

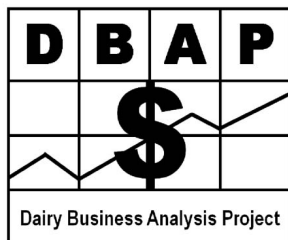


Dairy Business Analysis Project: 2006 Financial Summary¹

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Introduction

The Dairy Business Analysis Project (DBAP) was initiated in 1996 by the University of Florida in an effort to measure and document the financial performance of Florida dairy farms using standardized accounting measures. The University of Georgia has been a formal collaborator since 1998. The DBAP website is <http://dairy.ifas.ufl.edu/programs/dbap.shtml>.



Financial data for the year 2006 were collected from 22 participating dairy farms and screened for completeness and validity. Each dairy farm then received a benchmark report detailing its financial results compared to the average results for the other participants and the six dairy farms with the highest net farm income per cwt. This benchmark report is

discussed with the participants to identify challenges and opportunities for improvement.

This publication is a summary of the financial performance of the 22 dairy farms that participated in 2006. It is intended for general use by dairy farmers, the allied industry, government, and educational professionals.

Data Collection and Accounting Methods

Dairy producers in Florida and Georgia were given the opportunity to participate in DBAP. Participants were not a random sample of all dairy farms in the two states. The financial performance results in this publication are therefore not necessarily representative of the average results of all dairy farms in Florida and Georgia.

Most of the data were collected by extension agents when visiting dairy farms using a standardized data collection spreadsheet. Occasionally, data were sent in by the dairy producers. The financial data were either entered into the spreadsheet on the farm or mailed in on paper copies of the spreadsheet.

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The accounting methods followed the recommendations made by the Farm Financial Standards Council³. All revenues and expenses were accrual adjusted. Cash receipts and expenses were therefore adjusted for changes in inventory, prepaid expenses, accounts payable, and accounts receivable. Depreciation data were often taken from tax records. Asset valuation was based on market values if available, but the changes from January 1 to December 31 were kept small. Unpaid management was valued at \$50,000 per farm. Gain or loss on sale of purchased livestock resulted when livestock depreciation did not completely account for the gain or loss in the value of the purchased livestock during 2006. Appreciation resulted when machinery and building depreciation did not completely account for the gain or loss in the value of these capital assets during 2006. The bottom line of each dairy farm is its net farm income. Net farm income is the return to the owner and unpaid family members for their labor, management, and equity in the dairy farm. It is the total income available for owner's salary, new investments, taxes, and paying off principal.

All submitted data were carefully scrutinized and checked for completeness. The cash flow statement reconciles the net cash flow resulting from the reported operating, investing, and financing activities with the reported available cash on the January 1 and December 31 balance sheets. The equity statement reconciles the changes in equity through reported retained capital and valuation with the calculated equity on the balance sheets. The reconciliation attempts typically result in unresolved imbalances. Both cash flow imbalance and equity imbalance had to be less than 10% to be included in the summary results reported here.

All results in this publication are the simple averages of the statistics of the dairy farms with valid data. Every dairy farm has equal weight. For example, assume a 100-cow herd produced 1,700,000 lbs of milk (17,000 lbs / cow) and a 1000-cow herd produced 19,000,000 lbs of milk (19,000 lbs / cow). Average milk yield per farm is $(19,000,000 + 1,700,000) / 2 = 10,350,000$ lbs and average herd size is $(100 + 1000) / 2 = 550$ cows. The weighted average milk yield per cow is $10,350,000 / 550 =$

18,818 lbs / cow. The simple average milk yield per cow is $(17,000 + 19,000) / 2 = 18,000$ lbs / cow.

Some definitions and calculation rules are as follows:

Asset turnover ratio = total revenues / average assets

Assets = value of assets on the balance sheet

Average assets = average of value of assets on January 1 and December 31

Average equity = average of value of equity on January 1 and December 31

Capital replacement and term debt repayment margin = NFIFO + depreciation + interest on term debt – net social security and income taxes – owner withdrawals – annual scheduled payments on term debt and capital leases.

Cash flow coverage ratio = (cash revenues – cash expenses) / current liabilities

Current assets = short-term assets that can be utilized within one year

Current liabilities = liabilities due within one year

Current ratio = current assets / current liabilities

Debt to asset ratio = liabilities / assets

Debt to equity ratio = liabilities / equity

Depreciation expense ratio = depreciation / total revenue

Equity = assets - liabilities

Equity to asset ratio = equity / assets

FTE = full time equivalent worker, on average 54 hours per week

Interest expense ratio = interest paid / total revenue

Liabilities = value of liabilities on the balance sheet

Net farm income = NFIFO + gain on sale of capital assets

NFIFO = net farm income from operations

NFIFO ratio = NFIFO / total revenue

Operating expense ratio = (total operating expenses – depreciation) / total revenue

Operating profit margin ratio = (NFIFO + interest paid – unpaid management) / total revenues

Rate of return on dairy assets = (NFIFO + interest paid – unpaid management) / average assets

Rate of return on equity = (NFIFO – unpaid management) / average equity

Std = standard deviation

Term debt and capital lease coverage ratio = (NFIFO + non-dairy income + depreciation + interest paid on term debt – net social security and income taxes – owner withdrawals) / (annual scheduled payments on term debt and capital leases).

Working capital = current assets - current liabilities

Results

Summary results for 2006 are presented in Tables 1.1 to 4.4 and Figures 1 to 5. Each category in Tables 2.1 to 4.4 is divided into three levels based on the lowest 7, middle 8, and highest 7 farms for that category. Therefore, the lowest 7 farms in one category may be different from the lowest 7 farms in another category. Revenues and expenses may not add up due to rounding.

In brief, 22 dairy farms were included in the summary results. Of these, 17 were located in Florida and 5 in Georgia. The average herd size of the participating dairies was 1163 cows and 684 heifers with 18,599 lbs. milk sold per cow. The average culling rate was 31%. The average milk price was \$16.79. Average total revenues were \$19.36 per cwt. milk sold. Total expenses averaged \$18.56 per cwt. sold. The largest items were purchased feed, \$7.17, and personnel costs, \$3.13 per cwt. sold. Net farm income from operations averaged \$0.81 per cwt.

sold. Net farm income per cwt. was \$0.70. Average current ratio was high in 2006 due to 2 farms with very high current ratios.

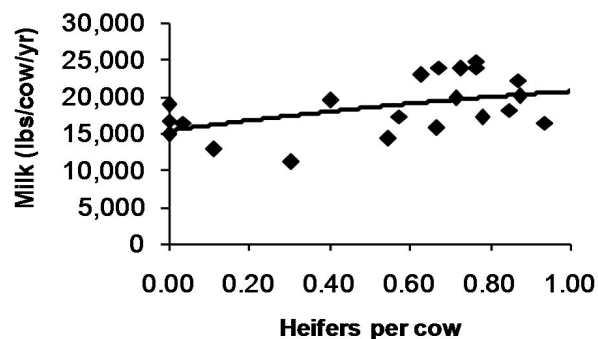


Figure 2. DBAP 2006 Summary - Milk production (lbs/cow/year) by heifers per cow.

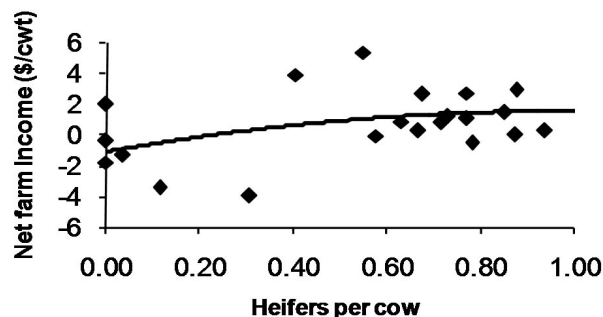


Figure 3. DBAP 2006 Summary - Net farm income (\$/cwt) by heifers per cow.

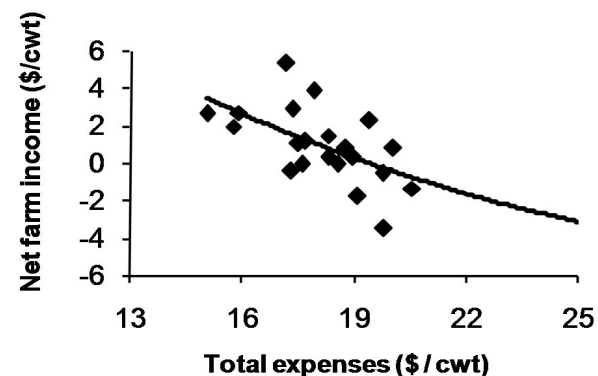


Figure 4. DBAP 2006 Summary - Net farm income (\$/cwt) by total expenses (\$/cwt).

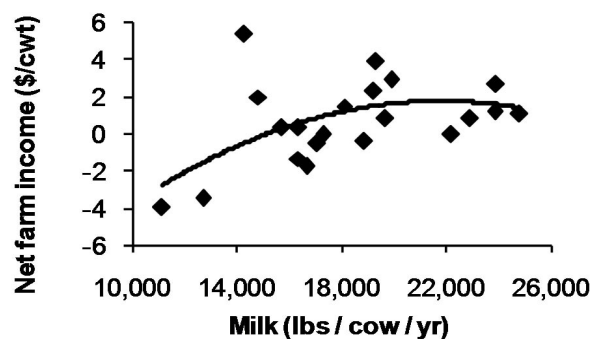


Figure 5. DBAP 2006 Summary - Net farm income (\$/cwt) by milk yield (lbs/cow/year).

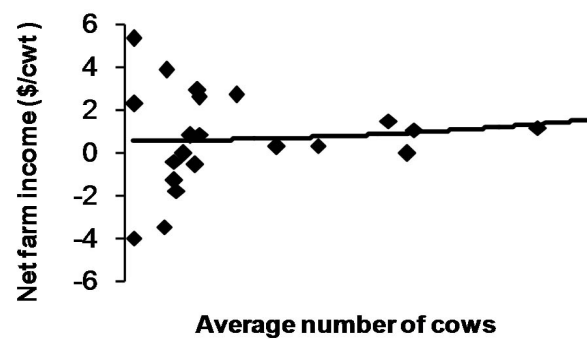


Figure 6. DBAP 2006 Summary - Net farm income per cwt (\$) by average number of cows. The x-axis is not displayed to avoid possible identification of dairy farms.

Additional Notes:

3. Farm Financial Standards Council. 1997. Financial Guidelines for Agricultural Producers.

Table 1.1. DBAP 2006 Summary - Business size and production efficiency by state and overall average, median, and standard deviation.

Category	Average	Overall Median	Std ¹	State Averages	
				Florida	Georgia
Number of farms	22	22	22	16	6
<i>Business size:</i>					
Average number of cows	1,163	637	1,207	1,273	867
Average number of heifers	684	418	829	736	545
Milk sold (million lbs)	22.77	12.15	24.32	23.77	20.12
FTE ² workers	20	12	18	21	18
Acres of pasture + cultivated land	624	311	762	663	520
<i>Production efficiency:</i>					
Milk sold (lbs/cow/year)	18,599	18,485	3,822	17,613	21,231
Cows/FTE worker	55	53	22	59	45
Milk sold/FTE worker (million lbs)	1.01	1.00	0.37	1.03	0.95
Cull rate	31%	31%	8%	33%	25%

¹Standard deviation.²Full-time equivalent.**Table 1.2.** DBAP 2006 Summary - Revenues and expenses by state and overall average, median, and standard deviation (\$/cwt).

Category	Average	Overall Median	Std ¹	State Averages	
				Florida	Georgia
Number of farms	22	22	22	16	6
<i>Revenues:</i>					
Milk sold	16.79	16.85	0.64	16.90	16.51
Raised, leased cow sales	0.75	0.76	1.77	0.76	0.73
Heifer sales	1.00	0.63	0.93	1.20	0.47
Gain on purchased livestock:					
Sales	(0.33)	(0.00)	2.11	(0.43)	(0.05)
Other revenues	1.15	0.71	1.21	1.17	1.10
Total revenues	19.36	19.16	1.87	19.59	18.75
<i>Expenses:</i>					
Personnel	3.13	2.76	1.43	3.00	3.50
Purchased feed	7.17	6.97	1.56	7.82	5.44
Crops	0.33	0.18	0.40	0.33	0.34
Machinery	1.03	0.91	0.53	1.07	0.93
Livestock	1.60	1.48	0.69	1.50	1.86
Milk marketing	1.17	1.18	0.25	1.12	1.32
Buildings and land	0.45	0.39	0.37	0.41	0.56
Interest	0.67	0.66	0.40	0.69	0.60
Depreciation:					
Livestock	0.90	0.55	0.81	0.86	1.00
Machinery	0.62	0.45	0.57	0.65	0.55
Buildings	0.46	0.39	0.44	0.52	0.28
Other expenses	1.02	0.89	0.55	1.02	1.00
Total expenses	18.56	18.28	2.49	19.00	17.38
Net farm income from operations	0.81	0.78	2.28	0.59	1.38
Gain on sale of capital assets	(0.10)	(0.00)	0.28	(0.02)	(0.32)
Net farm income	0.70	0.78	2.21	0.57	1.05

¹Standard deviation.

Table 1.3. DBAP 2006 Summary - Financial performance by state and overall average, median, and standard deviation.

Category	Average	Overall Median	Std ¹	State Averages	
				Florida	Georgia
Number of farms	22	22	22	16	6
<i>Liquidity:</i>					
Current ratio	9.81	0.67	27.95	8.24	13.98
Working capital (\$)	(44,461)	(36,619)	761,162	(275,696)	572,164
<i>Solvency:</i>					
Debt to asset ratio	0.40	0.36	0.23	0.39	0.41
Equity to asset ratio	0.60	0.64	0.23	0.61	0.59
Debt to equity ratio	1.04	0.57	1.13	0.99	1.19
<i>Profitability:</i>					
Rate of return on assets	0.03	0.03	0.08	0.03	0.04
Rate of return on equity	0.03	0.01	0.27	0.05	(0.03)
Operating profit margin ratio	0.03	0.05	0.14	0.02	0.06
<i>Financial efficiency:</i>					
Asset turnover rate	0.70	0.71	0.27	0.69	0.73
Operating expense ratio	0.82	0.86	0.13	0.84	0.80
Depreciation expense ratio	0.10	0.10	0.05	0.10	0.10
Interest expense ratio	0.04	0.04	0.02	0.04	0.03
NFIFO ratio ²	0.04	0.04	0.11	0.03	0.07
<i>Repayment capacity:</i>					
Cash flow coverage ratio	7.82	0.56	20.26	5.54	13.87
Term debt coverage ratio ³	2.61	1.59	3.24	2.98	1.62
Capital replacement margin ⁴ (\$)	120,024	56,493	686,901	(40,480)	548,035

¹Standard deviation.²Net farm income from operations ratio.³Term debt and capital lease coverage ratio.⁴Capital replacement and term debt repayment margin.**Table 1.4.** DBAP 2006 Summary - Balance sheet by state and overall average, median, and standard deviation (\$/cow).

Category	Average	Overall Median	Std ¹	State Averages	
				Florida	Georgia
Number of farms	22	22	22	16	6
<i>Balance sheet (January 1):</i>					
Current assets	418	281	329	361	570
Total assets	6,214	4,929	4,750	5,251	8,781
Current liabilities	662	579	533	750	426
Total liabilities	1,963	1,806	1,104	2,015	1,822
Equity	4,251	3,391	5,103	3,235	6,959
<i>Balance sheet (December 31):</i>					
Current assets	427	422	319	362	600
Total assets	6,218	4,921	3,972	5,546	8,011
Current liabilities	592	555	535	777	100
Total liabilities	2,050	1,986	1,116	2,085	1,957
Equity	4,168	3,576	4,312	3,461	6,054

¹Standard deviation.

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Table 2.1. DBAP 2006 Summary - Business size and production efficiency by average number of cows and milk per cow.

Category	Average number of cows			Milk yield (lbs/cow/year)		
	< 450	450-1,000	> 1,000	< 16,500	16,500-19,800	> 19,800
Number of farms	7	8	7	7	8	7
<i>Business size:</i>						
Average number of cows	268	644	2,651	1,213	678	1,666
Average number of heifers	54	424	1,611	375	430	1,284
Milk sold (million lbs)	4.46	13.30	51.91	18.47	12.29	39.05
FTE workers	6	13	42	14	13	33
Acres of pasture + cultivated land	146	530	1,210	413	514	962
<i>Production efficiency:</i>						
Milk sold (lbs/cow/year)	15,995	20,169	19,410	14,492	18,284	23,067
Cows/FTE worker	44	53	69	65	49	52
Milk sold/FTE worker (million lbs)	0.70	1.05	1.27	0.96	0.89	1.20
Cull rate	32%	28%	33%	34%	31%	28%

Table 2.2. DBAP 2006 Summary - Revenues and expenses by average number of cows and milk per cow (\$/cwt).

Category	Average number of cows			Milk yield (lbs/cow/year)		
	< 450	450-1000	> 1,000	< 16,500	16,500-19,800	> 19,800
Number of farms	7	8	7	7	8	7
<i>Revenues:</i>						
Milk sold	16.35	16.67	17.37	16.85	16.75	16.78
Raised, leased cow sales	0.11	1.46	0.57	(0.13)	1.50	0.76
Heifer sales	1.52	1.00	0.48	1.33	1.00	0.66
Gain on purchased livestock						
Sales	0.29	(1.14)	(0.01)	0.12	(1.11)	0.12
Other revenues	2.01	1.07	0.38	1.37	1.23	0.84
Total revenues	20.29	19.06	18.79	19.55	19.38	19.16
<i>Expenses:</i>						
Personnel	3.69	3.01	2.72	3.01	3.78	2.52
Purchased feed	7.76	6.40	7.46	8.23	6.91	6.41
Crops	0.22	0.53	0.23	0.33	0.25	0.43
Machinery	0.89	1.35	0.82	0.89	1.14	1.06
Livestock	1.45	1.66	1.69	1.40	1.44	1.99
Milk marketing	1.13	1.28	1.09	1.00	1.28	1.22
Buildings and land	0.40	0.37	0.60	0.42	0.62	0.29
Interest	0.68	0.67	0.64	0.74	0.56	0.71
<i>Depreciation:</i>						
Livestock	1.01	0.82	0.87	0.98	0.96	0.74
Machinery	0.84	0.58	0.45	0.83	0.53	0.53
Buildings	0.57	0.38	0.43	0.70	0.14	0.57
Other expenses	1.34	0.89	0.85	1.20	1.05	0.79
Total expenses	19.98	17.93	17.85	19.74	18.67	17.25
Net farm income from operations	0.31	1.13	0.94	(0.19)	0.71	1.91
Gain on sale of capital assets	(0.01)	(0.22)	(0.07)	0.04	(0.04)	(0.32)
Net farm income	0.30	0.91	0.87	(0.15)	0.67	1.59

Table 2.3. DBAP 2006 Summary - Financial performance by average number of cows and milk per cow.

Category	Average number of cows			Milk yield (lbs/cow/year)		
	< 450	450-1,000	> 1,000	< 16,500	16,500-19,800	> 19,800
Number of farms	7	8	7	7	8	7
<i>Liquidity:</i>						
Current ratio	7.30	3.31	19.74	0.32	22.29	5.03
Working capital (\$)	(46,928)	(73,034)	(9,340)	(215,069)	(56,588)	140,006
<i>Solvency:</i>						
Debt to asset ratio	0.46	0.38	0.36	0.40	0.42	0.38
Equity to asset ratio	0.54	0.62	0.64	0.60	0.58	0.62
Debt to equity ratio	1.53	0.92	0.71	0.81	1.57	0.68
<i>Profitability:</i>						
Rate of return on assets	(0.00)	0.05	0.06	(0.01)	0.03	0.09
Rate of return on equity	0.03	0.01	0.06	(0.06)	0.06	0.10
Operating profit margin ratio	(0.06)	0.07	0.08	(0.05)	0.02	0.13
<i>Financial efficiency:</i>						
Asset turnover rate	0.64	0.75	0.70	0.51	0.81	0.76
Operating expense ratio	0.84	0.81	0.82	0.85	0.85	0.77
Depreciation expense ratio	0.12	0.10	0.10	0.12	0.09	0.10
Interest expense ratio	0.03	0.04	0.03	0.04	0.03	0.04
NFIFO ratio ¹	0.01	0.06	0.05	(0.01)	0.03	0.10
<i>Repayment capacity:</i>						
Cash flow coverage ratio	7.94	3.13	13.05	0.35	17.17	4.59
Term debt coverage ratio ²	1.33	4.12	2.16	2.10	2.47	3.28
Capital replacement margin ³ (\$)	(18,693)	174,068	196,977	(233,486)	54,455	548,471

¹Net farm income from operations ratio.²Term debt and capital lease coverage ratio.³Capital replacement and term debt repayment margin.

Table 2.4. DBAP 2006 Summary - Balance sheet by average number of cows and milk per cow (\$/cow).

Category	Average number of cows			Milk yield (lbs / cow / year)		
	< 450	450-1,000	> 1000	< 16,500	16,500-19,800	> 19,800
Number of farms	7	8	7	7	8	7
<i>Balance sheet (January 1):</i>						
Current assets	185	519	535	255	335	675
Total assets	8,148	5,385	5,226	5,746	6,768	6,048
Current liabilities	446	881	628	543	756	674
Total liabilities	2,099	1,908	1,889	1,998	1,627	2,310
Equity	6,050	3,477	3,336	3,747	5,140	3,738
<i>Balance sheet (December 31):</i>						
Current assets	200	537	527	254	375	658
Total assets	7,998	5,339	5,443	6,256	6,237	6,159
Current liabilities	426	747	581	653	610	510
Total liabilities	2,143	1,913	2,113	2,219	1,602	2,393
Equity	5,855	3,426	3,330	4,037	4,635	3,766

Table 3.1. DBAP 2006 Summary - Business size and production efficiency by net farm income per cwt and rate of return on assets.

Category	Net farm income (\$/cwt)			Rate of return on assets (%)		
	< \$(1.13)	\$(1.13) - \$2.30	> \$2.30	< 0.0%	0.0% - 7.0%	> 7.0%
Number of farms	7	8	7	7	8	7
<i>Business size:</i>						
Average number of cows	418	1,917	1,045	358	1,218	1,905
Average number of heifers	125	1,514	295	96	980	934
Milk sold (million lbs)	6.91	40.48	18.40	5.89	22.97	39.43
FTE workers	8	36	14	8	23	29
Acres of pasture + cultivated land	170	943	714	166	827	850
<i>Production efficiency:</i>						
Milk sold (lbs/cow/year)	15,729	20,454	19,350	16,010	18,323	21,504
Cows/FTE worker	49	56	60	44	56	66
Milk sold/FTE worker (million lbs)	0.79	1.13	1.09	0.70	1.01	1.32
Cull rate	35%	33%	25%	34%	32%	27%

Table 3.2. DBAP 2006 Summary - Revenues and expenses by net farm income per cwt and rate of return on assets (\$/cwt).

Category	Net farm income (\$/cwt)			Rate of return on assets (%)		
	\$ (0.06) -			0.0% -		
	< \$(0.06)	1.50	> \$1.50	< 0.0%	7.0%	> 7.0%
Number of farms	7	8	7	7	8	7
<i>Revenues:</i>						
Milk sold	16.72	17.22	16.38	16.53	16.98	16.84
Raised, leased cow sales	0.71	0.61	0.94	(0.06)	1.55	0.64
Heifer sales	1.04	0.65	1.36	0.86	1.26	0.84
Gain on purchased livestock						
Sales	(1.15)	0.15	(0.05)	0.18	(1.06)	(0.00)
Other revenues	1.31	0.67	1.54	1.69	0.81	1.00
Total revenues	18.62	19.31	20.17	19.21	19.54	19.32
<i>Expenses:</i>						
Personnel	3.76	2.84	2.84	4.43	2.59	2.45
Purchased feed	8.09	7.33	6.07	7.79	7.28	6.43
Crops	0.14	0.45	0.39	0.18	0.46	0.34
Machinery	0.93	1.22	0.93	0.80	1.36	0.90
Livestock	1.50	1.81	1.45	1.69	1.34	1.81
Milk marketing	1.20	1.14	1.18	1.16	1.12	1.25
Buildings and land	0.53	0.52	0.29	0.58	0.43	0.34
Interest	0.70	0.61	0.70	0.54	0.75	0.69
Depreciation:						
Livestock	1.19	0.63	0.91	1.11	0.63	0.99
Machinery	0.67	0.59	0.62	0.59	0.87	0.37
Buildings	0.45	0.41	0.51	0.36	0.52	0.48
Other expenses	1.09	0.93	1.04	1.29	1.09	0.66
Total expenses	20.25	18.50	16.93	20.51	18.44	16.73
Net farm income from operations	(1.63)	0.81	3.24	(1.30)	1.09	2.59
Gain on sale of capital assets	(0.04)	(0.10)	(0.17)	(0.04)	(0.00)	(0.28)
Net farm income	(1.68)	0.71	3.08	(1.35)	1.09	2.31

Table 3.3. DBAP 2006 Summary - Financial performance by net farm income per cwt and rate of return on assets.

Category	Net farm income (\$/cwt)			Rate of return on assets (%)		
	< \$(0.06)	\$(0.06) - \$1.50	> \$1.50	< 0.0%	0.0% - 7.0%	> 7.0%
Number of farms	7	8	7	7	8	7
<i>Liquidity:</i>						
Current ratio	7.56	17.41	3.37	7.55	16.01	4.97
Working capital (\$)	(257,439)	(41,508)	165,141	(90,796)	(409,708)	419,298
<i>Solvency:</i>						
Debt to asset ratio	0.52	0.33	0.36	0.41	0.37	0.42
Equity to asset ratio	0.48	0.67	0.64	0.59	0.63	0.58
Debt to equity ratio	1.69	0.59	0.92	1.19	0.91	1.05
<i>Profitability:</i>						
Rate of return on assets	(0.05)	0.05	0.10	(0.05)	0.03	0.12
Rate of return on equity	(0.18)	0.04	0.24	(0.17)	0.01	0.26
Operating profit margin ratio	(0.11)	0.06	0.14	(0.12)	0.05	0.15
<i>Financial efficiency:</i>						
Asset turnover rate	0.70	0.77	0.63	0.63	0.67	0.81
Operating expense ratio	0.92	0.84	0.71	0.93	0.81	0.74
Depreciation expense ratio	0.12	0.09	0.10	0.11	0.10	0.10
Interest expense ratio	0.04	0.03	0.03	0.03	0.04	0.04
NFIFO ratio ¹	(0.09)	0.04	0.16	(0.07)	0.05	0.13
<i>Repayment capacity:</i>						
Cash flow coverage ratio	7.71	11.39	3.84	7.68	10.61	4.75
Term debt coverage ratio ²	0.67	2.34	4.86	0.55	2.52	4.79
Capital replacement margin ³ (\$)	(138,003)	355,037	109,466	(117,653)	32,327	457,927

¹Net farm income from operations ratio.²Term debt and capital lease coverage ratio.³Capital replacement and term debt repayment margin.**Table 3.4.** DBAP 2006 Summary - Balance sheet by net farm income per cwt and rate of return on assets (\$/cow).

Category	Net farm income (\$/cwt)			Rate of return on assets (%)		
	< \$(0.06)	\$(0.06) - \$1.50	> \$1.50	< 0.0%	0.0% - 7.0%	> 7.0%
Number of farms	7	8	7	7	8	7
<i>Balance sheet (January 1):</i>						
Current assets	298	479	468	293	358	611
Total assets	4,874	5,216	8,693	7,846	5,560	5,328
Current liabilities	815	704	461	582	880	493
Total liabilities	1,987	1,812	2,111	1,483	2,213	2,156
Equity	2,887	3,405	6,582	6,362	3,347	3,172
<i>Balance sheet (December 31):</i>						
Current assets	286	514	467	308	380	599
Total assets	5,293	5,370	8,112	7,676	5,551	5,523
Current liabilities	801	558	422	491	845	404
Total liabilities	2,244	1,912	2,013	1,748	2,148	2,240
Equity	3,049	3,458	6,099	5,928	3,403	3,283

Table 4.1. DBAP 2006 Summary - Business size and production efficiency by assets per cow and liabilities per cow.

Category	Assets (\$/cow)			Liabilities (\$/cow)		
	< \$4,350	\$4,350 -\$5,750	> \$5,750	< \$1,500	\$1,500 -\$2,500	> \$2,500
Number of farms	7	8	7	7	8	7
<i>Business size:</i>						
Average number of cows	1,148	1,366	945	1,325	1,145	1,020
Average number of heifers	691	620	750	1,015	356	729
Milk sold (million lbs)	23.42	23.46	21.35	26.75	19.30	22.77
FTE workers	22	18	19	24	16	20
Acres of pasture + cultivated land	409	684	771	647	508	734
<i>Production efficiency:</i>						
Milk sold (lbs/cow/year)	17,986	18,833	18,946	19,089	17,176	19,737
Cows/FTE worker	52	69	43	54	59	52
Milk sold/FTE worker (million lbs)	0.94	1.23	0.83	1.02	1.00	1.02
Cull rate	31%	30%	32%	35%	29%	29%

Table 4.2. DBAP 2006 Summary - Revenues and expenses by assets per cow and liabilities per cow (\$/cwt).

Category	Assets (\$/cow)			Liabilities (\$/cow)		
	< \$4,350	\$4,350 -\$5,750	> \$5,750	< \$1,500	\$1,500 -\$2,500	> \$2,500
Number of farms	7	6	7	7	6	7
<i>Revenues:</i>						
Milk sold	16.96	17.12	16.26	16.81	16.96	16.59
Raised, leased cow sales	(0.01)	1.18	1.01	0.81	(0.19)	1.76
Heifer sales	0.77	0.89	1.36	0.94	0.68	1.43
Gain on purchased livestock						
Sales	(0.07)	(1.14)	0.34	(0.01)	0.36	(1.43)
Other revenues	0.97	1.00	1.50	1.38	0.85	1.26
Total revenues	18.61	19.06	20.47	19.93	18.66	19.60
<i>Expenses:</i>						
Personnel	3.16	2.75	3.55	3.83	3.17	2.39
Purchased feed	7.68	6.65	7.26	7.25	7.29	6.97
Crops	0.20	0.59	0.18	0.38	0.43	0.17
Machinery	0.93	1.36	0.76	1.20	1.02	0.89
Livestock	1.53	1.57	1.71	1.95	1.53	1.33
Milk marketing	1.22	1.23	1.06	1.05	1.31	1.13
Buildings and land	0.60	0.34	0.43	0.61	0.51	0.22
Interest	0.69	0.62	0.70	0.32	0.57	1.11
Depreciation:						
Livestock	1.19	0.71	0.82	0.29	1.15	1.22
Machinery	0.44	0.54	0.90	0.37	0.70	0.78
Buildings	0.22	0.46	0.69	0.30	0.50	0.56
Other expenses	0.80	1.00	1.26	1.11	0.96	0.98
Total expenses	18.65	17.82	19.31	18.67	19.16	17.75
Net farm income from operations	(0.05)	1.24	1.16	1.25	(0.50)	1.85
Gain on sale of capital assets	(0.04)	(0.04)	(0.23)	(0.09)	(0.00)	(0.23)
Net farm income	(0.09)	1.20	0.93	1.16	(0.50)	1.62

Table 4.3. DBAP 2006 Summary - Financial performance by assets per cow and liabilities per cow.

Category	Assets (\$/cow)			Liabilities (\$/cow)		
	< \$4,350	\$4,350 - \$5,750	> \$5,750	< \$1,500	\$1,500 - \$2,500	> \$2,500
Number of farms	7	8	7	7	8	7
<i>Liquidity:</i>						
Current ratio	25.57	1.36	3.71	18.24	7.65	3.85
Working capital (\$)	117,845	(202,292)	(26,389)	(56,754)	34,022	(121,864)
<i>Solvency:</i>						
Debt to asset ratio	0.50	0.38	0.32	0.17	0.45	0.57
Equity to asset ratio	0.50	0.62	0.68	0.83	0.55	0.43
Debt to equity ratio	1.66	0.91	0.58	0.22	1.14	1.76
<i>Profitability:</i>						
Rate of return on assets	0.01	0.06	0.02	0.04	(0.01)	0.07
Rate of return on equity	0.03	0.05	0.02	0.04	(0.08)	0.15
Operating profit margin ratio	(0.01)	0.08	0.01	0.05	(0.04)	0.10
<i>Financial efficiency:</i>						
Asset turnover rate	0.93	0.72	0.45	0.72	0.71	0.68
Operating expense ratio	0.87	0.81	0.79	0.87	0.87	0.73
Depreciation expense ratio	0.10	0.09	0.12	0.05	0.12	0.13
Interest expense ratio	0.04	0.03	0.04	0.02	0.03	0.06
NFIFO ratio ¹	(0.01)	0.06	0.06	0.06	(0.02)	0.09
<i>Repayment capacity:</i>						
Cash flow coverage ratio	19.85	1.19	3.35	12.04	7.64	3.79
Term debt coverage ratio ²	1.36	5.18	0.93	3.60	2.47	1.78
Capital replacement margin ³ (\$)	44,394	(23,071)	359,192	254,909	(205,905)	357,630

¹Net farm income from operations ratio.²Term debt and capital lease coverage ratio.³Capital replacement and term debt repayment margin.**Table 4.4.** DBAP 2006 Summary - Balance sheet by assets per cow and liabilities per cow (\$/cow).

Category	Assets (\$/cow)			Liabilities (\$/cow)		
	< \$4,350	\$4,350 - \$5,750	> \$5,750	< \$1,500	\$1,500 - \$2,500	> \$2,500
Number of farms	7	8	7	7	8	7
<i>Balance sheet (January 1):</i>						
Current assets	381	495	366	321	548	366
Total assets	3,641	4,917	10,268	7,606	5,105	6,089
Current liabilities	675	829	458	423	816	725
Total liabilities	1,843	1,774	2,298	832	1,845	3,227
Equity	1,798	3,143	7,970	6,773	3,259	2,862
<i>Balance sheet (December 31):</i>						
Current assets	386	491	394	352	498	419
Total assets	3,801	4,984	10,046	7,221	5,289	6,277
Current liabilities	404	792	551	501	510	776
Total liabilities	1,856	1,837	2,487	865	1,968	3,329
Equity	1,945	3,147	7,559	6,356	3,321	2,948