

What a Difference a Year Makes in the Dairy Industry

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What a Difference a Year Makes in the Dairy Industry

Brian K. Herbst, James W. Richardson, Joe L. Outlaw, and David P. Anderson

The projections for feed and milk prices have changed over the last year. This study looks at how the changes affect the dairy industry. The high feed prices have been trumped by higher milk prices and the economic viability of the dairy industry has improved across the board.

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Background

Milk and feed prices have been very volatile over the past five years. The increase in ethanol and biodiesel production has shifted the use of corn and soybeans away from livestock feed and towards fuel production. This has led to an increase in the cost of feeding livestock. Corn, soybean meal, and other feed ingredients have seen an increase in prices as their demand increased for alternative uses. In 2006, the prices for feed ingredients increased and projections show they would stay at a high level for the foreseeable future (FAPRI 2006). In 2007, the feed prices increased to even higher levels than expected in the 2006 projections (FAPRI 2007). The prices can be found in Table 1.

Over the same period, there has been milk prices have been very volatile. After two years of good prices in 2004 and 2005 (\$15.19/cwt), the 2006 price was considerably lower (\$12.97/cwt). The December 2007 Baseline price projections by the Food and Policy Research Institute (FAPRI) showed small increases in the price of milk over the projection period. However, milk prices for 2007 were significantly higher than 2006 and presently the projected prices for the next five years are also higher than the projections from the previous year (Table 1). The 2007 milk price at \$19.10/cwt is as high as it has ever been. Future price projections do not maintain the milk price at the 2007 price level but have it leveling off above the January 2006 FAPRI projections. Figure 1 shows the all milk price (\$/cwt) for 2005-2012 under the January 2006 and December 2007 FAPRI Baseline projections.

Input prices have also changed since the January 2006 baseline was released. Fuel inflation rates have been adjusted and are now at a higher level than they were in 2006. Fuel

costs affect dairies heavily as they have to pay hauling, and their utilities are a large part of total costs. The inflation and interest rates can be found in Table 2.

Objectives

This study will quantify the economic effects of higher milk and feed prices on the dairy industry for 23 representative dairies in ten states (California, Washington, Idaho, New Mexico, Texas, Missouri, Wisconsin, New York, Vermont, and Florida), over a six-year horizon using the January 2006 and the December 2007 FAPRI price projections. Key economic and financial variables will be compared among dairies to show how the two projected price and inflation series may affect economic viability of dairy farms.

Data and Methods

Economic and production data are available for 23 representative dairy operations that have been developed and maintained by the Agricultural and Food Policy Center (AFPC) at Texas A&M University. The representative dairies range from 85 to 3,000 head of milking cows. All information about the operations is obtained in interviews of the 3-6 member panels and the interviews are repeated every two to three years. Table 3 presents characteristics of the dairies included in this study. The dairies are named by state (TX = Texas dairy), region (TXC = Central Texas dairy), and the number is the size of the dairy in terms of milk cows (TXC1300 = Central Texas 1300 head dairy)

To facilitate comparison across dairies, key assumptions are imposed across the set. Dairy herd sizes are held constant over the planning horizon. No off farm income, including family employment, is included in the analysis. Each dairy started 2005 with 30 percent debt on land and equipment.

The effects of the different baseline projections were analyzed using the farm level income and policy simulation model (FLIPSIM) developed by Richardson and Nixon (1986). The FLIPSIM model draws random crop yields, livestock production variables, and prices from a multivariate empirical probability distribution allowing projections to incorporate production and price risk using the procedures described by Richardson, Klose, and Gray (2000). Under a set of standard assumptions, each dairy is compared using macro level projections of prices, inflation rates, and yield growth in the January 2006 FAPRI Baseline and December 2007 FAPRI Baseline.

The key variables analyzed are average annual net cash farm income, average annual cash receipts, average annual dairy costs (contains dairy production costs, feed costs, and replacement heifers and bulls), average ending cash in 2012, average ending nominal net worth in 2012, and the probability of negative ending cash in 2012.

Results

All representative dairies showed improvement in all financial indicator variables under the December 2007 Baseline compared to the January 2006 Baseline (Table 4). Under the 2006 baseline, the dairies were facing high probabilities of cash flow and solvency problems because of high feed costs and the stagnant milk price with eight dairies classified as good, five marginal, and ten in poor overall financial position (Figure 2).

Under the 2007 baseline, the dairies show an improvement in economic viability even with the higher feed prices due to increases in milk price, with 20 classified as good, two as marginal, and only one dairy is in a poor overall financial position (Figure 3). Five dairies (WA250, ID1000, WI145, VT140, and FLS1500) went from a marginal to a good overall financial position. Seven dairies (WA850, TXN3000, TXE450, TXE1000, NYW1200,

NYC500, and VT400) went from a poor to a good overall financial position. Two dairies (NYW800 and MO85) went from a poor to a marginal overall financial position. TXC550 is the only dairy that is classified as being in a poor overall financial position; however, the dairy showed mild improvement with the December 2007 Baseline over the January 2006 Baseline.

Under the December 2007 Baseline there is a significant positive improvement on the financial condition of the representative dairies compared to the January 2006 Baseline. Table 4 includes the financial impacts of the different Baselines on the dairies. Each dairy is listed with the financials from the January 2006 Baseline and the December 2007 Baseline.

Different dairies and regions were impacted at different levels. The dairies that purchased all their feed saw a higher increase in feed purchases than the ones that raised a portion of their dairy ration. The dairies in Florida saw a higher percentage increase in dairy costs (primarily feed) than in their milk price. California saw the highest increase in dairy costs.

The California dairy (1,710 cows) had a twenty percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by twenty-nine percent. Therefore, the average annual net cash farm income increased from \$761,000 to \$1,661,000 or \$526/cow. The ending cash reserves in 2012 increased from \$2,313,000 to \$5,750,000, and the probability of a negative ending cash dropped from two percent to one percent. The nominal net worth in 2012 increased from \$13.2 million to \$19.1 million.

The Texas High Plains dairy (3,000 cows) had a sixteen percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by twenty-eight percent. Therefore, the average annual net cash farm income increase from \$47,000 to \$1,447,000 or \$466/cow. The ending cash reserves in 2012 increased from -

\$1,805,000 to \$5,020,000, and the probability of a negative ending cash dropped from seventy-two percent to six percent. The nominal net worth in 2012 increased from \$8.4 million to \$16.1 million. This resulted in the dairy moving from a poor overall financial position to a good overall financial position.

The Northern Florida dairy (550 cows) had a thirty percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by nineteen percent. Therefore, the average annual net cash farm income only increased eight percent from \$559,000 to \$606,000 or \$85/cow. The ending cash reserves in 2012 increased from \$1,380,000 to \$1,557,000. The nominal net worth in 2012 increased from \$5.2 million to \$6.2 million.

The Southern Florida dairy (1500 cows) had a twenty-four percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by eighteen percent. Therefore, the average annual net cash farm income increased from \$441,000 to \$818,000 or \$251/cow. The ending cash reserves in 2012 increased from \$151,000 to \$1,891,000, and the probability of a negative ending cash dropped from forty-two percent to seventeen percent. The nominal net worth in 2012 increased from \$9.8 million to \$13.8 million. This resulted in the dairy moving from a marginal overall financial position to a good overall financial position.

The moderate Western New York dairy (800 cows) had a seventeen percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by twenty-seven percent. Therefore, the average annual net cash farm income increased from negative \$167,000 to \$338,000 or \$631/cow. The ending cash reserves in 2012 increased from negative \$2,518,000 to \$8,000, and the probability of negative ending cash

dropped from ninety-nine percent to forty-one percent. The nominal net worth in 2012 increased from \$2.7 million to \$6.3 million. This resulted in the dairy moving from a poor overall financial position to a marginal overall financial position.

The large Western New York dairy (1200 cows) had a seventeen percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by twenty-six percent. Therefore, the average annual net cash farm income increased from negative \$127,000 to \$553,000 or \$566/cow. The ending cash reserves in 2012 increased from negative \$2,713,000 to \$700,000, and the probability of a negative ending cash dropped from ninety-nine percent to twenty-two percent. The nominal net worth in 2012 increased from \$5.0 million to \$9.9 million. This resulted in the dairy moving from a poor overall financial position to a good overall financial position.

The moderate Washington dairy (250 cows) had a seventeen percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by twenty-six percent. Therefore, the average annual net cash farm income increased from \$143,000 to \$295,000 or \$608/cow. The ending cash reserves in 2012 increased from negative \$75,000 to \$483,000, and the probability of a negative ending cash dropped from sixty-three percent to four percent. The nominal net worth in 2012 increased from \$2.5 million to \$3.6 million. This resulted in the dairy moving from a marginal overall financial position to a good overall financial position.

The large Washington dairy (850 cows) had a twenty percent increase in dairy costs from the January 2006 Baseline to the December 2007 Baseline, while having their receipts increase by twenty-nine percent. Therefore, the average annual net cash farm income increased from negative \$72,000 to \$457,000 or \$622/cow. The ending cash reserves in 2012 increased from

negative \$2,028,000 to \$428,000, and the probability of a negative ending cash dropped from ninety-seven percent to twenty-nine percent. The nominal net worth in 2012 increased from \$3.5 million to \$6.8 million. This resulted in the dairy moving from a poor overall financial position to a good overall financial position.

Discussion

There are many ways that the dairies are adjusting to the higher milk prices. Many are trying to find ways to spend the extra money so that Uncle Sam does not get too much. They are replacing barns, expanding herds, and buying new equipment. Other dairies are buying/building new dairies.

Dairies are also trying to minimize the effects of the higher feed costs. One change that is being made is to shift feed ingredients that the dairies are feeding. Some dairies feed a complete feed that they purchase premixed and have little control over changing the ingredients while others buy commodities and mix their own. The dairies that buy commodities and mix their own feed will have more flexibility to adjust their ration to include ingredients that are lower in cost and still have the same nutritional value that the milk cow requires.

The impact from the high feed prices has not been felt the same way that it would if the prices had stayed at the January 2006 Baseline level. The dairymen do not like the higher feed prices but don't mind them as much with high milk prices. Future research on the subject will analyze how much feed prices can increase and not jeopardize the economic viability of dairy farms using risk analysis.

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Figure 1. Annual All Milk Price (\$/cwt) for January 2006 and December 2007 Baseline from 2005-2012.

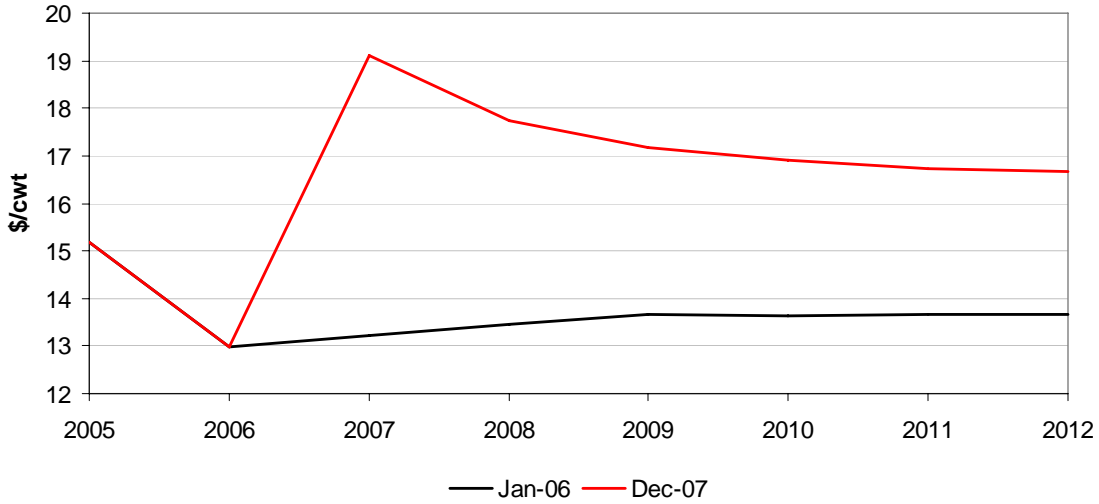


Figure 2. Stoplite Results for January 2006 Baseline.

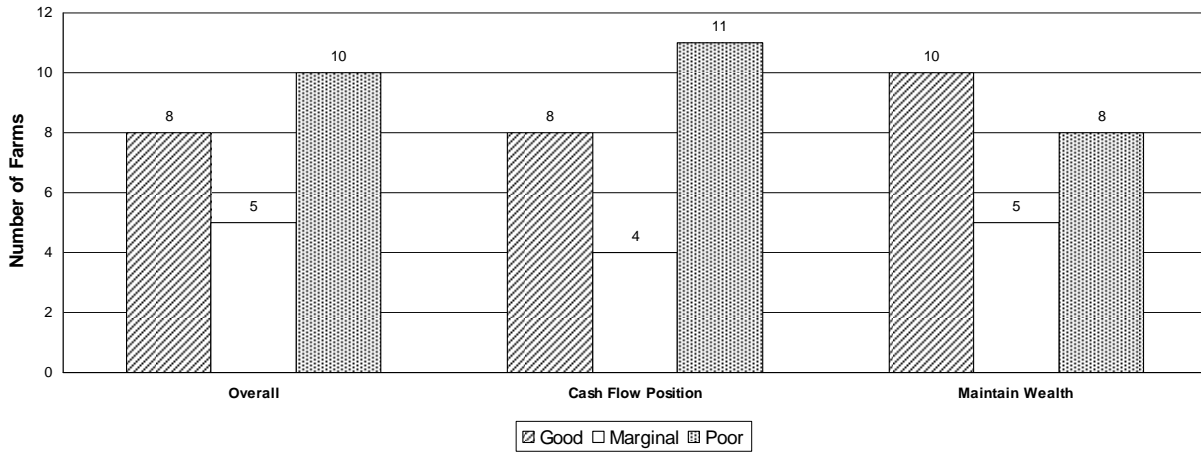


Figure 3. Stoplite Results for December 2007 Baseline.

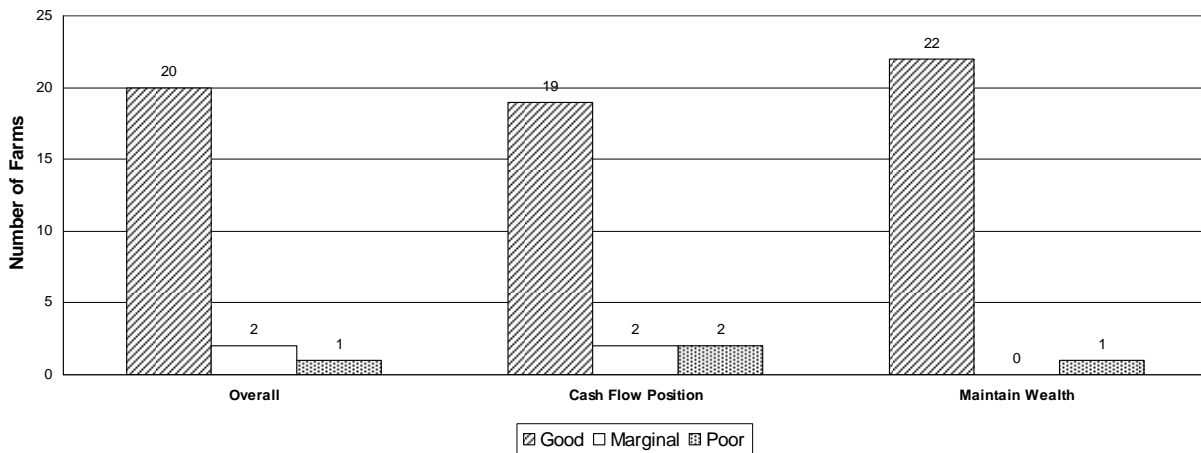


Table 1. FAPRI January 2006 and December 2007 Baseline Projections of Crop Prices, Cattle Prices, and Milk Prices, 2005-2012

		2005	2006	2007	2008	2009	2010	2011	2012
Crop Prices									
Corn (\$/bu.)	Jan-06			2.20	2.30	2.38	2.44	2.46	2.47
	Dec-07	2.00	3.04	3.26	3.28	3.49	3.41	3.42	3.37
Soybean Meal (\$/ton)	Jan-06			164.38	164.96	163.76	163.50	163.87	162.98
	Dec-07	166.12	195.95	229.68	217.05	201.35	200.91	200.00	203.60
All Hay (\$/ton)	Jan-06			98.27	99.56	101.06	102.37	103.39	104.32
	Dec-07	98.20	110.00	121.34	113.96	111.60	111.85	113.09	114.63
Cattle Prices									
Feeder Cattle (\$/cwt)	Jan-06			105.54	100.47	95.34	90.37	85.81	83.81
	Dec-07	120.11	117.68	115.95	116.95	111.26	106.82	103.65	99.79
Culled Cows (\$/cwt)	Jan-06			48.03	45.65	44.09	42.33	40.64	39.73
	Dec-07	54.36	47.56	52.24	53.50	50.36	49.03	48.56	48.37
Milk Prices -- National									
All Milk Price (\$/cwt)	Jan-06			13.22	13.47	13.66	13.65	13.67	13.68
	Dec-07	15.19	12.97	19.10	17.75	17.17	16.90	16.73	16.66

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

Table 2. FAPRI January 2006 and December 2007 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2006-2012

		2006	2007	2008	2009	2010	2011	2012
Annual Rate of Change for Input Prices Paid								
Seed Prices (%)	Jan-06		4.10	1.74	1.05	0.64	1.01	1.05
	Dec-07	8.33	5.59	3.91	3.62	2.38	1.83	1.66
All Fertilizer Prices (%)	Jan-06		-6.03	-3.53	-3.66	-3.97	-2.26	0.65
	Dec-07	5.70	4.17	5.78	8.44	1.94	-1.34	-1.17
Herbicide Prices (%)	Jan-06		-1.25	-0.58	-0.28	-0.46	0.16	0.77
	Dec-07	6.03	5.32	3.76	2.56	1.42	1.17	1.26
Insecticide Prices (%)	Jan-06		-0.44	0.58	1.49	1.48	1.96	2.39
	Dec-07	-0.69	-0.08	1.29	0.88	0.89	1.65	1.76
Fuel and Lube Prices (%)	Jan-06		-1.94	-2.05	-2.66	-3.79	-2.79	-1.35
	Dec-07	10.65	6.42	2.87	1.60	1.40	-0.46	-0.97
Machinery Prices (%)	Jan-06		2.16	3.63	3.13	2.67	2.94	3.09
	Dec-07	5.20	4.07	2.55	1.51	0.79	0.96	1.35
Wages (%)	Jan-06		3.28	3.05	2.77	2.49	2.63	2.46
	Dec-07	3.64	2.97	2.05	1.96	2.42	2.61	2.78
Supplies (%)	Jan-06		1.55	0.67	0.01	-0.80	-0.47	0.17
	Dec-07	7.03	5.31	5.27	5.19	3.09	2.15	1.84
Repairs (%)	Jan-06		1.43	1.52	1.61	1.58	1.69	1.81
	Dec-07	2.05	3.20	2.79	2.35	2.46	2.49	2.53
Services (%)	Jan-06		0.09	0.52	0.57	0.32	0.91	1.42
	Dec-07	4.55	3.93	2.22	2.04	1.39	1.02	1.11
Taxes (%)	Jan-06		0.34	2.07	1.06	0.44	1.13	1.64
	Dec-07	5.19	7.07	4.82	4.00	2.60	2.24	1.58
PPI Items (%)	Jan-06		-0.18	0.71	0.72	0.30	0.36	0.84
	Dec-07	5.04	5.86	2.53	2.19	1.58	0.56	0.56
PPI Total (%)	Jan-06		0.25	1.03	1.01	0.49	0.70	1.12
	Dec-07	4.96	5.92	2.60	2.50	1.84	0.90	0.88
Annual Change in Consumer Price Index (%)	Jan-06		1.83	1.99	1.96	1.89	2.08	2.26
	Dec-07	3.24	2.67	1.84	1.76	1.92	1.79	1.77
Annual Interest Rates								
Long-Term (%)	Jan-06		6.07	6.11	6.22	6.15	6.23	6.35
	Dec-07	7.45	7.88	8.13	8.72	9.05	9.20	9.32
Intermediate-Term (%)	Jan-06		4.91	4.95	5.04	4.98	5.04	5.14
	Dec-07	6.03	6.38	6.59	7.06	7.33	7.44	7.55
Savings Account (%)	Jan-06		1.68	1.70	1.73	1.71	1.73	1.76
	Dec-07	2.07	2.19	2.26	2.42	2.51	2.55	2.59
Annual Rate of Change for U.S. Land Prices (%)	Jan-06		1.40	-0.53	0.44	0.68	1.17	2.09
	Dec-07	15.15	13.68	8.60	3.75	2.41	2.62	2.92

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

Table 3. Description of Representative Ranches Included in this Study.

Dairy Name	Location	Description
CA1710	Tulare County, California	A 1,710-cow, large-sized central California dairy. The farm plants 1,100 acres of hay/silage for which it employs custom harvesting. Milk sales generated 91 percent of 2006 total receipts.
NM2125	Dona Ana and Chaves County, New Mexico	A 2,125 cow, large-sized southern New Mexico dairy. This farm purchases all commodities necessary for blending its own total mixed ration and plants no crops. Milk sales accounted for 91 percent of 2006 total receipts.
WA250	Whatcom County, Washington	A 250-cow, moderate-sized northern Washington dairy. This farm plants 200 acres of silage and generated 88 percent of its 2006 gross receipts from milk sales.
WA850	Whatcom County, Washington	An 850-cow, large-sized northern Washington dairy. This farm plants 605 acres for silage annually. During 2006, 93 percent of this farm's gross receipts came from milk.
ID1000	Twins Falls County, Idaho	A 1,000-cow, moderate-sized Idaho dairy. This farm plants no crops. Milk sales accounted for 88 percent of IDD1000's gross receipts for 2006.
ID3000	Twins Falls County, Idaho	A 3,000-cow, large-sized Idaho dairy. This farm plants 2,000 acres for silage annually. Milk sales represent 91 percent of this farm's gross receipts.
TXN3000	Bailey County, Texas	A 3,000-cow, large-sized dairy located in the South Plains of Texas. This farm plants 180 acres of sorghum for silage annually. Milk sales account for 90 percent of 2006 gross receipts.
TXC550	Erath County, Texas	A 550-cow, moderate-sized central Texas dairy. TXCD550 plants 500 acres of hay each year. Milk sales represented 90 percent of this farm's 2006 gross receipts.
TXC1300	Erath County, Texas	A 1,300-cow, large-sized central Texas dairy. TXCD1300 plants 400 acres of silage annually. During 2006, milk sales accounted for 91 percent of receipts.
TXE550	Hopkins County, Texas	A 450-cow, moderate-sized northeast Texas dairy. This farm has 850 acres of improved pasture and 50 acres of hay. During 2006, milk sales represented 87 percent of annual receipts.
TXE1000	Hopkins County, Texas	A 1,000-cow, large-sized northeast Texas dairy. This farm plants 1,025 acres of hay/silage. This farm generated 93 percent of 2006 receipts from milk sales.
WI145	Winnebago County, Wisconsin	A 145-cow, moderate-sized eastern Wisconsin dairy. The farm plants 237 acres of silage, 60 acres for hay, 184 acres of corn, and 99 acres of soybeans. Milk constituted 87 percent of this farm's 2006 receipts.
WI775	Winnebago County, Wisconsin	A 775-cow, large-sized eastern Wisconsin dairy. The farm plants 696 acres of hay and 454 acres of silage each year. Milk sales comprised 92 percent of the farm's 2006 receipts.

NYW800	Wyoming County, New York	An 800-cow, moderate-sized western New York dairy. This farm plants 690 acres of silage and 750 acres of haylage annually. Milk sales accounted for 92 percent of the gross receipts for this farm in 2006.
NYW1200	Wyoming County, New York	A 1,200-cow, large-sized western New York dairy. This farm plants 2,160 acres for silage annually. Milk sales accounted for 92 percent of the gross receipts for this farm in 2006.
NYC110	Cayuga County, New York	A 110-cow, moderate-sized central New York dairy. The farm plants 80 acres for hay, 64 acres for corn, and 131 acres for silage annually. Milk accounted for 87 percent of the gross receipts for 2006 on this dairy.
NYC500	Cayuga County, New York	A 500-cow, large-sized central New York dairy. This farm plants 714 acres of hay and haylage and 386 acres of silage. Milk sales make up 92 percent of the 2006 total receipts for this dairy.
VT140	Washington County, Vermont	A 140-cow, moderate-sized Vermont dairy. VTD140 plants 30 acres of hay, and 190 acres of silage annually. Milk accounted for 85 percent of the 2006 receipts for this farm.
VT400	Washington County, Vermont	A 400-cow, large-sized Vermont dairy. This farm plants 100 acres of hay and 900 acres of silage annually. Milk sales represent 88 percent of VTD400's gross receipts in 2006.
MO85	Christian County, Missouri	An 85-cow, moderate-sized southwest Missouri dairy. The farm plants 190 acres of hay and 32 acres of silage. Milk accounted for 82 percent of gross farm receipts for 2006.
MO400	Dade County, Missouri	A 400-cow, large-sized southwest Missouri dairy. The farm plants 315 acres of hay, 135 acres of silage, and 150 acres of improved pasture annually. Milk accounted for 92 percent of gross farm receipts for 2006.
FLN500	Lafayette County, Florida	A 550-cow, moderate-sized north Florida dairy. The dairy grows 130 acres of hay each year. All other feed requirements are purchased in a pre-mixed ration. Milk sales accounted for 92 percent of the farm receipts.
FLS1500	Okeechobee County, Florida	A 1,500-cow, large-sized south central Florida dairy. FLSD1500 plants 100 acres of hay and 400 acres of silage annually. Milk sales represent 92 percent of 2006 total receipts.

Table 4. Implications of the January 2006 and December 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	CA1710		NM2125		WA250		WA850		ID1000		ID3000	
	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007
Overall Financial Position 2007-2012 Ranking	Good	Good	Good	Good	Marginal	Good	Poor	Good	Marginal	Good	Good	Good
Change Real Net Worth (%) 2007-2012 Average	2.73	7.25	4.73	9.78	1.85	6.33	-3.94	3.46	1.37	7.34	3.81	8.51
Total Cash Receipts (\$1000) 2007-2012 Average	5,657	7,325	6,862	8,707	888	1,124	3,020	3,874	3,593	4,548	10,498	13,352
Dairy Costs (\$1000) 2007-2012 Average	2,761	3,317	4,342	4,948	431	504	1,761	2,055	1,973	2,246	5,752	6,562
Net Cash Farm Income (\$1000) 2007-2012 Average	761	1,661	1,102	2,251	143	295	-72	457	252	873	1,657	3,516
Ending Cash Reserves in 2012 (\$1000)	2,313	5,750	3,593	8,026	-75	483	-2,028	428	107	2,575	4,471	11,422
Nominal Net Worth in 2012 (\$1000)	13,277	19,072	11,883	17,630	2,515	3,593	3,492	6,785	5,586	9,002	22,228	32,335
Prob. of Negative Ending Cash in 2012 (%)	2	1	1	1	63	4	97	29	41	1	4	1

Table 4 Continued. Implications of the January 2006 and December 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	TXN3000		TXC550		TXC1300		TXE450		TXE1000	
	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007
Overall Financial Position 2007-2012 Ranking	Poor	Good	Poor	Poor	Good	Good	Poor	Good	Poor	Good
Change Real Net Worth (%) 2007-2012 Average	-2.84	4.58	-15.31	-4.86	3.78	7.80	-1.39	4.72	-1.67	4.94
Total Cash Receipts (\$1000) 2007-2012 Average	9,198	11,828 0.286	1,595	2,029	4,233	5,344	1,279	1,626	3,097	3,961
Dairy Costs (\$1000) 2007-2012 Average	7,101	8,268 0.164	1,313	1,567	2,603	3,054	786	896	1,888	2,191
Net Cash Farm Income (\$1000) 2007-2012 Average	47	1,447	-231	-58	550	1,131	52	259	148	676
Ending Cash Reserves in 2012 (\$1000)	-1,805	5,020	-2,204	-1,199	1,859	4,191	-391	529	-799	1,588
Nominal Net Worth in 2012 (\$1000)	8,416	16,142	156	1,540	6,689	9,539	2,082	3,482	4,062	7,175
Prob. of Negative Ending Cash in 2012 (%)	72	6	99	98	3	1	83	9	78	9

Table 4 Continued. Implications of the January 2006 and December 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	WI145		WI775		NYW800		NYW1200		NYC110		NYC500	
	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007
Overall Financial Position 2007-2012 Ranking	Marginal	Good	Good	Good	Poor	Marginal	Poor	Good	Good	Good	Poor	Good
Change Real Net Worth (%) 2007-2012 Average	1.17	5.34	7.36	10.98	-5.84	2.95	-4.08	2.81	5.42	8.57	1.04	5.62
Total Cash Receipts (\$1000) 2007-2012 Average	585	725 0.238	3,143	3,885 0.236	3,027	3,840 0.269	4,523	5,724 0.265	475	588 0.239	2,010	2,522 0.255
Dairy Costs (\$1000) 2007-2012 Average	133	152 0.147	971	1,160 0.195	1,336	1,574 0.178	1,957	2,297 0.173	125	145 0.166	885	1,017 0.148
Net Cash Farm Income (\$1000) 2007-2012 Average	127	220	878	1,336	-167	338	-127	553	146	216	179	470
Ending Cash Reserves in 2012 (\$1000)	-7	361	3,307	5,015	-2,518	8	-2,713	700	415	631	-222	840
Nominal Net Worth in 2012 (\$1000)	2,517	3,520	7,446	9,899	2,686	6,299	5,045	9,860	1,191	1,540	3,448	5,205
Prob. of Negative Ending Cash in 2012 (%)	49	1	1	1	99	41	99	22	1	1	72	2

Table 4 Continued. Implications of the January 2006 and December 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	VT140		VT400		MO85		MO400		FLN550		FLS1500	
	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007	Base2006	Base2007
Overall Financial Position 2007-2012 Ranking	Marginal	Good	Poor	Good	Poor	Marginal	Good	Good	Good	Good	Marginal	Good
Change Real Net Worth (%) 2007-2012 Average	0.42	4.80	-1.80	3.44	0.20	4.65	2.87	6.70	5.75	7.52	1.35	5.24
Total Cash Receipts (\$1000) 2007-2012 Average	583	718 0.231	1,542	1,916 0.242	257	322 0.253	1,353	1,714 0.267	1,992	2,370 0.190	5,500	6,517 0.185
Dairy Costs (\$1000) 2007-2012 Average	208	246 0.184	671	779 0.161	129	156 0.211	675	828 0.226	911	1,186 0.302	2,277	2,831 0.243
Net Cash Farm Income (\$1000) 2007-2012 Average	96	178	58	280	41	79	251	426	559	606 0.084	441	818
Ending Cash Reserves in 2012 (\$1000)	-4	294	-682	315	-232	-56	357	1,069	1,380	1,557	151	1,891
Nominal Net Worth in 2012 (\$1000)	1,435	2,058	2,880	4,586	1,140	1,633	3,729	5,105	5,214	6,277	9,842	13,792
Prob. of Negative Ending Cash in 2012 (%)	45	2	98	16	99	72	10	1	1	1	42	17