	-0.55	0.23	0.15	0.10	0.07	0.05	0.03	0.02	-0.32	0.05
Idaho	-0.03	0.10	0.17	0.24	0.15	0.10	0.07	0.05	0.03	0.02	0.13	0.06
New Mexico	0.16	0.28	0.35	0.24	0.15	0.10	0.07	0.05	0.03	0.02	0.24	0.05
Michigan	-0.60	-0.46	-0.38	0.24	0.15	0.10	0.07	0.05	0.03	0.02	-0.21	0.05
Washington	-0.08	0.04	0.12	0.25	0.16	0.11	0.07	0.05	0.03	0.03	0.10	0.06
Texas	-0.32	-0.18	-0.10	0.24	0.15	0.10	0.07	0.05	0.03	0.02	-0.04	0.05
Other States	-0.59	-0.45	-0.37	0.24	0.15	0.10	0.07	0.05	0.03	0.02	-0.20	0.06

Baseline - FAPRI March 2003 Baseline, **MILC** - Extend current MILC program through 2012, **MILC+** - Extend MILC program through 2012 and pay on all milk marketed, **No MILC** - Eliminate the current MILC program 1/1/2003

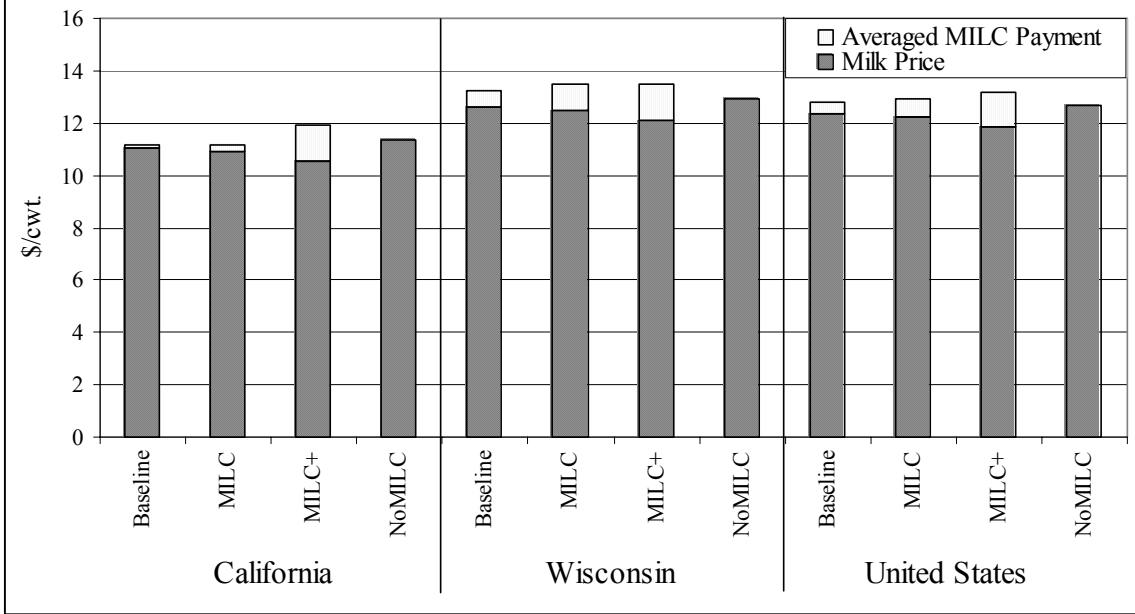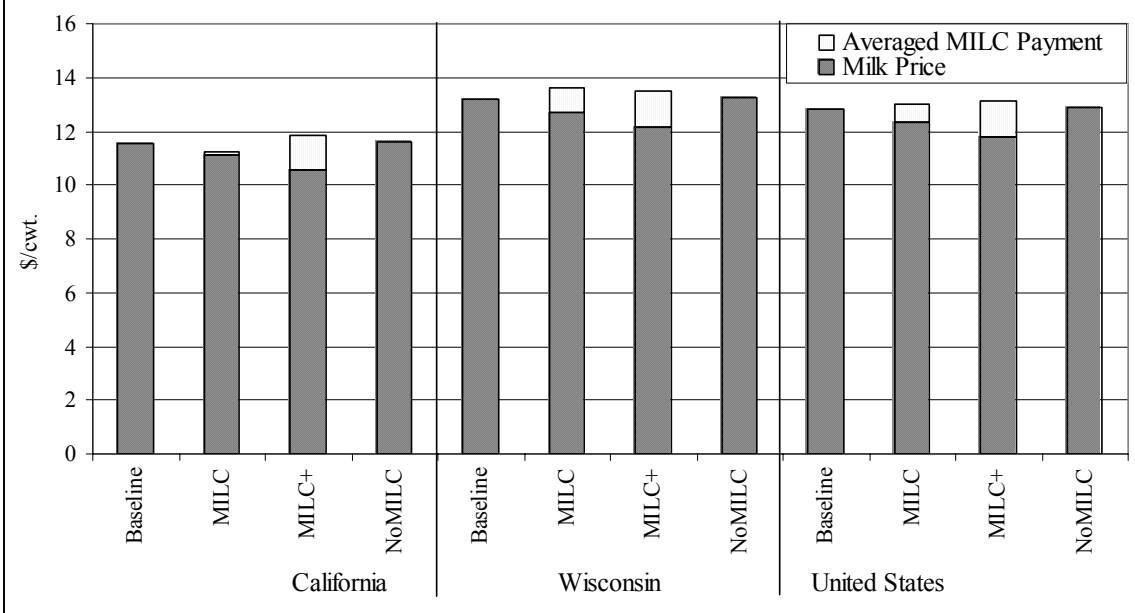Figure 1. Revenue Effects of the MILC Program, 2003-2007 Average

Figure 2. Revenue Effects of the MILC Program, 2008-2012 Average

Price Support Program and DEIP Elimination

This section will explore the effects on the dairy sector of eliminating the price support program and the DEIP. These alternatives are compared to the NoMILC scenario as this research continues to peal away each layer of federal dairy policy. The yardstick against which these scenarios are compared is important. The outlook for the dairy sector suggests that nonfat dry milk will continue to be in surplus for several years yet the government does not accumulate any stocks of other dairy products. If demand for nonfat solids would be larger than shown here or demand for butterfat weaker, this analysis would show different effects as these programs are eliminated. Similarly, the baseline assumes full use of the DEIP for nonfat dry milk, but no use in cheese or butter.

Two assumptions dealing with the world price outlook for butter and nonfat dry milk are needed to look at the scenarios in this section. World nonfat dry milk prices are assumed to be the average of the 1990 to 2000 level less $0.10 per lb. for transportation. That puts a floor on U.S. nonfat dry milk prices of $0.68 per lb. Likewise, world butter prices are assumed to equal their 1990 to 2000 average. Once the tariff is added to the world butter price, it suggests that additional butter imports would enter the United States once the U.S. butter price exceeds $1.50 per lb. These assumptions oversimplify the linkages and dynamics that exist in global dairy markets.

One final assumption is needed concerning the release of large quantities of nonfat dry milk stocks held by the government. This analysis assumes that in 2003 and 2004 300 million pounds of nonfat dry milk held by the government is eliminated with no market effect. The remaining government-held inventory is assumed to enter the market equally in 2003 and 2004. This is one of numerous ways the government could dispose of nonfat dry milk in storage.

The outcome of these scenarios is summarized in Table 4. Both of these scenarios have the largest impact on nonfat dry milk markets. Table 4 provides the level results for the NoMILC, NoMILC/CCC, and NoMILC/CCC/DEIP. The comparison to the NoMILC scenario is used so that the impact of eliminating the support price program and DEIP can be isolated. The NoMILC/CCC scenario ends the price support program at the beginning of 2003 while the NoMILC/CCC/DEIP eliminates the price support program and the DEIP at the start of 2003.

Under the NoMILC/CCC scenario, the first two years of the scenario show the largest changes as the government gets out of the stock-holding business. Although this research assumes that 300 million pounds of nonfat dry milk held by the government never reaches commercial markets in the first two years of the analysis, the government could choose to not let any nonfat dry milk held in government inventory reach commercial markets and that would minimize the effect of eliminating the price support program. An additional 700 million pounds of nonfat dry milk enters the market in 2003 under the NoMILC/CCC scenario. Domestic nonfat dry milk prices fall to world prices and the United States is able to commercially export 193 million pounds of nonfat dry milk. Nonfat dry milk production declines by 223 million pounds, leaving the balance of the additional nonfat dry milk to be domestically consumed.

A similar story can be told for the 2004 results. After 2004, all government inventory of nonfat dry milk is gone. That leaves a much smaller amount of nonfat dry milk that must enter domestic markets. For example, in 2008 an additional 106 million pounds of nonfat dry milk

that was removed under the NoMILC scenario now ends up in commercial channels, 14% compared to the 2003 level.

The NoMILC/CCC/DEIP scenario shows similar directional results, only larger magnitudes. In the first two years of the analysis, eliminating the DEIP only causes switching of DEIP product to commercial exports. However, the NoMILC/CCC/DEIP scenario keeps nonfat dry milk prices lower in the out-years of the analysis since domestic prices are too high to allow the formerly subsidized product to move as commercially exported product.

As less milk is produced under both of the scenarios relative to the NoMILC scenario, less fat is available to churn into butter. That causes butter prices to rise to the point that additional imports enter the U.S. In 2004 under the NoMILC/CCC/DEIP scenario, an additional 75 million pounds of butter enters the U.S.

Cheese markets experience an increase in production in the early years of both scenarios as milk supplies are diverted away from nonfat dry milk and butter markets. Cheese prices are $0.05 per pound lower than the NoMILC scenario during the first two years. Once milk supplies adjust, cheese prices approach the NoMILC levels.

All milk prices are $0.40 to $0.45 per cwt lower the first two years under both scenarios. However, beginning in 2005 all milk prices return to the baseline in the NoCCC scenario as they are propped up by higher butter prices. Under the NoCCC/DEIP scenario all milk prices remain below the NoMILC scenario as nonfat dry milk and cheese prices remain below the NoMILC scenario. Milk supplies adjust down under both of these scenarios. In 2012 under the NoCCC/DEIP scenario, milk production is 1.2 billion pounds less than under the NoMILC scenario.

Table 4. Impact of the Elimination of the Price Support Program and the DEIP on the U.S. Dairy Sector

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	03-07 Ave.	08-12 Ave.
Nonfat Dry Milk Net Removals (mil. lbs.)												
NoMILC	418	314	280	259	244	251	239	220	200	183	303	219
NoMILC/CCC	-285	-485	145	145	145	145	145	145	145	145	-67	145
NoMILC/CCC/DEIP	-430	-630	0	0	0	0	0	0	0	0	-212	0
Nonfat Dry Milk Production (mil. lbs.)												
NoMILC	1,433	1,364	1,348	1,341	1,339	1,362	1,362	1,359	1,357	1,357	1,365	1,359
NoMILC/CCC	1,210	1,106	1,287	1,292	1,301	1,321	1,330	1,340	1,350	1,360	1,239	1,340
NoMILC/CCC/DEIP	1,210	1,106	1,167	1,170	1,177	1,193	1,206	1,215	1,225	1,236	1,166	1,215
Nonfat Dry Milk Commerical Exports (mil. lbs.)												
NoMILC	-	-	-	-	-	-	-	-	-	-	-	-
NoMILC/CCC	193	264	-	-	-	-	-	-	-	-	91	-
NoMILC/CCC/DEIP	338	409	-	-	-	-	-	-	-	-	149	-
Butter Production (mil. lbs.)												
NoMILC	1,314	1,292	1,292	1,293	1,292	1,306	1,306	1,306	1,305	1,304	1,297	1,305
NoMILC/CCC	1,241	1,195	1,274	1,277	1,281	1,293	1,297	1,300	1,302	1,305	1,253	1,299
NoMILC/CCC/DEIP	1,241	1,195	1,224	1,226	1,228	1,238	1,244	1,246	1,249	1,251	1,222	1,245
Butter Imports (mil. lbs.)												
NoMILC	32	32	32	32	34	36	38	40	42	44	32	40
NoMILC/CCC	75	32	64	107	37	32	34	36	38	40	63	36
NoMILC/CCC/DEIP	64	107	82	82	84	90	86	88	90	92	84	89
Cheese Production (mil. lbs.)												
NoMILC	8,397	8,576	8,719	8,876	9,039	9,190	9,357	9,522	9,688	9,855	8,721	9,522
NoMILC/CCC	8,489	8,656	8,697	8,869	9,034	9,191	9,358	9,520	9,684	9,849	8,749	9,520
NoMILC/CCC/DEIP	8,489	8,656	8,748	8,902	9,061	9,215	9,376	9,538	9,700	9,865	8,771	9,539
Nonfat Dry Milk Price ($/lb.)												
NoMILC	0.84	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.82	0.81
NoMILC/CCC	0.68	0.68	0.78	0.78	0.79	0.78	0.79	0.80	0.81	0.82	0.74	0.80
NoMILC/CCC/DEIP	0.68	0.68	0.73	0.74	0.75	0.75	0.75	0.76	0.77	0.78	0.71	0.76
Butter Price ($/lb.)												
NoMILC	1.27	1.36	1.39	1.40	1.39	1.42	1.41	1.42	1.43	1.44	1.36	1.42
NoMILC/CCC	1.51	1.53	1.50	1.50	1.47	1.49	1.47	1.46	1.45	1.44	1.50	1.46
NoMILC/CCC/DEIP	1.51	1.53	1.53	1.53	1.51	1.53	1.52	1.51	1.50	1.49	1.52	1.51
Cheese Price ($/lb.)												
NoMILC	1.27	1.28	1.29	1.30	1.30	1.31	1.31	1.32	1.33	1.34	1.29	1.32
NoMILC/CCC	1.22	1.23	1.30	1.31	1.30	1.31	1.31	1.32	1.33	1.34	1.27	1.32
NoMILC/CCC/DEIP	1.22	1.23	1.27	1.28	1.29	1.29	1.30	1.31	1.32	1.33	1.26	1.31
Class III Price ($/cwt.)												
NoMILC	11.23	11.42	11.53	11.59	11.59	11.69	11.70	11.78	11.89	11.99	11.47	11.81
NoMILC/CCC	10.82	10.97	11.64	11.70	11.66	11.72	11.72	11.81	11.92	12.02	11.36	11.84
NoMILC/CCC/DEIP	10.82	10.97	11.37	11.48	11.50	11.58	11.63	11.72	11.84	11.95	11.23	11.74
Class IV Price ($/cwt.)												
NoMILC	10.81	10.95	11.08	11.13	11.09	11.18	11.15	11.18	11.24	11.28	11.01	11.21
NoMILC/CCC	10.40	10.49	11.28	11.28	11.20	11.24	11.20	11.23	11.29	11.33	10.93	11.26
NoMILC/CCC/DEIP	10.40	10.49	10.95	11.03	11.02	11.09	11.10	11.14	11.21	11.26	10.78	11.16
All Milk Price ($/cwt.)												
NoMILC	12.45	12.61	12.71	12.75	12.73	12.81	12.80	12.86	12.95	13.02	12.65	12.89
NoMILC/CCC	12.04	12.15	12.83	12.86	12.80	12.84	12.83	12.89	12.98	13.06	12.54	12.92
NoMILC/CCC/DEIP	12.04	12.15	12.55	12.64	12.64	12.70	12.73	12.80	12.90	12.98	12.40	12.82
Milk Production (bil. lbs.)												
NoMILC	170.3	171.7	173.1	174.7	176.3	178.1	179.8	181.6	183.4	185.2	173.2	181.6
NoMILC/CCC	169.5	170.3	172.4	174.2	175.9	177.8	179.6	181.4	183.2	185.1	172.4	181.4
NoMILC/CCC/DEIP	169.5	170.3	171.8	173.4	175.0	176.7	178.5	180.3	182.1	184.0	172.0	180.3

NoMILC - Eliminate the current MILC program 1/1/2003, **NoMILC/CCC** - Eliminate the price support program 1/1/2003 in addtion to MILC elimination, **NoMILC/CCC/DEIP** - Eliminate the price support program and the DEIP 1/1/2003 in addtion to MILC elimination

Federal Order Elimination

Elimination of the federal order system is a difficult task for the FAPRI dairy model or for that matter any model that is formed with data that has embedded in it the presence of the federal order system. Some of the particulars of federal order elimination are likely lost in this quantitative assessment. Hopefully, these results provide the directional impact of eliminating the federal order system.

Many assumptions were necessary to conduct this portion of the analysis. The first assumption deals with the pricing of milk used for purposes other than fluid consumption. The analysis assumes that Class II, III, and IV milk prices are gone and one market-clearing price replaces them. The alternatives that could replace the classified minimum prices are endless. This analysis assumes that the manufacturing price will be the average of the Class III and IV price formulas. This price will be used for all manufacturing uses.

This analysis looked at two alternatives for fluid milk prices under elimination of federal orders. The first scenario, NoMILC/CCC/DEIP/FMMO, assumes that fluid premiums will exist without orders and average, nationally, $0.50 per cwt. over the manufacturing price. These premiums are not the same across states but follow a pattern similar to current Class I differentials although the surface is much flatter. The second scenario, NoMILC/CCC/DEIP/FMMO⊚, assumes there would be no fluid premiums in the absence of federal orders.

These scenarios are run assuming that California makes no changes to its state milk system. It is reasonable to question whether the California system could remain intact with federal order elimination, but that effort is left to other rounds of policy analysis. This assumption helps lead to the results shown in Tables 5 and 6.

Table 5 shows that the largest negative price effects on milk occur in the first few years of the analysis. Once supply adjustment occurs, milk prices return closer to levels found before federal order elimination. Fluid consumption rises 2.5 percent as federal orders are eliminated.

Table 5. Summary of the Impact of Alternative Federal Milk Market Order Options on the U.S. Dairy Sector

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	03-07 Ave.	08-12 Ave.
Milk Cows (thou. head)												
NoMILC/CCC/DEIP	9,003	8,896	8,831	8,784	8,744	8,713	8,688	8,668	8,652	8,639	8,851	8,672
NoMILC/CCC/DEIP/FMMO	8,969	8,828	8,768	8,724	8,686	8,655	8,631	8,611	8,594	8,581	8,795	8,614
NoMILC/CCC/DEIP/FMMO⊚	8,953	8,797	8,743	8,700	8,665	8,636	8,612	8,593	8,576	8,563	8,772	8,596
Milk Production (bil. lbs.)												
NoMILC/CCC/DEIP	169.5	170.3	171.8	173.4	175.0	176.7	178.5	180.3	182.1	184.0	172.0	180.3
NoMILC/CCC/DEIP/FMMO	168.7	168.7	170.7	172.4	174.0	175.8	177.6	179.4	181.2	183.1	170.9	179.4
NoMILC/CCC/DEIP/FMMO⊚	168.3	168.1	170.4	172.0	173.7	175.5	177.4	179.2	181.1	182.9	170.5	179.2
All Milk Price ($/cwt.)												
NoMILC/CCC/DEIP	12.04	12.15	12.55	12.64	12.64	12.70	12.73	12.80	12.90	12.98	12.40	12.82
NoMILC/CCC/DEIP/FMMO	11.57	11.63	12.53	12.62	12.60	12.65	12.69	12.76	12.87	12.95	12.19	12.79
NoMILC/CCC/DEIP/FMMO⊚	11.35	11.42	12.59	12.62	12.63	12.67	12.70	12.77	12.88	12.97	12.12	12.80
Fluid Milk Consumption (lbs.)												
NoMILC/CCC/DEIP	208	208	207	206	205	204	204	203	203	203	207	203
NoMILC/CCC/DEIP/FMMO	211	212	209	209	208	207	206	206	205	205	210	206
NoMILC/CCC/DEIP/FMMO⊚	213	213	210	209	208	208	207	206	206	206	211	207

NoMILC/CCC/DEIP - Eliminate the MILC program, price support program and DEIP on 1/1/2003, **NoMILC/CCC/DEIP/FMMO** - In addition to the previous programs eliminated, eliminate FMMOs 1/1/2003, allow for fluid milk premiums, **NoMILC/CCC/DEIP/FMMO⊚** - Identical to NoFMMO except have zero fluid premiums

The result on the U.S. all milk price of these alternatives needs further discussion. The FAPRI model calculates the U.S. all milk price as a current production weighted average of the state-level all milk prices. The result of constructing the U.S. all milk price in this fashion is that if the production effect of policy changes on a low all milk price state like California is positive then the California all milk price will get a larger weight and that will have a negative effect on the U.S. all milk price. This result occurs in these scenarios.

Table 6 shows that the state-level results of these federal order elimination scenarios are not uniform across the country. It appears that states with less than 20 percent fluid utilization show higher all milk prices with the elimination of federal orders while those states with fluid utilization in excess of 35 percent clearly are better off with the federal order system in place. Again, it is important to note that no change was made to the California order system and that they are much better off under the elimination of federal orders because as dairy product prices increase all of their class prices adjust upward as well.

Table 6. The Regional Impact on Milk Prices of Alternative Federal Milk Market Order Options

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	03-07 Ave.	08-12 Ave.
						($/cwt.)						
NoMILC/CCC/DEIP (All Milk Price)												
California	10.71	10.83	11.24	11.34	11.35	11.42	11.45	11.53	11.63	11.71	11.09	11.55
Wisconsin	12.27	12.41	12.81	12.92	12.94	13.01	13.06	13.15	13.26	13.36	12.67	13.17
New York	12.71	12.85	13.26	13.36	13.37	13.45	13.49	13.57	13.68	13.77	13.11	13.59
Pennsylvania	13.64	13.78	14.19	14.30	14.31	14.38	14.42	14.50	14.61	14.70	14.04	14.53
Minnesota	12.34	12.48	12.88	12.99	13.01	13.09	13.13	13.22	13.34	13.44	12.74	13.24
Idaho	11.30	11.44	11.85	11.95	11.97	12.04	12.08	12.16	12.27	12.36	11.70	12.18
New Mexico	11.68	11.82	12.23	12.34	12.35	12.43	12.47	12.56	12.67	12.76	12.09	12.58
Michigan	12.13	12.27	12.67	12.78	12.79	12.87	12.91	13.00	13.11	13.21	12.53	13.02
Washington	11.99	12.12	12.53	12.64	12.64	12.72	12.75	12.83	12.93	13.02	12.38	12.85
Texas	12.73	12.87	13.28	13.38	13.40	13.47	13.52	13.60	13.71	13.81	13.13	13.62
Other States	12.46	12.59	13.00	13.11	13.12	13.20	13.24	13.32	13.43	13.53	12.86	13.34
NoMILC/CCC/DEIP/FMMO (Δ in All Milk Price Relative to NoMILC/CCC/DEIP)												
California	0.23	0.19	0.66	0.66	0.65	0.64	0.65	0.66	0.68	0.69	0.48	0.67
Wisconsin	-0.32	-0.40	0.12	0.11	0.08	0.07	0.07	0.06	0.05	0.04	-0.08	0.05
New York	-1.03	-1.10	-0.60	-0.60	-0.62	-0.63	-0.63	-0.63	-0.63	-0.63	-0.79	-0.63
Pennsylvania	-1.01	-1.07	-0.57	-0.58	-0.59	-0.61	-0.61	-0.61	-0.61	-0.61	-0.76	-0.61
Minnesota	-0.27	-0.35	0.16	0.15	0.13	0.11	0.11	0.10	0.09	0.08	-0.03	0.10
Idaho	-0.17	-0.24	0.27	0.26	0.24	0.23	0.23	0.23	0.23	0.23	0.07	0.23
New Mexico	-1.02	-1.09	-0.58	-0.59	-0.61	-0.63	-0.62	-0.63	-0.63	-0.64	-0.78	-0.63
Michigan	-0.60	-0.68	-0.17	-0.17	-0.20	-0.21	-0.21	-0.22	-0.22	-0.23	-0.36	-0.22
Washington	-0.16	-0.22	0.27	0.27	0.26	0.24	0.25	0.26	0.26	0.27	0.08	0.26
Texas	-1.03	-1.10	-0.59	-0.60	-0.62	-0.64	-0.63	-0.64	-0.65	-0.65	-0.79	-0.64
Other States	-0.73	-0.80	-0.30	-0.30	-0.32	-0.34	-0.34	-0.34	-0.34	-0.35	-0.49	-0.34
NoMILC/CCC/DEIP/FMMO◎ (Δ in All Milk Price Relative to NoMILC/CCC/DEIP)												
California	0.26	0.23	0.97	0.91	0.92	0.90	0.90	0.91	0.92	0.93	0.66	0.91
Wisconsin	-0.45	-0.51	0.27	0.20	0.20	0.17	0.16	0.15	0.14	0.13	-0.06	0.15
New York	-1.38	-1.43	-0.66	-0.73	-0.72	-0.75	-0.75	-0.76	-0.76	-0.76	-0.98	-0.75
Pennsylvania	-1.35	-1.40	-0.63	-0.70	-0.69	-0.72	-0.72	-0.73	-0.73	-0.73	-0.96	-0.73
Minnesota	-0.38	-0.44	0.34	0.27	0.27	0.24	0.23	0.22	0.21	0.20	0.02	0.22
Idaho	-0.28	-0.33	0.44	0.37	0.38	0.35	0.35	0.34	0.34	0.33	0.12	0.34
New Mexico	-1.41	-1.46	-0.69	-0.76	-0.75	-0.78	-0.79	-0.80	-0.81	-0.81	-1.01	-0.80
Michigan	-0.83	-0.88	-0.11	-0.18	-0.17	-0.20	-0.21	-0.22	-0.22	-0.23	-0.43	-0.22
Washington	-0.30	-0.34	0.42	0.35	0.37	0.34	0.34	0.34	0.34	0.35	0.10	0.34
Texas	-1.52	-1.57	-0.80	-0.87	-0.86	-0.89	-0.90	-0.91	-0.91	-0.92	-1.12	-0.91
Other States	-1.16	-1.21	-0.44	-0.51	-0.50	-0.53	-0.54	-0.55	-0.55	-0.56	-0.77	-0.54

NoMILC/CCC/DEIP - Eliminate the MILC program, price support program and DEIP on 1/1/2003, **NoMILC/CCC/DEIP/FMMO** - In addition to the previous programs eliminated, eliminate FMMOs 1/1/2003, allow for fluid milk premiums, **NoMILC/CCC/DEIP/FMMO◎** - Identical to NoFMMO except have zero fluid premiums

Summary

The combined effect of eliminating all of the federal dairy policies examined in this paper results in less milk being produced in the United States. The short run disruption of eliminating features of dairy policy generally results in the largest decline in milk prices. Table 7 highlights that the longer run effect on milk prices or milk revenue in the case of a direct payment program is often less as milk supplies adjust to the changed policy. U.S. milk production declines by over 2 billion pounds in this analysis with the elimination of federal orders with no market generated fluid premiums, price support program, DEIP, and the MILC program.

This analysis highlights the reason regional battles have occurred as new dairy policy is debated. The impacts of eliminating the MILC program or the federal order system are not uniform across states. It appears from this analysis that the regional dairy battles that occur in the dairy policy debate are not over.

This analysis is meant to quantify the "corners" of dairy policy alternatives. It is an attempt to show how the industry would look under these different elimination scenarios. Each of these scenarios required assumptions to be made that can lead to particular results. A different set of assumptions could generate results that look quite different. The model used to judge these policy alternatives can be called into question when such large policy changes are made. The FAPRI model is always being examined to make changes to its structure to better deal with the kinds of questions that are being asked of it. These results are meant to help frame the dairy policy debate in quantitative terms.

Table 7. Summary of the Effects of Removing Federal Dairy Policy on the U.S. Dairy Sector

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	03-07 Ave.	08-12 Ave.
Milk Production (bil. lbs.)	171.2	172.8	174.5	175.4	176.7	178.4	180.0	181.7	183.5	185.2	174.1	181.8
MILC	(0.0)	(0.0)	(0.0)	0.8	1.1	1.3	1.4	1.5	1.5	1.5	0.4	1.4
MILC+	0.8	1.1	1.3	2.3	2.7	2.9	3.1	3.2	3.2	3.1	1.6	3.1
NoMILC	(0.9)	(1.2)	(1.3)	(0.7)	(0.4)	(0.3)	(0.2)	(0.1)	(0.1)	(0.1)	(0.9)	(0.2)
NoMILC/CCC	(1.7)	(2.6)	(2.1)	(1.2)	(0.8)	(0.6)	(0.5)	(0.3)	(0.2)	(0.1)	(1.7)	(0.4)
NoMILC/CCC/DEIP	(1.7)	(2.6)	(2.7)	(2.0)	(1.8)	(1.7)	(1.5)	(1.4)	(1.3)	(1.2)	(2.1)	(1.4)
NoMILC/CCC/DEIP/FMMO	(2.5)	(4.1)	(3.8)	(3.0)	(2.7)	(2.6)	(2.4)	(2.3)	(2.2)	(2.1)	(3.2)	(2.3)
NoMILC/CCC/DEIP/FMMO⊚	(3.0)	(4.7)	(4.1)	(3.3)	(3.0)	(2.8)	(2.7)	(2.5)	(2.4)	(2.3)	(3.6)	(2.5)
All Milk Price ($/cwt.)	12.19	12.24	12.27	12.52	12.58	12.71	12.73	12.81	12.91	13.00	12.36	12.83
MILC	(0.00)	(0.00)	(0.00)	(0.24)	(0.36)	(0.43)	(0.47)	(0.50)	(0.50)	(0.50)	(0.12)	(0.48)
MILC+	(0.23)	(0.35)	(0.42)	(0.72)	(0.88)	(0.97)	(1.03)	(1.06)	(1.06)	(1.05)	(0.52)	(1.04)
NoMILC	0.25	0.37	0.44	0.23	0.15	0.10	0.07	0.04	0.03	0.02	0.29	0.05
NoMILC/CCC	(0.16)	(0.09)	0.56	0.34	0.22	0.13	0.09	0.08	0.07	0.06	0.18	0.09
NoMILC/CCC/DEIP	(0.16)	(0.09)	0.28	0.12	0.05	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	0.04	(0.01)
NoMILC/CCC/DEIP/FMMO	(0.62)	(0.61)	0.26	0.10	0.02	(0.06)	(0.04)	(0.05)	(0.05)	(0.05)	(0.17)	(0.05)
NoMILC/CCC/DEIP/FMMO⊚	(0.85)	(0.82)	0.32	0.10	0.05	(0.04)	(0.03)	(0.04)	(0.04)	(0.04)	(0.24)	(0.04)
MILC Payment ($/cwt.) a/	1.22	1.18	1.16	-	-	-	-	-	-	-	0.71	-
MILC	0.00	0.00	0.00	1.15	1.17	1.13	1.13	1.10	1.05	1.00	0.46	1.08
MILC+	0.10	0.15	0.18	1.35	1.39	1.36	1.37	1.34	1.29	1.23	0.63	1.32
NoMILC	(1.22)	(1.18)	(1.16)	-	-	-	-	-	-	-	(0.71)	-
NoMILC/CCC	(1.22)	(1.18)	(1.16)	-	-	-	-	-	-	-	(0.71)	-
NoMILC/CCC/DEIP	(1.22)	(1.18)	(1.16)	-	-	-	-	-	-	-	(0.71)	-
NoMILC/CCC/DEIP/FMMO	(1.22)	(1.18)	(1.16)	-	-	-	-	-	-	-	(0.71)	-
NoMILC/CCC/DEIP/FMMO⊚	(1.22)	(1.18)	(1.16)	-	-	-	-	-	-	-	(0.71)	-
Net Milk Revenue ($/cwt.) b/	12.91	12.93	12.95	12.52	12.58	12.71	12.73	12.81	12.91	13.00	12.78	12.83
MILC	(0.00)	(0.00)	(0.00)	0.43	0.32	0.23	0.19	0.15	0.11	0.08	0.15	0.15
MILC+	0.37	0.29	0.24	0.63	0.51	0.39	0.34	0.28	0.22	0.18	0.41	0.28
NoMILC	(0.46)	(0.32)	(0.24)	0.23	0.15	0.10	0.07	0.04	0.03	0.02	(0.13)	0.05
NoMILC/CCC	(1.38)	(1.27)	(0.60)	0.34	0.22	0.13	0.09	0.08	0.07	0.06	(0.54)	0.09
NoMILC/CCC/DEIP	(1.38)	(1.27)	(0.89)	0.12	0.05	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.67)	(0.01)
NoMILC/CCC/DEIP/FMMO	(1.84)	(1.79)	(0.91)	0.10	0.02	(0.06)	(0.04)	(0.05)	(0.05)	(0.05)	(0.88)	(0.05)
NoMILC/CCC/DEIP/FMMO⊚	(2.06)	(2.00)	(0.85)	0.10	0.05	(0.04)	(0.03)	(0.04)	(0.04)	(0.04)	(0.95)	(0.04)
Cheese Price ($/lb.)	1.25	1.25	1.26	1.28	1.29	1.30	1.30	1.31	1.33	1.34	1.27	1.32
MILC	(0.00)	(0.00)	(0.00)	(0.02)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.01)	(0.04)
MILC+	(0.02)	(0.03)	(0.03)	(0.06)	(0.07)	(0.08)	(0.08)	(0.09)	(0.09)	(0.09)	(0.04)	(0.08)
NoMILC	0.02	0.03	0.04	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.00
NoMILC/CCC	(0.03)	(0.02)	0.04	0.02	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.01
NoMILC/CCC/DEIP	(0.03)	(0.02)	0.01	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)
NoMILC/CCC/DEIP/FMMO	(0.01)	(0.00)	0.07	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.04	0.06
NoMILC/CCC/DEIP/FMMO⊚	(0.01)	(0.00)	0.10	0.09	0.08	0.07	0.08	0.08	0.08	0.08	0.05	0.08
Butter Price ($/lb.)	1.19	1.25	1.26	1.33	1.35	1.38	1.39	1.40	1.42	1.43	1.28	1.40
MILC	(0.00)	(0.00)	(0.00)	(0.07)	(0.11)	(0.13)	(0.14)	(0.15)	(0.15)	(0.15)	(0.04)	(0.14)
MILC+	(0.07)	(0.10)	(0.12)	(0.21)	(0.25)	(0.28)	(0.29)	(0.30)	(0.31)	(0.30)	(0.15)	(0.30)
NoMILC	0.08	0.11	0.13	0.07	0.05	0.03	0.02	0.02	0.01	0.01	0.09	0.02
NoMILC/CCC	0.32	0.28	0.24	0.17	0.12	0.11	0.09	0.06	0.03	0.00	0.22	0.06
NoMILC/CCC/DEIP	0.32	0.28	0.27	0.20	0.16	0.15	0.14	0.11	0.09	0.06	0.24	0.11
NoMILC/CCC/DEIP/FMMO	0.37	0.27	0.26	0.20	0.16	0.14	0.14	0.11	0.08	0.06	0.25	0.10
NoMILC/CCC/DEIP/FMMO⊚	0.38	0.32	0.30	0.21	0.20	0.17	0.17	0.14	0.12	0.09	0.28	0.14
Nonfat Dry Milk Price ($/lb.)	0.84	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.82	0.81
MILC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MILC+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NoMILC	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
NoMILC/CCC	(0.17)	(0.14)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.00)	0.01	(0.08)	(0.01)
NoMILC/CCC/DEIP	(0.17)	(0.14)	(0.09)	(0.08)	(0.07)	(0.07)	(0.06)	(0.05)	(0.04)	(0.03)	(0.11)	(0.05)
NoMILC/CCC/DEIP/FMMO	(0.16)	(0.11)	0.01	0.01	0.02	0.02	0.02	0.03	0.05	0.06	(0.05)	0.04
NoMILC/CCC/DEIP/FMMO⊚	(0.16)	(0.13)	0.03	0.03	0.04	0.03	0.04	0.05	0.06	0.08	(0.04)	0.05

Baseline - FAPRI March 2003 Baseline, **MILC** - Extend current MILC program through 2012, **MILC+** - Extend MILC program through 2012 and pay on all milk marketed, **No MILC** - Eliminate the current MILC program 1/1/2003, **NoMILC/CCC** - Eliminate the price support program 1/1/2003 in addtion to MILC elimination, **NoMILC/CCC/DEIP** - Eliminate the price support program and the DEIP 1/1/2003 in addtion to MILC elimination, **NoMILC/CCC/DEIP/FMMO** - In addition to the previous programs eliminated, eliminate FMMOs 1/1/2003, allow for fluid milk premiums, **NoMILC/CCC/DEIP/FMMO⊚** - Identical to NoMILC/CCC/DEIP/FMMO except have zero fluid premiums
a/ - Payment rate on eligible milk
b/ - Net revenue on all milk produced

D. SCOTT BROWN
Research Assistant Professor
101 S. Fifth Street
Columbia, Missouri 65201
Phone: (573) 882-3861
Fax: (573) 884-4688
E-mail: browndo@missouri.edu

Current Position:

Research Assistant Professor, Food and Agricultural Policy Research Institute
(FAPRI), University of Missouri

Responsibilities:

Provide market outlook, long-term baseline projections, and policy analysis for the
livestock and dairy sectors.

Education:

B.S. – Agricultural Business, Northwest Missouri State University, 1986
M.S. - Agricultural Economics, University of Missouri, 1991
Ph.D. - Agricultural Economics, University of Missouri, 1994

Professional Registration:

American Agricultural Economics Association
Southern Agricultural Economics Association
Member of The Dairy Markets and Policy Extension Education Committee, an
extension project of the Cornell Program on Dairy Markets and Policy

Honors and Awards:

Distinguished Policy Contribution Award, American Agricultural Economics
Association, 1991

USDA Group Honor Award for Excellence, with other FAPRI analysts, "for
developing stochastic methodology that provided Congress and other decision makers
with in-depth quantitative analysis of the behavior of proposed agricultural policies for
a range of projected economic and market conditions, 2002

Previous Experience:

1989-1993   Research Associate, FAPRI-University of Missouri
1993-1997   Program Director, FAPRI-University of Missouri

Recent Publications:

"Regional Implications of the Current Senate Farm Bill Dairy Provisions" FAPRI-UMC Report 01-02, Janaury 2002

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