

## **Appendix C**

### **Effects of Make Allowances Proposed by International Dairy Foods Association**

**March 2007**

This appendix has been included to illustrate the effects of adopting the make allowances presented by IDFA at the February 2007 hearing on Class III and Class IV pricing factors.

During the February 2007 hearing on Class III and Class IV pricing factors, the International Dairy Foods Association (IDFA), proposed the manufacturing (make) allowances analyzed as Scenario N. The impacts stated are in comparison to the USDA baseline (Model Calibrated to USDA Baseline Projections to 2015) that has been adjusted to reflect make allowances stated in the December 2006 Interim Final Rule. The analysis of Scenario N is therefore comparable to the Preliminary Economic Analyses previously presented.

Make allowances proposed by IDFA are in support of Agri-Mark’s proposal to update make allowances to reflect the most recent published data. Whereas 2004 CDFA data are used in part to determine make allowances under the Interim Final Rule, IDFA advocates use of the 2005 CDFA data published November 29, 2006. Whereas the Interim Final Rule makes use of Cornell data, but not CDFA data, in determining the make allowance for dry whey, IDFA advocates use of both the Cornell data and the 2005 CDFA data. Regarding the make allowance for cheese, the Interim Final Rule uses in part the Cornell sample weighted average manufacturing costs, whereas IDFA advocates use of Cornell’s estimate of the population weighted average manufacturing cost.<sup>1</sup>

IDFA’s calculations included weighted averages for Cornell and CDFA data from NASS 2005 Dairy Production volumes, “the most recent data available—the next data to be published in the April 2007 edition of the Dairy Products Annual Summary”. The proposed changes are all increases over the current make allowances and are listed in Table C-1. All impacts discussed are changes from the USDA baseline as adjusted to the Interim Final Rule.

Table C-1. Make Allowances Proposed by IDFA in Support of Agri-Mark Proposal (Scenario N)

	Units	Baseline	Change from baseline
Butter	\$/pound	0.1202	0.0012
NFDM	\$/pound	0.1570	0.0060
Cheese	\$/pound	0.1682	0.0335
Whey	\$/pound	0.1956	0.0113

Agri-Mark’s proposal was previously analyzed as Scenario A. IDFA’s method of calculating the updated make allowances, incorporating additional data and a different weighted average manufacturing cost results in some differences from Scenario A. The proposed changes in make allowances for butter and NFDM are a slightly smaller than the changes analyzed in Scenario A. The make allowance for whey, left unchanged from the Interim Final Rule in Scenario A, is increased in Scenario N. The change in the make allowance for cheese is the greatest difference between this set of make allowances and those previously analyzed; an increase of \$0.035 as opposed to \$0.0029.

<sup>1</sup> Cornell’s estimate of the population weighted average cheese manufacturing costs is found in the testimony of Dr. Mark Stephenson in the Reconvened Hearing concerning make allowances (exhibit 75).

A summary of the impacts expected under Scenario N can be found in Table C-2. The proposed make allowance for cheese is the greatest change from existing make allowances, increasing by nearly 20%. As a result of these changes, the protein price falls by an average of ten cents per pound over the projection period. In turn, Class I and Class III skim prices fall by an average \$0.38 per cwt over the same period. As marketings shrink, product prices strengthen. The butter price increases enough to outweigh the changed make allowance, resulting in an increased butterfat price and consequently raising Class II and Class IV prices.

Class I use increases as the Class I price at test maintains a steady decrease, averaging \$0.29 per cwt below baseline level over the nine-year period. With an increase in dairy product prices, manufacturing classes all exhibit a drop in use, reflecting the reduction in supply relative to baseline projections. Total Federal order marketings fall an average 238 million pounds during the 9-year projection period.

Both cow numbers and yield per cow see a decline from baseline levels over the projection period. A lower blend price, down an average \$0.12 per cwt at test, and decreased Federal order marketings result in a projected average decline of \$195 million in Federal order cash receipts. The reduced all-milk price, an average \$0.09 per cwt below baseline projections, and decrease in U.S. marketings result in an average \$216 million drop in producer revenue. Detailed impacts of the changes to major variables are listed in Table C-3.

Table C-2. Changes from Baseline: Impacts of Proposed Changes in Make Allowances  
 Nine-year averages, 2007 through 2015

	Units	Baseline <sup>1</sup>	Change from baseline
<b>F.O. Minimum Prices, 3.5% BF</b>			
Class I	\$/cwt	16.35	-0.22
Class II	\$/cwt	12.68	0.12
Class III	\$/cwt	13.64	-0.22
Class IV	\$/cwt	11.98	0.12
Blend	\$/cwt	14.28	-0.13
<b>F.O. Minimum Prices at Test</b>			
Class I	\$/cwt	13.95	-0.29
Class II	\$/cwt	20.46	0.32
Class III	\$/cwt	13.61	-0.22
Class IV	\$/cwt	13.45	0.21
Blend	\$/cwt	14.63	-0.12
<b>NASS Wtd. Avg. Product Prices</b>			
Cheddar	\$/pound	1.4713	0.0148
Butter	\$/pound	1.5630	0.0367
NFDM	\$/pound	0.8456	0.0022
Whey	\$/pound	0.2765	0.0019
Retail fluid milk price <sup>2</sup>	\$/gal.		-0.0248
<b>Component Prices</b>			
Protein	\$/pound	2.3759	-0.1052
Butterfat	\$/pound	1.7313	0.0426
Other solids	\$/pound	0.0834	-0.0096
Nonfat solids	\$/pound	0.6817	-0.0037
<b>Skim Milk Prices</b>			
Class I skim price	\$/cwt	10.5671	-0.3831
Class II skim price	\$/cwt	6.8352	-0.0336
Class III skim price	\$/cwt	7.8571	-0.3831
Class IV skim price	\$/cwt	6.1352	-0.0336
<b>Federal Order Class Uses</b>			
Class I	mil. pounds	45,892	31
Class II	mil. pounds	17,464	-69
Class III	mil. pounds	51,122	-39
Class IV	mil. pounds	15,597	-160
Total F.O. Marketings	mil. pounds	130,075	-238

Table C-2 continued on next page

Table C-2 Continued. Changes from Baseline: Impacts of Proposed Changes in Make Allowances

	Units	Baseline	Change from baseline
Federal Order Cash Receipts	mil. \$	19,040	-195
All Milk Price	\$/cwt	14.73	-0.09
Milk Cows	1000s	8,884	-11
Yield per Cow	pounds	21,660	-12
U.S. Marketings <sup>3</sup>	mil. pounds	191,649	-349
Government removals of NFDMM	mil. pounds	282	-14
U.S. Producer Revenue <sup>4</sup>	mil. \$	28,274	-216

<sup>1</sup> For this analysis, the baseline reflects adjustments from the published USDA baseline to reflect changes in manufacturing (make) allowances per the Interim Final Rule issued by USDA on December 26, 2006.

<sup>2</sup> Retail fluid milk prices are not projected in the model. Projected impacts are calculated by multiplying the Class I price per pound at test by 8.62 pounds of milk per gallon.

<sup>3</sup> U.S. Marketings differs from U.S. milk production due to farm use of milk.

<sup>4</sup> U.S. Producer Revenue includes Milk Income Loss Contract payments for 2007.

Table C-3. Detailed Impacts of Proposed Make Allowance Changes

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Milk Cows	1000s	Baseline	9,083	9,054	8,999	8,944	8,888	8,831	8,770	8,720	8,665	8,884
	1000s	N	-4	-7	-10	-11	-12	-13	-14	-14	-14	-11
Yield per Cow	pounds	Baseline	20,266	20,657	20,989	21,344	21,688	22,069	22,330	22,644	22,954	21,660
	pounds	N	0	-5	-8	-11	-14	-16	-17	-19	-20	-12
Milk Production	mil. pounds	Baseline	184,072	187,030	188,881	190,898	192,767	194,894	195,836	197,460	198,907	192,305
	mil. pounds	N	-83	-193	-279	-343	-390	-428	-456	-476	-492	-349
Farm Use	mil. pounds	Baseline	900	800	800	700	700	600	500	500	400	656
Marketings	mil. pounds	Baseline	183,172	186,230	188,081	190,198	192,067	194,294	195,336	196,960	198,507	191,649
	mil. pounds	N	-83	-193	-279	-343	-390	-428	-456	-476	-492	-349
Product Prices												
Cheddar cheese	\$/pound	Baseline	1.4715	1.4831	1.4510	1.4532	1.4664	1.4720	1.4579	1.4884	1.4985	1.4713
	\$/pound	N	0.0046	0.0094	0.0122	0.0146	0.0164	0.0176	0.0183	0.0197	0.0200	0.0148
Butter	\$/pound	Baseline	1.4015	1.4162	1.5197	1.5501	1.5899	1.6292	1.6385	1.6314	1.6904	1.5630
	\$/pound	N	0.0176	0.0279	0.0357	0.0391	0.0408	0.0415	0.0428	0.0433	0.0414	0.0367
Nonfat dry milk	\$/pound	Baseline	0.8917	0.8614	0.8313	0.8377	0.8353	0.8322	0.8298	0.8399	0.8509	0.8456
	\$/pound	N	0.0020	0.0031	0.0014	0.0019	0.0021	0.0021	0.0020	0.0024	0.0030	0.0022
Dry whey	\$/pound	Baseline	0.2539	0.2496	0.2507	0.2618	0.2756	0.2831	0.2940	0.3104	0.3096	0.2765
	\$/pound	N	0.0007	0.0015	0.0018	0.0021	0.0023	0.0023	0.0023	0.0024	0.0022	0.0019
Retail fluid milk <sup>1</sup>	\$/gallon	N	-0.0318	-0.0286	-0.0270	-0.0252	-0.0237	-0.0229	-0.0224	-0.0213	-0.0208	-0.0248

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Table C-3 continued. Detailed Impacts of Proposed Make Allowance Changes

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Component Prices												
Butterfat	\$/pound	Baseline	1.5376	1.5551	1.6794	1.7159	1.7637	1.8108	1.8220	1.8134	1.8842	1.7313
	\$/pound	N	0.0197	0.0321	0.0414	0.0455	0.0475	0.0483	0.0500	0.0506	0.0482	0.0426
Protein	\$/pound	Baseline	2.5804	2.5995	2.3651	2.3336	2.3258	2.2943	2.2372	2.3444	2.3025	2.3759
	\$/pound	N	-0.1139	-0.1114	-0.1123	-0.1087	-0.1049	-0.1022	-0.1014	-0.0978	-0.0943	-0.1052
Nonfat Solids	\$/pound	Baseline	0.7274	0.6973	0.6675	0.6739	0.6716	0.6684	0.6660	0.6761	0.6869	0.6817
	\$/pound	N	-0.0039	-0.0029	-0.0046	-0.0040	-0.0039	-0.0039	-0.0040	-0.0035	-0.0029	-0.0037
Other Solids	\$/pound	Baseline	0.0601	0.0556	0.0568	0.0682	0.0824	0.0902	0.1014	0.1182	0.1174	0.0834
	\$/pound	N	-0.0109	-0.0101	-0.0097	-0.0095	-0.0093	-0.0093	-0.0093	-0.0092	-0.0093	-0.0096
Pricing Factors												
Class I Skim	\$/cwt	Baseline	11.06	11.10	10.38	10.35	10.41	10.35	10.24	10.68	10.54	10.57
	\$/cwt	N	-0.42	-0.41	-0.41	-0.39	-0.38	-0.37	-0.37	-0.36	-0.35	-0.38
Class II Skim	\$/cwt	Baseline	7.25	6.98	6.71	6.77	6.74	6.72	6.69	6.78	6.88	6.84
	\$/cwt	N	-0.04	-0.03	-0.04	-0.04	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03
Class III Skim	\$/cwt	Baseline	8.35	8.39	7.67	7.64	7.70	7.64	7.53	7.97	7.83	7.86
	\$/cwt	N	-0.42	-0.41	-0.41	-0.39	-0.38	-0.37	-0.37	-0.36	-0.35	-0.38
Class IV Skim	\$/cwt	Baseline	6.55	6.28	6.01	6.07	6.04	6.02	5.99	6.08	6.18	6.14
	\$/cwt	N	-0.04	-0.03	-0.04	-0.04	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03

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Table C-3 continued. Detailed Impacts of Proposed Make Allowance Changes

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Federal Order Prices at 3.5% Butterfat												
Class I	\$/cwt.	Baseline	16.15	16.25	15.99	16.09	16.31	16.42	16.36	16.74	16.86	16.35
	\$/cwt.	N	-0.33	-0.28	-0.25	-0.22	-0.20	-0.19	-0.18	-0.17	-0.17	-0.22
Class II	\$/cwt.	Baseline	12.40	12.20	12.38	12.56	12.71	12.84	12.86	12.92	13.26	12.68
	\$/cwt.	N	0.03	0.09	0.11	0.12	0.13	0.14	0.14	0.15	0.14	0.12
Class III	\$/cwt.	Baseline	13.44	13.54	13.28	13.38	13.60	13.71	13.65	14.03	14.15	13.64
	\$/cwt.	N	-0.33	-0.28	-0.25	-0.22	-0.20	-0.19	-0.18	-0.17	-0.17	-0.22
Class IV	\$/cwt.	Baseline	11.70	11.50	11.68	11.86	12.01	12.14	12.16	12.22	12.56	11.98
	\$/cwt.	N	0.03	0.09	0.11	0.12	0.13	0.14	0.14	0.15	0.14	0.12
Uniform at 3.5% BF	\$/cwt.	Baseline	14.10	14.11	13.95	14.06	14.25	14.37	14.31	14.61	14.77	14.28
	\$/cwt.	N	-0.24	-0.19	-0.16	-0.13	-0.11	-0.10	-0.10	-0.08	-0.08	-0.13
Average Butterfat Test												
Class I	percent	Baseline	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
	percent	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Class II	percent	Baseline	8.19	8.18	8.18	8.17	8.17	8.16	8.14	8.13	8.12	8.16
	percent	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Class III	percent	Baseline	3.49	3.48	3.48	3.48	3.48	3.48	3.48	3.49	3.49	3.48
	percent	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Class IV	percent	Baseline	4.51	4.48	4.50	4.46	4.42	4.37	4.32	4.24	4.18	4.39
	percent	N	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.03

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Table C-3 continued. Detailed Impacts of Proposed Make Allowance Changes

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Federal Order Prices at Test												
Class I	\$/cwt.	Baseline	14.04	14.10	13.65	13.70	13.85	13.90	13.81	14.22	14.23	13.95
	\$/cwt.	N	-0.37	-0.33	-0.31	-0.29	-0.28	-0.27	-0.26	-0.25	-0.24	-0.29
Class II	\$/cwt.	Baseline	19.30	19.19	19.96	20.30	20.65	21.00	21.04	21.03	21.68	20.46
	\$/cwt.	N	0.13	0.24	0.30	0.34	0.36	0.36	0.37	0.38	0.37	0.32
Class III	\$/cwt.	Baseline	13.42	13.51	13.24	13.34	13.56	13.68	13.62	14.02	14.14	13.61
	\$/cwt.	N	-0.34	-0.28	-0.25	-0.22	-0.21	-0.19	-0.19	-0.17	-0.17	-0.22
Class IV	\$/cwt.	Baseline	13.19	12.96	13.29	13.45	13.56	13.67	13.61	13.51	13.80	13.45
	\$/cwt.	N	0.08	0.15	0.20	0.23	0.24	0.24	0.25	0.25	0.24	0.21
Uniform	\$/cwt.	Baseline	14.41	14.42	14.29	14.41	14.61	14.73	14.69	14.98	15.16	14.63
	\$/cwt.	N	-0.24	-0.18	-0.15	-0.12	-0.10	-0.09	-0.09	-0.07	-0.07	-0.12
Federal Order Marketings												
Class I	mil. pounds	Baseline	45,748	45,905	45,865	45,890	45,895	46,030	45,926	45,886	45,883	45,892
	mil. pounds	N	42	37	34	32	29	28	27	25	24	31
Class II	mil. pounds	Baseline	16,719	16,984	17,026	17,192	17,375	17,611	17,826	18,116	18,322	17,464
	mil. pounds	N	-25	-47	-61	-71	-77	-81	-85	-89	-88	-69
Class III	mil. pounds	Baseline	47,803	48,975	49,907	50,657	51,305	52,049	52,608	53,136	53,656	51,122
	mil. pounds	N	-8	-20	-26	-34	-41	-47	-53	-58	-64	-39
Class IV	mil. pounds	Baseline	14,628	14,920	15,029	15,397	15,721	16,021	15,955	16,215	16,488	15,597
	mil. pounds	N	-61	-101	-138	-163	-179	-193	-200	-203	-207	-160
Total	mil. pounds	Baseline	124,898	126,785	127,827	129,137	130,297	131,711	132,316	133,352	134,350	130,075
	mil. pounds	N	-53	-130	-191	-235	-268	-293	-312	-325	-335	-238

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Table C-3 continued. Detailed Impacts of Proposed Make Allowance Changes

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Federal Order Cash Receipts												
Class I	mil. \$	Baseline	6,421	6,474	6,262	6,286	6,358	6,398	6,344	6,525	6,530	6,400
	mil. \$	N	-163	-147	-139	-130	-122	-118	-116	-110	-108	-128
Class II	mil. \$	Baseline	3,227	3,259	3,398	3,489	3,588	3,697	3,751	3,810	3,972	3,577
	mil. \$	N	17	32	39	44	46	47	48	50	47	41
Class III	mil. \$	Baseline	6,416	6,618	6,609	6,756	6,959	7,121	7,164	7,448	7,588	6,964
	mil. \$	N	-161	-140	-128	-118	-111	-108	-105	-100	-100	-119
Class IV	mil. \$	Baseline	1,929	1,933	1,997	2,071	2,133	2,190	2,172	2,191	2,276	2,099
	mil. \$	N	3	10	11	13	13	12	12	13	11	11
Total	mil. \$	Baseline	17,993	18,284	18,265	18,603	19,038	19,406	19,431	19,974	20,366	19,040
	mil. \$	N	-304	-246	-217	-191	-174	-167	-160	-147	-149	-195
U.S. Class Use <sup>2</sup>												
Class I	mil. pounds	Baseline	55,519	55,710	55,662	55,692	55,698	55,862	55,735	55,687	55,684	55,694
	mil. pounds	N	51	45	42	38	36	34	33	30	29	38
Class II	mil. pounds	Baseline	19,555	19,865	19,913	20,108	20,322	20,597	20,849	21,188	21,430	20,425
	mil. pounds	N	-29	-56	-72	-83	-90	-94	-100	-104	-103	-81
Class III	mil. pounds	Baseline	87,072	89,208	90,906	92,271	93,452	94,808	95,826	96,786	97,735	93,118
	mil. pounds	N	-15	-36	-47	-61	-74	-86	-96	-106	-116	-71
Class IV	mil. pounds	Baseline	21,355	21,782	21,940	22,477	22,951	23,389	23,292	23,671	24,070	22,770
	mil. pounds	N	-89	-147	-202	-237	-262	-281	-293	-296	-302	-234
Total Class Use	mil. pounds	Baseline	183,501	186,565	188,421	190,549	192,423	194,655	195,703	197,332	198,918	192,007
	mil. pounds	N	-83	-193	-279	-343	-390	-428	-456	-476	-492	-349

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Table C-3 continued. Detailed Impacts of Proposed Make Allowance Changes

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
Domestic Commercial Disappearance												
American Cheese	mil. pounds	Baseline	3,897	3,998	4,062	4,119	4,178	4,243	4,291	4,352	4,400	4,171
	mil. pounds	N	-1	-3	-4	-5	-6	-6	-7	-7	-7	-5
Other Cheese	mil. pounds	Baseline	5,830	5,969	6,084	6,188	6,275	6,388	6,472	6,562	6,654	6,269
	mil. pounds	N	-1	-3	-5	-6	-7	-8	-9	-10	-11	-7
Butter	mil. pounds	Baseline	1,364	1,379	1,399	1,423	1,441	1,457	1,442	1,438	1,449	1,421
	mil. pounds	N	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2
Nonfat dry milk	mil. pounds	Baseline	995	1,049	1,106	1,193	1,227	1,267	1,286	1,389	1,507	1,225
	mil. pounds	N	-2	-3	-1	-2	-2	-2	-2	-3	-4	-2
Dry whey	mil. pounds	Baseline	921	909	894	876	853	829	802	774	749	845
	mil. pounds	N	0	-1	-2	-3	-3	-4	-4	-4	-5	-3
Class I Price at Boston (3.5 percent butterfat)	\$/cwt.	Baseline	16.15									
	\$/cwt.	N	0.37									
MILC Payments	mil. \$	Baseline	214									
	mil. \$	N	44									

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Table C-3 continued. Detailed Impacts of Proposed Make Allowance Changes

	Units	Scenario	2007	2008	2009	2010	2011	2012	2013	2014	2015	9 Yr. Avg.
NDM Net	mil. pounds	Baseline	145	147	310	366	370	365	326	291	214	282
Govt. Removals <sup>3</sup>	mil. pounds	N	0	-2	-13	-16	-18	-19	-20	-18	-16	-14
MPSP Outlays <sup>4</sup>	mil. \$	N	0	-1	-11	-12	-14	-16	-16	-15	-13	-11
Total Govt. Outlays	mil. \$	N	44	-1	-11	-12	-14	-16	-16	-15	-13	-6

<sup>1</sup> Retail fluid milk prices are not projected in the model. Projections are calculated by multiplying the Class I price per pound at test by 8.62 pounds of milk per gallon.

<sup>2</sup> U.S. Class Use differs from U.S. Marketings due to the presence of imported dairy ingredients.

<sup>3</sup> Net government removals equals support price purchases plus Dairy Export Incentive Program (DEIP) removals minus unrestricted sales. To be consistent with the USDA baseline, there is no change to NDM removals for 2007 because the DEIP is assumed to be fully funded.

<sup>4</sup> MPSP outlays are not projected in the model. The change is computed by multiplying NDM net removal quantities by the NDM support price of \$0.80. No attempt is made to estimate changes in storage, handling, transportation, processing, and packaging.